

5.

EXAMPLES OF GOOD PRACTICES

This part describes 18 cases of good practice in the Horeca sector. The actions described are very different from one another, both as regards the risks incurred by the workers and the types of workplaces, and the methods used. The objective of these examples is to provide information on good health and safety programmes and practices addressing the key OSH issues in the sector. They demonstrate practical preventive actions that have been taken in the workplace to eliminate or reduce risks in the Horeca sector.

The good practice examples are aimed primarily at policy-makers, but they should also be very useful for practitioners and social partners.

The 18 studies included in this report were suggested by the Member States. They were chosen for their diversity and the different risks they are dealing with, which reflects the great variety of working environments in this sector. They cover restaurants in hotels, but also in school canteens or in clubs and bars.

The 18 cases are grouped in four categories:

- those concerning hotels;
- those concerning restaurants/catering/canteens;
- those concerning clubs and bars;
- those concerning the Horeca sector more generally.

Each of these working environments has specific risks, and so the cases have been grouped by activity and not by risk.

Examples of good practices in hotels

France — Risk prevention for hotel housekeepers

The Île-de-France regional health insurance fund (CRAM) decided to undertake a review of the working conditions of chambermaids. The initial aim of this initiative was to create and disseminate a supporting document to raise awareness among the