51st Meeting of the Senior Labour Inspectors’ Committee and Thematic Day

THEMATI C DAY

SLIC

“The role and input of health professionals in the labour inspection authority”

23rd October 2006
Helsinki, Finland

EUROPEAN COMMISSION
Directorate General for Employment, Social Affairs and Equal Opportunities
Photograph of the SLIC Members
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Preface

The 51st meeting of the EU Senior Labour Inspectors’ Committee was held in Helsinki, Finland, from 23 to 24 October 2006. The Thematic Day dealt with the role and input of health professionals in the labour inspection authority. The programme of the thematic day was developed by a working group appointed by the SLIC.

Occupational health is one of the major objectives of the labour inspection activities. The methods and techniques of labour inspection vary in the member states as is evident from the presentations included in this report. It contains short abstracts and the presentations of the speakers. The presentations are the personal opinions of the authors.

The organizers hope that the material will be useful in the comparison and the development of European labour inspection practices. The organizers thank the experts and participants for the lively and interesting discussion.

Mikko Hurmalainen
Director General
Ministry of Social Affairs and Health
Department for Occupational Safety and Health
Introduction to the thematic day

Professor Heikki Savolainen, Ministry of Social Affairs and Health

The utility and need of health professionals in the Labour Inspection

European and national health and safety rules and regulations mainly target the protection and maintenance of human health at work. While the governments cannot guarantee the individual health status per se they can and do strive to create healthy conditions at work. In this general context, health is defined in a very broad sense to include, according to pertinent directives, somatic and mental health. The broad definition has not always been the basis of the public governance of occupational safety and health services. New examples may include the assessment of mental strain, problems due to the organisation of work or even from moving of loads or from repetitive movements.

Modern workplaces are composed or combined of work accomplished at several stages in a temporal or spatial order. One can examine them one by one as they occur or the whole process in a single operation. It could be argued that the latter can give a better general idea of the risks and hazards rather than the task-related examination. However, the holistic view requires a combination of competencies seldom united in one person. The current solution to this problem has been the multidisciplinary approach. By definition, it means that two or more specialists collaborate on the same project or task thus producing a more complete solution than the sum of their individual views.

There is a multitude of possibilities of specialist combinations in the labour protection authority as the conditions at the work and places of work are extremely variable. Traditionally, structural and mechanical safety has been the most important aspects and they continue to remain very important also in the future. However, the prevention of accidents, for example, is not only in the soundness of physical structures but also in the human functioning and behaviour. Likewise, the general health of European peoples has improved as attested by the lengthening life expectancies and yet there are increasing concerns of work incapacity due to mental disorders and musculoskeletal diseases, for example.

The question, therefore, is what might be the required combination of skills as to the achievement of modern inspection of occupational safety and health situation. Many member states have different approaches to reach the goal and it might be useful to all to compare notes and to benchmark the current routines.

Thematic day

The idea of the thematic day is to examine the possible contribution of health professionals to the management of common problems as encountered by the inspection authority.

Member states have implemented aspects of the relevant European directives, and especially, those that relate to comprehensive definition of health. Secondly, many countries have a relatively strong occupational health service sector, which derives its legitimacy from national laws. The occupational health service professionals and teams could therefore be partners to the occupational safety authority. The situation is, however, more complex than that. One of the reasons is that occupational health professionals are mostly hired by the employer while the inspection authority is a public service. It should be worked out the best and fairest ways of collaboration of the two so as to not jeopardise the integrity of process or to miss obvious health risks.

One solution to this could be the recruitment of inspectors with health branch education. Thus, one may encounter doctors or public health nurses in inspection roles in some member states or they have been mandated with special duties on defined tasks. The field is obviously under evolution in terms of development of work and required expertise.
The same may apply to detection of occupational illnesses and their early prevention. While medical science is invaluable at the evaluation of health status of individuals doctors may be less adept in the assessment of excessive strain or burden, be it mental or physical. It could be rightfully maintained that the best prevention begins at the evaluation and regulation of tasks done e.g. by ergonomists.

On this background, the thematic day will examine the new European strategy of occupational safety and health and its requirements. The view and comments of a senior SLIC member will illuminate the practical consequences to national authority. The main body of presentations deal then with current practices of health professionals in the labour inspection and the detection of occupational diseases, a major task of labour protection. It is envisaged that on this background the new requirements of the strategy will be discussed and practical conclusions drawn.
Programme

Monday, 23 October 2006
Thematic day “The role and input of health professionals in the labour inspection authority”
Marina Congress Center, Helsinki

09.00 Opening
Ms Tuula Haatainen, Minister of Social Affairs and Health, Ministry of Social Affairs and Health, Finland

09.15 Medical doctors in labour inspection in Belgium
Dr Karel van Damme, Federal Public Service Employment, Labour and Social Dialogue, Belgium

09.45 The role of occupational medicine in labour inspection in Austria
Dr Susanne Pinsger, Federal Ministry of Economics and Labour, Austria

10.15 Coffee break

10.45 Reporting of occupational diseases in Member States
Ms Katrin Lepisk, ABB, Estonia

11.00 Prevention of musculoskeletal disorders in Finland
Ms Tarja Kantolahti, Ministry of Social Affairs and Health, Finland

11.45 Discussion

12.15 Lunch

13.45 The role of occupational hygienist in labour inspection
Ms Sandra Caldwell, Health and Safety Executive, UK

14.15 The role of occupational psychologist in labour inspection
Dr Kai Lüken, BG-Institute for Occupational Safety and Health BGIA, Germany

14.45 Discussion, comment speeches:
Dr Bertil Remaeus, Swedish Work Environment Authority
Mr Paul Weber, Inspection du Travail et des Mines, Luxembourg

15.15 Coffee break

15.45 Concluding session
Moderator Dr Heikki Savolainen, Ministry of Social Affairs and Health, Finland

16.30 Closing
Participants

Breindl          Gertrud          Austria
Pinsger          Susanne          Austria
Szymanski        Eva-Elisabeth   Austria
Van Damme        Karel            Belgium
Mladenov         Totyu            Bulgaria
Veselinov        Veselin          Bulgaria
Nicolaides       Leandros         Cyprus
Yiannaki         Anastasios       Cyprus
Elbel            Jaromir          Czech Republic
Kubicková        Daniela          Czech Republic
Jensen           Jens             Denmark
Lydert Wittenborg Anne             Denmark
Lepisk           Katrin           Estonia
Nigul            Helle            Estonia
Salum            Juhan            Estonia
Takala           Jukka            European Agency for Safety and Health at Work
Biosca de Sagastuy Jose Ramon       European Commission
Moitinho de Almeida Teresa           European Commission
Hurmalainen      Mikko            Finland
Itäkannas        Jaakko           Finland
Kantolahti       Tarja            Finland
Savolainen       Heikki           Finland
Teronen          Arto             Finland
Giraud           Christiane       France
Pallier-Duplat   Jeanne-Marie     France
Bieneck          Hans-Jürgen      Germany
Deden            Helmut           Germany
Lüken            Kai              Germany
Karageorgiou     Alexandros       Greece
Gádor            János            Hungary
Zombori-Molnár   Kornélia          Hungary
Papp             István            Hungary
Saemundsson      Eyjolfur         Iceland
Albracht         Gerd             ILO
Claffey          Peter            Ireland
Henry            Michael          Ireland
Martone          Mariano          Italy
Notaro           Mario            Italy
Elce             Rita             Latvia
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Opening speech

Minister of Social Affairs and Health Tuula Haatainen

Improved safety and health through collaboration

As we all know the demographic change creates a real challenge to Europe. Due to this fact we have to try to find ways how we can make working career longer. The only sustainable solution is to raise the quality of working-life. One side of the coin is pension system. We need pension systems that encourage staying longer in working-life but the other side of the coin is the fact that we need better working life. In this respect good occupational health policy is crucial if we want to reach our goals.

The ministers of health, labour and social affairs reconvened in an unofficial meeting during the Finnish presidency to discuss the demographic change stressed in their conclusion that health objectives should be prominent in all policies of the European Union and its member states.

It is well known that the economic success is directly related to the health and life expectancy of the population and it is clear as well that good state of health also creates wealth. For instance the employability of healthy persons is good, they have little absences because of illness, and their work ability contributes to the productivity and general success of economy.

Apart of this, prevention of health problems and accidents has also a human value in itself and a primary objective of a welfare state. Therefore, good conditions in work and workers´ protection are in the interest of state. Governments have created special services or authorities to provide for the achievement of these goals, and today we have convened the representants of these services in Helsinki for the conference of the SLIC.

The theme today is the contribution of health professionals in the labour inspection service. It is obvious that all member states have adopted their specific models due to historical and economic conditions. It cannot be said that one model is better than the other. However, we all can learn from each other, and I believe that this has been the principal idea of the organizers of this meeting.

European economies resemble more and more each other, and it would seem evident that close cooperation and mutual help through exchange of ideas and good practices is an excellent way to increase the coherence of the Union and also make the life of its citizens easier.

Today´s programme shows the large variety of solutions in the labour protection methods in member states. It is also interesting that we share the same ideas and objectives. It goes without saying that the health protection is close to all health professionals. Old dictum says that it is better to prevent than heal. I want to add that it is also much, much cheaper to the taxpayer.

Therefore, to send doctors to a workplace is not to expect that they give out headache pills to palliate stress or exposure effects but to see how the unhealthy conditions could be improved.

We also have to realize that preventing of accidents or ill health may not be core capabilities of a medical practitioner. Other experts are needed as well. In fact, nobody can truly say that they know all about work. Quite simply, like in production, in occupational health and safety the teams must be formed so that members understand the contribution of others and carry out their roles in good harmony.
Today, we can learn of the solutions in several member countries. Although I regret to say that I cannot follow the discussion later on, I very much would like to learn of the conclusions and ideas presented here.

To this end, I count on the participation of everyone and on seeing the final report of this session. It may even be that this seminar will be a beginning of a project that will influence the procedures in all member states.

With these words I wish you a fruitful and constructive day.
Doctors at the Labour Inspectorate in Belgium
“a long history for very good reasons”

Dr Karel Van Damme and Dr Jean-Marie de Coninck, Federal Public Service for Employment, Labour and Social Dialogue, Belgium

Outline

• Background and timeline.
• The milestones 1849-2006.
• The milestones in the Medical Inspectorate.

Background

• Occupational diseases have existed ever since man has worked
• Ancient Greece and Rome (Pb, Hg)
• In 1700, Bernardino Ramazzini published De Morbis Artificum Diatriba (Treatise on Diseases of Workers)
• Quarry workers’ silicosis.
• Bakers’ asthma.
• Painters’ disease (Pb).
• Tailors’ MSD (sciatica).
• Boilermakers’ ear (copper).
19th century:

- Industrial age: development of coalmining and steelmaking
- Workers' conditions appalling: more and more people affected
- Endless working hours - 12 to 15 hours per day
- Women and children working in mines
- Poor hygiene and living conditions, extreme poverty, exploitation of workers
- Life expectancy at birth:
  1850: 25 years          2000: 75.3 years (France)

Dawn of the 20th century

- Things start to move.
- 1900 Paris: International Association for the Protection of Workers.
- 1919: establishment of the ILO and first publications:
  - Health at work – Pathology of occupational diseases – Industrial toxicology
Since 1945

- 1945 Emergence in the English-speaking world of the idea of adapting work to the worker:
- Physiology – Psychology – Organisation of work (birth of ergonomics)
- 1959 ILO Recommendation No 112 on Occupational Health Services in Places of Employment.
- 1980 WHO: new definition of health
- Framework Directive 89/391 and individual Directives on safety and health at work.

Preamble to the Constitution of the World Health Organisation

- "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."
FEDERAL PUBLIC SERVICE EMPLOYMENT, LABOUR AND SOCIAL DIALOGUE

Milestones 1

- 1810 (under Napoleon) Mines Inspectorate – maintenance of buildings and safety of ground
- 1849 Survey on workers’ conditions and child labour (The Labour Inspectorate was rejected by the Liberals in Parliament)
- March 1886 Riots and working-class uprisings – many killed (Charleroi and Liège)
- November 1886 Reaction in the royal address to Parliament, and birth of social legislation

Milestones 2

- 1888 Classified Establishments Police Act – Pro-justitia and fixing of fines.
- 1899 Safety and Health of Workers in Industrial and Commercial Businesses Act (free access to places of work)
- 1905 Supervision for workers aged less than 21 years by the medical inspectors of the occupational health service (State)
- 1937 Supervision extended to the public sector.
Milestones 3

• 1945 Health checks for workers: examination on recruitment and then at regular intervals for workers aged less than 21 years and for occupational risks. Employers were simply asked to set up occupational medical services. (Preamble to the Act)
• 1952 The law prescribed the establishment of medical services under the aegis of the Medical Inspectorate.
• 1965 Occupational medicine moves into the private sector under the aegis of the Medical Inspectorate and the supervision of the two sides of industry.
• ALL BUSINESSES must become members of an Occupational Health Service

Milestones 4

• 1965 Full implementation of ILO Recommendation 112 of 1959:
• Links established between medical surveillance and surveillance of the hygiene of places of work
• Compulsory notification of occupational diseases
• Supervision of medical services by medical inspectors.
• Confraternity – sharing of medical confidentiality – same level of training permitting effective cooperation.
Milestones 5

- Transposition into Belgian law of European Directives as from the end of the 1970s.
- Move from safety and health to well-being.
- Need for a multidisciplinary approach
- New approach to health and safety through risk analysis and assessment.
- Obligation as to results rather than as to means.
- Humanisation of work and account taken of psychosocial aspects.
- Balance between work and private life.

Medical Inspectorate 1

- 1895 Ministry of Industry and Labour.
- 1 doctor in central administration of Inspectorate.
- 4 medical inspectors conducting in situ surveillance of safety, health and hygiene at places of work.
- 1905 small research laboratory: air, water, dust.
Medical Inspectorate 2

- 1919 Establishment of the Occupational Medicine Service at the Ministry.
- 10 medical inspectors.
- Protection for pregnant women.
- Medical care for apprentices and occupational guidance.
- Monitoring medical legislation.
- Study of the physiology and pathology of work.
- Dissemination of knowledge and concepts of prevention in social security bodies and the work environment (advice and opinions).

Medical Inspectorate 3

- 1936 Restructuring of the Labour Inspectorate:
  - Technical Department
  - Social Department
  - Medical Department
  - Industrial Relations Department
  - Toxicology Laboratory
Medical Inspectorate 4

- 1936 Medical Department within the Inspectorate:
  - Health monitoring for apprentices
  - Assistance for social security bodies
  - Study of physiopathology
  - Annual medical examination for persons exposed to a risk of occupational disease.

Medical Inspectorate 5

- 1972
  - Legislation brought into line with ILO Convention 81 of 1947
  - Free access for medical inspectors to places of work.
  - Right to issue warnings and to set deadlines for compliance.
  - Immediate enforcement action in the event of imminent danger.
  - Exchanges of information between inspection services and assistance for the police.
  - 8 to 30 days imprisonment and a fine of €1 250 if instructions are not followed.
Medical Inspectorate 6

- 1972
- Staff to include 1 inspector-general and 3 medical inspectors in the central unit.
- 5 regional directorates to cover the country as a whole.
- around 25 medical inspectors, around 35 assistant inspectors and administrative staff.

Medical Inspectorate 7

- 2003
- Merger of medical and technical inspectorates
- Multidisciplinary inspection teams able to issue opinions and monitor the various aspects of well-being at work (Law of 1996):
  - Safety (accidents)
  - Occupational medicine
  - Occupational health
  - Ergonomics
  - Psychosocial aspects (stress and violence)
Medical Inspectorate 8

- Supervision of occupational medical services (monitoring the activities of the doctors and their compliance with the legal provisions; access to all individual medical records; checking compliance with rules of professional conduct etc.).
- Appeal against decisions by occupational medical officers
- Appeal against decisions following medical examinations in connection with absenteeism.
- Examination of the place of work and individual records following notifications of occupational diseases.
- *In situ* assessment of health risks and measures; evaluation of risk assessments carried out by the employer or his internal or external prevention service.
- Performing or prescribing medical examinations.
- Psychosocial aspects (stress and violence).
- Various tasks shared with other inspectors.

Medical Inspectorate 9

- TO SUM UP, THE AIMS ARE:
- to shore up the impartiality of occupational medicine in internal and external services
- to ensure the protection of workers
- to help prevent exclusion and the “survival of the fittest”.

Conclusion

• History provides enough evidence of the role played by doctors in improving safety and health at work. As is often the case, legislation adapts to changes in society and new knowledge. At a very early stage in this process, the medical department of the Inspectorate was assigned a protective and preventive role, which it continues to perform with great conviction.
The role of occupational medicine in labour inspection in Austria

Dr Susanne Pinsger, Medical Labour Inspection Service, Austria

Introduction

The Austrian Labour Inspectorate has been around for over a hundred years (it was founded in 1883). Labour inspection forms part of the remit of the Federal Ministry of Economic Affairs and Labour. There are 19 regional labour inspectorates and a labour inspectorate for construction, these being directly answerable to the Central Labour Inspectorate [Zentral- Arbeitsinspektorat], which is responsible for the coordination and overall management of operations. There are some 550 people on the pay roll, 310 of whom are in the external service responsible for monitoring compliance with legal provisions to protect some 2.6 million employees. Each Bundesland has at least one labour inspectorate. Each labour inspectorate has an inspectorate medical service at its disposal.

Inspections are made of workplaces, construction sites and external places of employment subject to labour inspection. Jurisdiction does not extend to agriculture and forestry, transport labour inspection, public education and training institutes, churches and religious associations or private households.

The labour inspectorate checks compliance with legal provisions to protect the lives and health of employees at the place of work. These include provisions on the handling of hazardous substances, the use of dangerous machinery, stress caused by working methods and other factors such as noise, child and youth labour, the employment of pregnant women and employees in need of special protection, working hours and time off/holidays. Information of a legally binding nature is also provided free of charge, and advice given on all aspects of safety and health at work. Labour inspectors are involved in authorisation and derogation procedures. Investigations are carried out in the event of accidents at work, complaints about shortcomings or occupational illnesses. As well as taking part in national and international projects, labour inspectors are also involved in training programmes, lectures and discussions to help with the basic or continuous training of officials responsible for occupational health and safety.

Routine work calls for expertise in the technical, legal and occupational health fields ("generalists"). The labour inspection bodies with special remits include the labour inspection medical services with labour inspection doctors, hygiene specialists, female labour inspectors for women's employment and maternity protection and labour inspectors for child labour and the protection of young people ("specialists").

Labour inspectors are authorised and, indeed, obliged, to provide advice and support on all aspects of labour protection. They may at any time visit and inspect work premises, companies and construction sites unannounced, ask people questions, ask for information in writing, carry out measurements, look at files, etc. If worker protection provisions are not being complied with, discussions are held with the persons responsible, and a written invitation is then issued to ensure that the situation is regularised within a specified period of time. If it is not, the relevant authorities issue a fine. For serious violations, a fine is issued on the spot.

Labour inspectorate medical service

The labour inspectorates currently employ 11 labour inspectorate doctors - four for Vienna, Niederösterreich and Burgenland, two for Oberösterreich and Salzburg, one each for Tirol, Vorarlberg and Kärnten and two for Steiermark. Medical graduates spend a three-year training period in various hospitals to become medical practitioners before coming to the labour inspectorates.
Here they do two years' training in vocational medicine with the Medical Services. We, like all other labour inspectorates, must also attend a number of training courses during the first two years of service covering technology, law, communications and vocational medicine, these leading to a final examination. Further expertise is acquired during an outside course lasting 12 weeks and covering the field of employment psychology.

Vocational medicine includes the prevention of occupational diseases and work-related illnesses from the particular viewpoint of medicine, occupational hygiene, occupational physiology, occupational psychology and ergonomics.

The day-to-day work of labour inspectorate doctors differs in a number of important respects from the work done by labour inspectors. Specifically, delicate questions relating to the suitability of workers must be assessed and processed, as must highly personal medical data and study findings. The labour inspectorate doctors do not carry out medical investigations themselves, but draw on findings produced by doctors with special authorisation to practice vocational medicine. Decisions on the need for legally prescribed studies are likewise the responsibility of the labour inspection doctors. In all, the results of investigations on some 55,000 employees are checked each year, and decisions made about the suitability of the individuals concerned in terms of their health, and whether they should stay in their posts. Their remit also includes quality assurance in respect of doctors' investigations and checks on the investigating doctors, as well as of the tasks legally assigned to works doctors within enterprises.

If an occupational disease or work-related illness is suspected, an on-site investigation is carried out and the relevant measures taken. Assessments are carried out of the composition of working materials ordered from manufacturers or distributors, and a working materials database is kept. Control measurements of chemical materials, air, noise or lighting often lead to applications being made to the labour inspectorate's measuring team or outside measuring bodies. Labour inspection doctors must answer questions about chemical or biological materials, physical effects, ergonomic or psychological problems at the workplace and their effect on health. To this end, extensive research is carried out of "new" problems cropping up in the context of vocational medicine, and facts and data are collected and evaluated. In order to field medical queries, cooperation is provided for almost all in-house projects relating to labour inspection.

For female employees suffering health problems during pregnancy, the labour inspection doctors, based on the findings of specialists, issue release certificates allowing the employees concerned to take premature maternity leave, either limited or unlimited (maternity leave normally begins in the 32nd week of pregnancy).

Besides internal cooperation with maternity protection experts, hygiene technicians, other labour inspectors and the measuring team, there is also external cooperation with private services, the authorities, works councils, etc.

The most intensive cooperation in house is with the labour inspectorate's hygiene inspectors. Since 1979, each labour inspectorate has had 1-2 hygiene experts with the relevant technical training to support vocational doctors in technical matters relating to hygiene in the workplace. Cooperation is clearly structured. If a particular work hygiene problem crops up, doctors submit written enquiries to the hygiene specialists. The hygiene specialists carry out the relevant investigations \textit{in situ} and answer the relevant questions. Records are kept of both queries and answers, so any labour inspector has the relevant information for subsequent inspections. Once a year a meeting takes place between hygiene experts and labour inspection doctors to exchange ideas on additional standards and procedures. The common objectives of vocational medicine and hygiene technology include prevention and the early diagnosis of occupational diseases and work-related illnesses, health promotion in the workplace, guaranteed standardized working conditions for all employees and the applicability of statutory provisions in all enterprises.
Doctors and technical experts act as contacts for all matters relating to vocational medicine and occupational hygiene, both internal and external, and also provide company preventive services with backup.

Summary

The Austrian system, which makes occupational medicine an integral part of labour inspection, has proved its value over the years. Occupational medicine plays a very important role in this system. Sound and close cooperation between labour inspection doctors and labour inspectors has led to comprehensive coverage of vocational health and safety concerns in terms of planning, consultation and inspection, and this has encouraged the primary prevention of occupational diseases, work-related illnesses and accident prevention in the workplace. For employers, employees, works councils, preventive services and other authorities, this has meant that a single authority has been created for all matters relating to health and safety at work.
Labour Inspection in Austria - a short overview

- for more than 100 years (since 1883)
- 19 regional labour inspectorates and one special inspectorate for construction work are directly under the Central Labour Inspectorate
- each labour inspectorate has a medical labour inspection service
- 310 field representatives supervise compliance with provisions for the employees’ protection
- responsible for approx. 2.6 m employees
Sphere of activities

- Workplaces, construction sites and other places of work
- No jurisdiction over
  - agriculture and forestry
  - traffic-labour inspection
  - public schools and approved schools
  - churches and religious communities
  - private households

Tasks of Labour Inspection in Austria

- labour inspection verifies adherence to the legal provisions for the protection of life and health of the working population
  - e.g. working conditions for young people or pregnant women, workers in need of special protection, working times and time-off
- information and advisory service in all matters of occupational safety and health at work
Tasks of Labour Inspection in Austria

- tasks as a party in permission and exemption procedures
- investigations in the event of accidents at work and occupational diseases
- lectures, education and further training of those responsible for protection at work
- participation in national and international projects

Labour inspectors are entitled to

- enter and inspect industrial plants, workplaces and construction sites at any time
- examine all documents referring to safety at work
- take samples of agents and arrange for analyses
- obtain informations on agents and machines from manufacturer and distributors
- lay an information with the competent authority
- enforce measures without delay

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Education and Knowledge

- professional know-how in matters of technology, occupational health care and law („generalists in OSH“)
- specialists in following fields
  - occupational medicine and hygiene
  - women’s employment and working pregnant women
  - children’s employment and protection of young workers

Specialised labour inspectors

- medical labour inspection service
  - occupational physicians

- each labour inspectorate has
  - hygiene technicians
  - labour inspectors for women’s employment and working pregnant women
  - labour inspectors for children’s employment and protection of young workers
Organization of a labour inspectorate

- Labour inspectorate
  - Medical labour inspection service
  - Employment restrictions
  - Women’s employment and expectant mothers
  - Protection for children and young persons
  - Technical aspects of health and safety at work
  - Occupational hygiene
  - Office

Occupational Physicians

- 11 occupational physicians for 20 districts
  - 4 in Vienna, Lower Austria, Burgenland
  - 2 in Upper Austria, Salzburg
  - 2 in Tyrol, Vorarlberg
  - 2 in Styria
  - 1 in Carinthia

- 2 occupational physicians in Central Labour Inspectorate

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Occupational physicians - Education

- general practitioners (studies at university and three years work at hospital)
- two years education in medical labour inspection service
- participation in training courses in the field of technology, law, communication and occupational health care and a final examination
- 12 weeks further training in occupational medicine (external)
- training in psychology and other qualifications

Tasks of occupational physicians

- Prevention of occupational diseases and work-related illness considering occupational medicine, occupational hygiene, occupational physiology, occupational psychology and ergonomics.
Tasks of occupational physicians

- our responsibility differs from work of other labour inspectors in special scopes of work
- we control workplaces too – working conditions, risk assessment, health hazard
- supervision of work of occupational physicians in companies

- decisions on health surveillance at work
- quality assurance of medical checkups and controlling of medical doctors who examine employees
- verification of results of tests concerning health surveillance and confirmation of employees’ physical suitability (approx. 55 000 employees a year)
Tasks of occupational physicians

- talking to employees confidentially about their results in tests concerning health surveillance, physical condition and/or diseases
- recommending further checkups
- deciding about whereabouts at workplaces in case of health problems

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Tasks of occupational physicians

- We do not examine employees but rest on the results of tests and inquiry reports made by other physicians like occupational physicians, internists, gynaecologists, neurologists etc.!
Tasks of occupational physicians

- making inquiries about etiology of supposed or confirmed occupational diseases
- measurements: interior climatic conditions (temperature, humidity and air velocity), noise, illumination/brightness, chemical agents
- control of compounds of agents and responsibility for the chemical database

Tasks of occupational physicians

- answering questions and delivering expert opinions concerning biological and chemical agents, physical effects, ergonomics or psychological problems
- comments on health hazards of employees, considering young people, pregnant women and disabled persons
Tasks of occupational physicians

- exemptions from work for pregnant employees with health hazards more than 8 weeks before expected date of birth
- advisory services for our colleagues in medical questions
- collecting information and facts about newly appeared occupational health problems and their consequences

Internal cooperation with

- hygiene technicians
- labour inspectors for female employees and pregnant women
- labour inspection team for measurements
- other labour inspectors, mostly technicians
- occupational physicians and experts from the Central Labour Inspectorate
External cooperation with

- experts and centres for the prevention of occupational accidents and diseases
- employers, employees and works councils
- chambers, trade unions and professional associations
- social security carriers
- testing, consultation and research services
- training institutions
- traffic-labour inspection, agriculture and forestry inspection
- other authorities

Hygiene technicians

- labour inspectors with special responsibilities
- established 1979
- technical education
- 1-2 hygiene technicians per labour inspectorate
- cooperation with occupational physicians
Tasks of hygiene technicians

- in support of physicians in hygienic/technical questions
- preliminary measurements: climatic conditions, noise, illumination/brightness, chemical agents
- technical checks e.g. exhaust systems, noise protection, lifting equipment
- checking personal safety equipment

Aims of occupational physicians and hygiene technicians

- prevention and early diagnosis of occupational diseases and work related diseases
- promotion of health
- guarantee of standardized working conditions for all employees and of application of legal regulations in every enterprise
Cooperation between occupational physicians and hygiene technicians

- Occupational physicians pass questions about technical / hygienical problems on to hygiene technicians, who inspect the concerned companies and try to answer those questions.
- Once a year, occupational physicians and hygiene technicians from all 20 labour inspectorates meet for exchange of information.

Common interests of occupational physicians and hygiene technicians

- Contact in all questions of occupational medicine and hygiene, both internally and externally.
- Treatment of “new“ problems.
- Setting of standards.
- Supporting preventive services.
- Projects and conferences.
Experience and advantage of the Austrian system

- very good experience with the integration of occupational medicine in the organisation of labour inspection

- a holistic view of occupational medicine and safety at work in controlling, planning and/or consultation considering problems at workplaces

Experience and advantage of the Austrian system

- support of primary prevention
- the „only place“ to go in questions of occupational medicine and hygiene for internal and external persons
- ….that´s the reason for fast action in problems of OSH
- occupational medicine plays an important role
Experience and advantage of the Austrian system

- Since medical labour inspection services are directly integrated in the structure of labour inspection, there is very good cooperation between physicians and other colleagues. Especially questions about health and diseases like health hazards because of chemical, biological or carcinogenic agents, effects of noise, vibration, electromagnetic fields, mobbing or risks for pregnant women etc. are worked on comprehensively.

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Experience and advantage of the Austrian system

To establish and to integrate occupational medicine in labour inspection give a very good account!

+++++++++++++++++++

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Prevention of musculoskeletal disorders in Finland

Ms Tarja Kantolahti, Ministry of Social Affairs and Health, Finland

The main objective of occupational safety and health is to maintain and promote health, safety and work ability of the employee, as well as to prevent occupational accidents and illnesses (1). Prevention of work-related musculoskeletal disorders, mental well-being at work and occupational accidents prevention are the special goals for the development of occupational safety and health in Finland (2). EU directives, national legislations, norms and standards give good bases for preventive activities in the field of musculoskeletal disorders.

There are many ways what we can use for the prevention of work-related musculoskeletal disorders. At first we have to accept that musculoskeletal disorders are a complex phenomenon. If we look at ICD-10 (International Classification of Diseases) classification, we can find about 800 different diagnoses for the musculoskeletal disorders. This means that different risk factors are behind different musculoskeletal disorders. If we compare for example repetitive injuries and back injuries, we understand that the risk factors are different in different musculoskeletal disorders. Recent studies from the Finnish population has addressed that chronic low back syndrome has become less frequent over the past 20 years. The prevalence of chronic low back syndrome in men was 10% and in women 11% according to the studies of Health 2000 (n=7977). In the Mini-Finland Health Survey, that was done 20 years ago, such a condition was diagnosed in 18% of men and 16% of women. Additionally, the prevalence of the neck syndrome has been reduced by one half in 20 years. A chronic neck syndrome was diagnosed in 5% of men and 7% of women according to the studies of Health 2000 (n=7977). The figures in the Mini-Finland Health Survey were 10% and 14%, respectively.

Group activities for health promotion are organised by various associations and companies, local authorities, health centres and parishes. There are no previous studies on participation in such group activities on the population level. During the past year 30% of the respondents (women 39%, men 20%) had participated in at least one health promoting group. The most common types of groups were those promoting musculoskeletal health or general physical health (women 19%, men 9%). Working age women were the most active participants, men aged 65 or over were least active.

Despite of these population findings we know that that musculoskeletal diseases and disorders are major causes of early retirement and work absenteeism.

It is important to understand that we already largely know the risk factors of work-related musculoskeletal disorders (7). Work-related musculoskeletal disorders are consequences from the different work system factors. The link for example between the pathologies of upper limb work-related musculoskeletal disorders (UL-WMSDS) and different aspects of work organization (high pace, repetitive tasks, lack of breaks and long working hours) has been convincingly proven (4). The study has indicated that taking global view in health promotion, preventive health and rehabilitation may provide a more effective tool than only focusing on the body, which is the more common approach today (6).

Key factors for the musculoskeletal prevention are 1) investment in ergonomics/human factor knowledge, 2) investment in development activities on the area of occupational safety and health and 3) investment in network activities in national and international level. Investment in ergonomics means that inspectorates start to use the knowledge of ergonomics more than today. With this knowledge inspectors can better understand the different risk factors that lead to the musculoskeletal disorders. The different factors are organisational and institutional factors, technological and technical factors, environmental factors, individual factors, leisure time and family life factors. Inspectors can add this knowledge also to the organisational level during the inspection. About 70% of our inspectors in Finland have got technological education.
The study has showed that even machinery and job designer need ergonomics knowledge like a clear understanding of ergonomics principles and methods for the prevention of UL-WMSDS (4).

Secondly, investment in development activities is needed. We have already a huge mount of studies about how to improve work system efficiently and how to affect musculoskeletal health with this information. 16.2 researchers per 1000 labour force exits in Finland. It is more than the other countries in Europe. At least some researchers are interested in musculoskeletal disorder and some other in other countries. We need now more activities in organisational level, because relevant useful studies already exist. Inspectors and inspectorates have already very good connections to the organisation and workplaces. Organisations need guidance for how to start development activities in the area of musculoskeletal prevention using the knowledge from the area of ergonomics. For example the risk assessment methods and other relevant knowledge could be unknown on the small and medium enterprises.

Thirdly, investment in better networking is needed. We need more co-operation between inspectorates and local universities/institution and more co-operation between inspectors and ergonomist. Objective of this network is that using this co-operation inspectors and inspectorates can better facilitate companies and workplaces for prevention of MSD.

We have many good examples for this prevention work: developing Repe-method for analysing repetitive work, developing method for analysing VDU work, co-operation program with researchers, national environmental analysis using the evidence-based knowledge from researchers, and sector co-operation.

Musculoskeletal disorders at work imply huge costs at national level. In Finland, the socio-economic costs of work-related musculoskeletal disorders were estimated as 1% GNP in 1996. Ergonomist is quite new profession in Finland. The education for ergonomist started in 1996 on the university level. One important thing is that ergonomists must also be active and they have to produce practical solutions and easy reading guidelines for workplaces.

Reference
1. Occupational Safety and Health in Finland. Brochures of the Ministry of Social Affairs and Health 2004:5.
“Ergonomics” - attitude on your mind

Wojciech Bogumil Jastrzebowski from Poland created this term in 1857

Ergonomics

- **Physical ergonomics** is concerned with human anatomical, anthropometric, physiological and biomechanical characteristics as they relate to physical activity.

- **Cognitive ergonomics** is concerned with mental processes, such as perception, memory, reasoning, and motor response, as they affect interactions among humans and other elements of a system.

- **Organizational ergonomics** is concerned with the optimization of sociotechnical systems, including their organizational structures, policies, and processes.
Areas of Knowledge and Topics, EU level

- Ergonomics principles: ergonomics approach
- Human Characteristics: anatomy, psychology, social and organisational aspect, physical environment
- Work Analysis and Measurement: work analysis
- People and Technology: health, safety and wellbeing, workplace design, information design, work organisation design, occupational hygiene
- Professional Issues
- Practical experience

Situation in Europe: Certified European Ergonomists
Key factors for prevention

1. The knowledge from Ergonomics/Human Factors is "alive" in organisational level
   - Musculoskeletal disorders are consequences from the different factors of work organisation and looking at disorders from the medical point of view is not enough for prevention
2. Organisation culture supports individuals for workplace development activities; ergonomics includes to the strategies, designing processes, day-to-day activities and it is a part when analysing safety and health and productivity through risk management
3. Networking: national and international level; better interaction between inspectors and ergonomist in the European Union level

Ergonomics and contributing factors

- Organisational and institutional factors: strategies, management, work system design, and working practises
- Technological and technical factors: working methods, machines and equipments
- Environmental factors: internal and external
- Individual factors: physical, psychological and sociological
- Leisure time and family life factors: understanding the interaction between work and family life
OSH Actions and Ergonomics

- Legislation gives a very good bases for prevention in Finland. Inspectors, OSH specialist, employers and employees have responsibility to act.
- Legislation requires co-operation with different specialists, inspectors and employer.
- Ergonomics is evidence-based multidisciplinary science: evidence-based knowledge exist
- Ergonomists apply this knowledge for workplaces: good practices, skills for work analysis and actions in the organizational level

Development activities

Where we want to put our effort?

Do we have skills and time to apply the results of the research?
Challenges for All

About 70% of inspectors have technical education in Finland; Is this good enough for MSD’s prevention?

- Technical education is very good base for prevention, additional education from ergonomics is possible to get during working time
- More co-operation has made with specialist from the different field of ergonomics; Finnish Institute of Occupational Health
- More co-operation with occupational health care professionals
- Education for ergonomist has started 1990’s on the university level in Finland: very few use evidence-based knowledge in day-to-day activities, more education from ergonomics is needed
- Inspectorate districts have hired ergonomists

Conclusion:

- More application of ergonomics knowledge is needed for workplaces
- Managers commitment for ergonomics should be reinforce
- Specific actions that leads to the MSD prevention are needed
Good examples

- Repe-method for analysing repetitive work
- Assessment method for safety and ergonomics in VDU work: Nappara (Handy)
- Co-operation program with Finnish Institute of Occupational Health
- National work environment analysis using evidence-based knowledge from Finnish Institute of Occupational Health
- Sector co-operation: health care/manual handling

MSD’s in Finland: 1990-2005

- Reference: Social Insurance Institution, Finland.
Have we really done everything or at least something?

Work-Related Health Problems by diagnosis group in EU

EUROSTAT 1999, EU15

Learn from yesterday, live for today, hope for tomorrow. The important thing is not to stop questioning.
-- Albert Einstein
The role of occupational hygienist in labour inspection

Ms Sandra Caldwell, Health and Safety Executive, United Kingdom

www.hse.gov.uk/metalworking

Role of health professionals in labour inspection

Outbreak of lung disease in metalworking factory
Investigation

- Multi – agency investigation
- HSE
- Health and Safety Laboratory (HSL)
- Birmingham Chest Clinic (BCC)
- Other experts and peer review

Outbreak – of what?

- The world’s largest recorded outbreak linked to metalworking fluids (MWF)
Outbreak – onsets of breathlessness - when?

Outbreak – cause?

- Mist from metalworking and possibly also washing machines
Mist from metalworking

Mist from washing
Simultaneous Priorities

- Stop harm
- Identify the cause
- Warn others
- Apply law

Specialists involved

- Clinical
- Occupational health
- Occupational hygiene
- Microbiology
- Immunology
- Epidemiology
- Regulatory
CLINICAL - KEY FINDINGS

- Diagnosis of nature and extent of harm
- 87 workers with confirmed diagnoses
- 74 with occupational asthma (OA)
  - 19 with extrinsic allergic alveolitis (EAA)
  - 7 with humidifier fever (HF)
- Some with more than one disease
- Some very badly affected

OCCUPATIONAL HYGIENE KEY FINDINGS - How much mist?

- Amount of mist variable
- When measured during the outbreak found to be within UK guidance values
- 1mg/m³ for mwf concentrate and 3mg/m³ for mineral oil
- Guidance values now withdrawn
## OCCUPATIONAL HYGIENE KEY FINDINGS - What was in the mist?

- Metals from machining
- Chemicals – additives
- Micro-organisms, including bacteria
- Proportions and make – up of constituents change in use

## OCCUPATIONAL HYGIENE KEY FINDINGS – metals/chemicals?

- Metals, potential sensitisers and chemical constituents
- But none calculated to be at harmful levels
- No reaction to unused mwf from large sump
**BACTERIOLOGY KEY FINDINGS - Bacteria (measured in 2004)**

- Large MWF sumps had traces of two types of bacteria (*Ochrobactrum* and *Acinetobacter*)
- Smaller MWF and washing machine sumps had up to 10 million bacteria (including *Ochrobactrum* and *Acinetobacter*) and 300,000 endotoxin units per ml
- No *Mycobacterium* found

**IMMUNOLOGY KEY FINDINGS – sera tests**

- Sera from 3 workers with EAA and 2 with OA showed response to extract from large Mayfram sump
- Sera from 10 workers with EAA showed response to *Ochrobactrum* and *Acinetobacter* from Mayfram
- Larger scale tests showed a few responses to specific bacteria
CLINICAL KEY FINDINGS - Breathing Challenge tests

• One worker with EAA and one with OA
• Significant reaction to samples of used MWF from largest (Mayfram) sump
• No reaction to samples of unused MWF for same sump

CAUSE – Consensus of health experts

• Used mwfs
• Bacteria played a part in EAA
• Low likelihood of other causes
• Enough information gained to clarify risk factors and warrant new guidance
REGULATORY KEY FINDINGS

• Risk assessments need to address risk of serious lung disease, including EAA
• Fluid management needs to include measurement and control of bacteria in fluids
• Better prevention/control of mist needed
• Health surveillance needed where there is exposure to mist

PUTTING FINDINGS INTO PRACTICE

• Updated guidance at www.hse.gov.uk/metalorking
• Reducing risks at large users – questionnaires with follow-up
• Reducing risks at small users – road shows with follow-up
• Publicity – HSL workshop, articles, MACH’06
Expert reports

• Emerging lessons (HSE)
• Epidemiology (BCC)
• Immunology (HSL)
• Links to reports will be at

• www.hse.gov.uk/metalworking
Functions of an occupational psychologist in labour inspection

Dr Kai Lüken, BG-Institute for Occupational Safety and Health BGIA, Germany

Following a brief presentation of the features and structure of statutory accident insurance, the people involved in the psychological side of prevention as part of labour inspection are introduced. In addition to a small number of psychologists in the inspection service, the statutory accident insurance institutions (BGs) can also draw on the support of psychology experts within their own organisations. Furthermore, the Hauptverband der gewerblichen Berufsgenossenschaften (the BG umbrella organisation) also offers research and qualification activity support for all BGs. A central pool of experts on psychological matters available to all BGs acts as a forum for the exchange of experience, serves the objectives of coordinated research and qualification and takes account of branch-specific BG priorities. Findings flow directly into the work of the prevention services, as demonstrated by the concept for advice-provision software (Stressomat).

Psychological research provides the practitioners of occupational health and safety with a complex wealth of processes for assessing mental stress/strain. However, for prevention service staff in direct contact with the client, the question is very often which of these can be recommended for a specific purpose. The Stressomat software addresses this issue by helping qualified experts to select a process that is suited to the target group. The procedure is that certain aspects which can be used to describe processes for investigating mental strain/stress are offered to the operator as possible classification criteria. By clicking on these aspects (e.g. branch) and making a selection (e.g. metal-working establishments), the operator can then view a selection of processes which are or have been used in the metal-working industry. The pool of possible processes can be narrowed down further by clicking on additional important aspects until, in the end, only a small selection of processes remain, which are suited to the selected target area. In this way, a user-dependent, aspect-driven selection of appropriate stress relief instruments can be provided quickly and reliably, for direct use by the prevention service in relation to the target group.

Another example of successful interaction between inspection service, accident insurance, and research and training is provided by the project on tampering with protective devices on machinery. Since accident statistics can be used to draw only limited conclusions about the extent of the problem, this project included an empirical analysis of the number of tampering incidents in metal-working establishments. An empirical analysis of the reasons for tampering expressed by machinery operators also provided concrete tips for prevention work — also for the inspection service. A general questionnaire used mainly in training establishments — thanks to the high response rate (940 persons) — led to a reliable estimate of tampering frequency, while a special questionnaire provided detailed analyses pertaining to the machinery/protective devices tampered with. This questionnaire was handed out by inspection service staff from Metall-BGGen to workers at more than 200 pieces of machinery and covered, among other things, the operator’s reasons for his action (as a potential tamperer). The results are worrying (e.g. more than a third of all protective devices on machinery are bypassed temporarily or permanently) and also apply to newer machinery. This means that manufacturers have not yet succeeded in designing user-friendly machinery which does not tempt operators to tamper with them and at the same time takes account of economic aspects. Robotised workstations are an example: at the moment workers are still kept well away from robots by protective barriers, but innovative safety concepts such as robots with virtual protective barriers will in future allow even hand-in-hand cooperation.
Intelligent camera systems, with software ensuring the safe separation of people and equipment, are tamper-proof protective devices which do not disrupt the work process. But not only machinery and protective device designers need to act; the project results can also help firms operating machinery, and the inspection service can make an active contribution here.

As the two examples have shown, the inspection services can draw on a network of psychology experts in addition to their own qualification and research organs. This network ensures both a safe scientific basis and a close link to practical reality. Only in this way can the results be implemented in a manner that is suited to the target group.
Structure

- Dual labour inspection system in Germany: mutual German strategy for occupational safety and health
- Psychology as a prevention component at the BGs
  - BG-Network: Results from the workgroups of an interdisciplinary committee
  - Good practice examples
    - Software concept „Stressomat”
    - Example: Project „Bypassing of protective devices on machinery”
- Conclusion

Characteristics of the Statutory Accident Insurance

- Autonomous system of social insurance
- Self-administration by social partners
- Financed by employers’ contributions
- Classification by industry sector
- Tasks: prevention, rehabilitation, compensation
- Supervision and service definition by the state
HVBG’s research institutes for occupational safety and health

- Industrial psychology is a main workscope of BGAG

Psychologists in prevention

- At the BGs
  - Psychologists as inspectors
  - BGs’ psychologists in support of inspectors

- Support
  - HVBG: research, consulting and qualification
  - Psychological network
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Central body of experts (I)

- Survey
  Inquiry “How do the BGs deal with the topic psychological impact?” Importance of the topic for the BGs
- Conception
  Development of a communicative document by specialists, definitions, fields of application
- Qualification
  Coordination, development and implementation of interdisciplinary qualification measures (regarding contents and didactics), operational courses

Central body of experts (II)

- Violence at the workplace/victim care
  Survey, cooperation with rehabilitation organs
- BGAG-Technical discussion
  Preparation and organisation of two technical discussions
- Instruments
  Differentiated evaluation of common procedures with regard to BG’s interests, development of a system to facilitate decision making
- Publications for SME
  e.g. brochure, BGAG-Reports
Best-Practice-Example: STRESSOMAT (I)

Problem:
- Variety of evaluation methods to assess psychological strain/load that are applied in prevention
- Difficulty for the end-user (but also experts) to offer recommendations

Central question: How can stress inventories for specific purposes (i.e., branch) be designated in a need-based, valid and uncomplicated way?

Best-Practice-Example: STRESSOMAT (II)

Objective: Development of a software-tool that assists in making decisions regarding the selection of psychological stress inventories within the frame of preventive work

User: qualified personnel at the BGs

Modus:
- Selection of adequate procedures with respect to users and aspects,
- Based on a database that has been developed by a workgroup
Conception STRESSOMAT

- Target group
  - branch
  - car repair shops
  - hospital
  - administration

- Internal factors
  - all branches
  - duration
  - performance
  - evaluation

- Content / Problem
  - risk assessment
  - object of investigation

Validity of the procedure
- profundity of the analysis
- normalisation / Benchmarking
- quality criteria
- precision of measures

Scientific Background
- theory
- sophistication
- normalisation / Benchmarking

- Quality criteria
  - Validity >= .5
  - Validity < .5

Why not procedure Y?
- Administration
- Validity < .5

Project: Bypassing of protective devices on machinery

Joint Project

- Accident Insurance
  - BG for metal-working industry
  - Supervision

- Research and Education
  - BGIA
  - BGAG

Technical committee
- Body of experts
Practical assistance

BG/BGIA-Empfehlungen (recommendations)

Bypassing of protective devices on machinery

Problem:

- According to HVBG’s statistics, more than 62,000 occupational accidents (1996-2000) were caused by incorrect behavior when operating and running a machine, in particular reaching into the machine or getting closer to it than allowed.

  - Why?
  - In which scale are tampered protective devices the causes for these accidents?

- After an accident there is rather no chance to identify bypassing as a possible reason!

Interdisciplinary project team

- psychologists, ergonomists, physicists, engineers, economists, jurists
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- Safety devices, application example

Source: Deckel Maho

Source: Euchner

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- Industrial practice ...

Why?

- Ergonomics?
- Usability?
- Motivation?

...
Project: Bypassing of protective devices on machinery

Objectives:
- Empirical analysis of the number of tampering incidences in companies
- Empirical analysis of the reasons for tampering protective devices on machinery
- Publication of the results and recommendations in a HVBG-Report (www.hvbg.de/bgia, Webcode: 1855742)

- target group related realisation of the results

Study design

General questionnaire
- Mostly applied in education centers
- Questioned: employees and supervisors of metalworking companies
- Short and economic tool
- Recording of assessments regarding specific incidences of tampering in plants

Special questionnaire
- Supervising persons of the BG for metalworking become active when tampering has been recognized
- Detailed analysis of the total tampering scene
- Involving all “protagonists”
- Integration of usability aspects

Inquiry period: Spring – Summer 2004
### Some general results

#### What's your opinion?

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<thead>
<tr>
<th>Question</th>
<th>Average</th>
<th>SD</th>
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<tbody>
<tr>
<td>How much percent of protective devices on machinery are permanently tampered?</td>
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<td>How much percent of protective devices on machinery are temporarily tampered?</td>
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<tr>
<td>How much percent of all noticed tampering incidences on machinery may result in accidents?</td>
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<tr>
<td>How much percent of all occupational accidents are caused by tampered protective devices?</td>
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<tr>
<td>How much percent of the companies do tolerate tampered machinery or protective devices?</td>
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### Some special results

#### Year of construction of the machine

- **New machines with CE-mark:** 51%
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- New robots with virtual protective fields

Robot and man work hand in glove

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- Vision
Target group related realisation of the results

Recommendations addressing at
- Supervision and Consulting
- Manufacturer of machinery / Construction
- Regulation and Standardization
- Operating Company
- Education

Conclusion

- The prevention services can not only refer to their own qualification and research organs but also to a psychologically assisting network.
- This network ensures (psychological) scientific foundation but also findings that are close to reality and can be transferred directly into practice.
- Target group related realisation!
Questionnaire study on the availability of national occupational disease data in the Labour Inspection authorities

Ms Katrin Lepisk, ABB AS, Estonia, Ms Hannele Jurvelius, Ministry of Social Affairs and Health, Finland and Dr Heikki Savolainen, Ministry of Social Affairs and Health, Finland

Background

The world of work is changing and Labour Inspectorates need to change along with it. Therefore it is necessary to find out what competence Labour Inspectorates have and if there is a need for change.

Study objectives

The main objective of the study was to give an overview of one of the major tasks of Labour Inspectorates - that is to exercise supervision over investigations of occupational accidents and diseases.

Methods and the study group

Self-administering e-mail questionnaire combined with open and closed format questions was sent to all 25 EU member states.

Results

In 23 member states out of 25 there are annual statistics on occupational diseases available and published.

Besides the compensation system there are the individual cases notified to the 21 labour inspection authorities among the EU member states. In 20 member states the labour inspection authorities have procedures to investigate and take remedial action following the notification.

21 labour inspection authorities in EU include or comment statistics on occupational diseases in their annual reports and 18 of them could make summaries of these authority reports available to SLIC.

Almost half of the member states’ labour inspection authorities (12) control the quality of occupational health services provided and in 17 member states there are medical doctors among the staff of labour inspectorate.

The number of occupational diseases per 100000 employees registered in member states on a yearly basis varies from country to country from 1 to 512 cases:
Among the three most frequently registered occupational diseases in member states most often occurred:
   a) noise-induced hearing loss: 11;
   b) diseases of respiratory system incl. asbestos-related and asthma: 10;
   c) skin diseases: 9;
   d) musculoskeletal disorders: 9;
   e) carpal tunnel syndrome: 4;
   f) low back pain and degeneration: 3;
   g) parasitic diseases: 2.

Discussion and conclusion

This study did not show any difference between new and old member states. However we can see that reporting systems as well as lists of occupational diseases vary from country to country.

The role of labour inspectors in preventing occupational diseases is as important as the role of medical doctors. Everybody is a winner when they work together. Is there a need for harmonized legal system for reporting OD? Maybe there is a need for new SLIC WG that would study these questions in depth? These were the questions raised in SLIC Thematic Day in Helsinki in October 2006.

Study objective and method

- The main objective of the study is to give an overview of one of the major tasks of Labour Inspectorates- that is to exercise supervision over investigations of occupational accidents and diseases.

- Self-administering e-mail questionnaire combined with open and closed format questions was sent to the all 25 EU member states.
Q1. In your country, are annual statistics on occupational diseases available and published?

- Yes: 23
- No: 2

Q2. Besides the compensation system, are the individual cases notified to the labour inspection authority?

- Yes: 21
- No: 4
Q3. Does the labour inspection authority have procedures to investigate and take remedial action following the notification?

- Yes: 20
- No: 5

Q4. Does the labour inspection authority include or comment these statistics in its annual reports?

- Yes: 21
- No: 4
Q5. Could summaries of these authority reports be made available to SLIC?

Yes: 18
No: 7

Q6. Does the labour inspection authority control the quality of occupational health services provided?

Yes: 12
No: 13
Q7. Are there medical doctors among the staff of labour inspection?

- Yes: 17
- No: 8

Q8. How many occupational diseases do you register on a yearly basis?

Graph showing the number of occupational diseases registered in different countries.
Q9. Occupational diseases (OD)

Most frequently reported ODs in 25 member states:
- Noise-induced hearing loss: 11
- Diseases of respiratory system incl. asbestos-related and asthma: 10
- Skin diseases: 9
- Musculoskeletal disorders: 9
- Carpal Tunnel syndrome: 4
- Low back pain and degeneration: 3
- Parasitic diseases: 2

Discussion and conclusion

- Reporting systems vary from country to country.
- This study did not show the difference between new and old member states.
- Lists of occupational diseases differ.
- Is there a need for harmonized legal system for reporting OD?
Comment speech

Mr Paul Weber, Labour and Mines Inspectorate, Luxembourg

Luxembourg – an integrated labour inspection system

Following audits by the ILO and the EU Senior Labour Inspectors Committee, Luxembourg decided to introduce an Integrated Labour Inspectorate System (ILIS) to meet the challenges of the global economy. ILIS is based on relevant ILO conventions on occupational safety and health and other standards that reflect the right to ‘decent work’. It will have prevention as its prime focus. As the national competent authority, the Labour and Mines Inspectorate (ITM - Inspection du Travail et des Mines) has taken the lead in this initiative, setting up multidisciplinary teams of field inspectors and controllers who cover occupational safety and health (OSH) and general working conditions.

As the national competent authority, the Labour and Mines Inspectorate (ITM - Inspection du Travail et des Mines) field inspectors and controllers who cover occupational safety and health (OSH) and general working conditions. The principle of 1 inspector to 1 enterprise is now being applied. If additional specialist advice is needed, they can call on either internal specialists or external ones such as occupational health physicians from the Ministry of Health. At the national level, a tripartite, consultative committee for labour has also been set up, bringing together all the main stakeholders so as to help define national priorities.

Existing legislation is being modernised, and ITM is being reformed step by step. The infrastructure of ITM is being adapted to suit the new organisation, and inspectors and controllers are to be trained in new practices, with special attention being given to psychosocial issues and human factors.

There are now 3 levels within ITM’s management system. It is more detailed than the old system and has “triangular teams”, which give more responsibility to the deputy directors and heads of specific services and regional agencies. Inspectors’ tasks go beyond just controlling OSH and working conditions, as they are also responsible for the setting up of a number of specific national priorities such as promoting compliance with industrial relations conventions, though not unemployment matters.

Cultural Mutation

« Traditional » Culture (tribe people)

- leisurely lives
- less poverty
- no crime
- diverse and healthy diet
- less degenerative disease
- better psychological health

« modern » Culture (white man’s ways)

- stressful lives
- few rich, many poor
- police and prisons
- industrial fast food
- tooth decay
- anxieties, depression
Cultural Mutation

« Traditional » Culture
(tribe people)

• culture of co-operation
• mutual respect
• long term care for renewable resources
• equality (between people, sexes, between humans and nature)

« modern » Culture
(white man’s ways)

• culture of competition
• domination
• exploitation for a quick buck
• power, concentrated wealth, dominators, prisons

Negative « FEEDBACK »

Type of work <=> Accidents and illnesses

Flexible working time,
  fear of losing job,
  lack of work safety,
  lack of experience,
  incompetence,
  moonlighting, illegal immigrants

Frequency accidents 
Common illnesses  
Stress and MSD  
Lack of free time

47.6 % of job losses affect workers aged between 20 and 30

Adapting the workplace to the worker and not the worker to the workplace
Integrated Labour Inspection System « ILIS »

Planetary Politics
Conventions and
Standards of ILO,
EU and MS Social Law

National Tripartisme
Synergy amongst Stakeholders in the frame
of a Holistic Approach

Coordination strategies between Competent Authorities
by means of an integrated management system

Coordination of practical measures to be taken in the field

Installation process of a ILIS system - Conclusions

1) National political level:
   • Draft legal act concerning the reorganisation of ITM
   • Draft legal act concerning the creation of a Standing Committee of work
     and employment and an authority of tripartite mediation
   • Draft legal act amending the law relating to the safety and the health of the
     workers at work (89/391)
   • Draft legal act carrying approval of conventions and protocols of the ILO

2) National strategic level:
   • Constitution of a Standing Committee of work and employment
   • Declaration: «Promotion of safety, health and well-being of workers»
3) Sector strategic level: (ITM)
- Pluri-sectors activities by departments
- Sector pluri-disciplinary teams in OSH and working conditions

4) Operational level: (ITM)
- Operational pluri-disciplinary teams by geographical area
- Specific actions in pluri-disciplinary teams
- Monitoring
- Inter-administrative collaboration
- Collaboration with the key actors of the companies and the insurance

Beyond control other aspects: mainstreaing action plans stimulation methodological help practical guidance

Standards for working life

Convention 81 + 129 OIT
Actors in the OSH field

<table>
<thead>
<tr>
<th>People Trained</th>
<th>People</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Safety supervisors&quot; in enterprises &gt;14 workers</td>
<td>~ 2,100</td>
</tr>
<tr>
<td>&quot;Workers Safety Delegates&quot; in enterprises &gt;14 workers</td>
<td>~ 2,100</td>
</tr>
<tr>
<td>&quot;Industrial health services&quot; - Work medical doctors</td>
<td>40</td>
</tr>
<tr>
<td>- Secretariat</td>
<td>40</td>
</tr>
<tr>
<td>Safety coordinators for mobile building sites</td>
<td>149</td>
</tr>
<tr>
<td>The Labour and Mines Inspectorate (ITM)</td>
<td>64</td>
</tr>
<tr>
<td>Department of Health, Industrial Health Division (SST)</td>
<td>6</td>
</tr>
<tr>
<td>The Health Service for the Public Service (SSFP)</td>
<td>3</td>
</tr>
<tr>
<td>Customs Authorities, safety division (ADA) from 115 about</td>
<td>~ 30</td>
</tr>
<tr>
<td>Accident Insurance Association (A.A.I.)</td>
<td>5</td>
</tr>
<tr>
<td>The 9 approved inspection bodies: AIB/Vincotte, Apave Alsacienne, Apragaz, Halffann &amp; Heister, Hosser-Haas, LC-Luxcontrol, Luxcontrol S.A., Secolux, TÜV-Rheinland</td>
<td>~ 50</td>
</tr>
</tbody>
</table>

Making a total of: equivalent to 2% of the working population ~4,500

Business Excellence

- Quality
- Costs
- Personnel
- Ethic
- Marketing
- Safety, health, environment
- Technology

DuPont 2004
Management Principle: Equal in priority

Healthcare, costs, personnel, production, quality, environment and safety are equal in priority and are “managed” by the same principles.

Prerequisites for Success

Excellence in safety, health and environmental performance as company goal

Goals and accountability communication

Improvement programs

Progress evaluation

Implementation of a new culture
Levels of ITM reorganisation

Number of actual critics

Facilities / hard-ware

Management System and Team-Work

Individual Human Factors management by result

2002 2003 2004 2005 2006 2007 2008

CHRIT / BIT 4 Draft Laws New Facilities Management Adoption

Audit New Facilities Management system of 4 Laws

Organizational development = Excellence

Performance

• Management commitment
• Workplace conditions
• Discipline, rules
• Supervisory control
• Value for all employees

• Personal commitment
• Mentality
• Self-management
• Self-discipline
• Self-responsibility
• Personal goals
• Care for her / himself

• Team commitment
• Team spirit
• Development in team
• Help others conform
• Team Objectives/Goals
• Value for each other

Development Stages in time

Dependent 40% seedbed

Independent 40% Arithmetic total

Interdependent 20% exponential

Source: DuPont
On the job / off the job

The DuPont Journey to Safety Excellence (200 years total)

Accidents causing lost work time per 1000 employees per year

The Goal is Zero Incident

Source: DuPont
Layers of more and more abstract manifestations

Model of more abstract layers of manifestation

- Present/Freedom
- Space/Time
- Feelings
- Energy Fields
  - Atomic Nucleus
  - Atom
  - Molecules
  - Cell
  - Organ
  - Organism

Employer / Employee Safety and Health 89/391/EEC

- Here and now
  - horizontal/vertical
  - Psychic Energy
    - Stress
    - Electro-magnetic
    - Radioactivity
    - Chemical Agents
    - Carcinogenic Agents
    - Biological Agents / GMO
    - Individual Protective Equipment / noise
      - Use of Personal Protection Equipment PPE
      - Minimal occupational safety and health
      - Mobil and temporary Work Sites, General OSH Plan

- 10^-9, 10^-2, 10^0, 10^2, 10^3, 10^4, 10^5, 10^6, 10^7, 10^8, 10^9, 10^10, 10^11, 10^12, 10^13, 10^14, 10^15, 10^16, 10^17, 10^18, 10^19, 10^20, 10^21, 10^22, 10^23, 10^24, 10^25, 10^26, 10^27, 10^28, 10^29, 10^30, 10^31, 10^32, 10^33, 10^34, 10^35, 10^36, 10^37, 10^38, 10^39, 10^40, 10^41, 10^42, < 10^43
An important conclusion of this study (BOEING USA) is that for every year one works beyond the age 55, one loses two years of life span on average.

Sing Lin, Ph. D.
Ways of organizing projects in a certain timeframes

<table>
<thead>
<tr>
<th>Time horizon</th>
<th>3 months</th>
<th>1 year</th>
<th>2 years</th>
<th>5 years</th>
<th>10 years</th>
<th>20 years</th>
<th>50 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>President gen. / 4-star General</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Director gen. of a corporation / Lieutenant-general</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Director / Major-general</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>General manager / brigadier</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Company manager / squadron leader</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Section head / major</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Worker / crew</td>
</tr>
</tbody>
</table>

Interim

Investments if >15% Profit

Levels of efficiency to manifest success

<table>
<thead>
<tr>
<th>Origin</th>
<th>Creativity Cognition</th>
<th>Absolute</th>
<th>Liberty Freedom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feelings</td>
<td>Wishes Intention Intuition Emotions</td>
<td>Future</td>
<td>Success / Fulfillment</td>
</tr>
<tr>
<td>Thoughts</td>
<td>Mind Psychic Energy “Soft ware”</td>
<td>Present</td>
<td>« just do it »</td>
</tr>
<tr>
<td>Practical Experiences</td>
<td>Environment Behavior Matter / Solid Press / News</td>
<td>Past</td>
<td>Don’t invest any energy</td>
</tr>
</tbody>
</table>
"Mobile" balance in time / space = Virtue: Harmony, peace

Freedom = here and now

Globalization = "Inter-Being"*

*Thich Nhat Hanh

"Nothing is created, nothing is lost"

The « C.E.R.N. » Internet www 1969 Metaphor
“The desire is the father of the thought.”
Activity = work = single true fortune

Definition of the “Well-being” of the worker

“ The worker’s well-being is characterized by a healthy, stress-free, interesting, harmonious, pollution-free working environment which is conducive to error-free performances.

The key element to develop this worker’s well-being is a holistic awareness of the complete structure of the organisation. Each employee should be provided with knowledge about technicalities, management systems, psycho-social factors and the corporate responsability of their organisation while concentrating on his/her specific task.

Think global and act local! "

4 stages of the development of an idea (Schopenhauer)

1. TO BE UNAWARE OF
2. TO POKE FUN AT
3. TO FIGHT AGAINST
4. THAT GOES WITHOUT SAYING

To multiply information
Scientific evidence
To institutionalize

Schopenhauer: Necessary time span: 70 years (approx.)
Conclusions

Professor Heikki Savolainen and Mr Arto Teronen, Ministry of Social Affairs and Health, Finland

Conclusions

- Statistics on occupational diseases exist in all member countries
- The occupational health problems are comparable
- Prevention of work-related deterioration of health is a main target of all national inspection services

Conclusions cont.

- National strategies vary somewhat although all conform with the EU strategy
- In systems with integrated health professional expertise, the health conditions of a work site and workers could be evaluated in a single process
- In systems employing external experts, a good flexibility of needed know-how is common
Development

- Reflection on the core competences of the inspection service
- Development of operation procedures in common health risk evaluation cases
- Exchange of experiences and techniques
- Comparison of health statistics
- Reinforcement of risk observatory activities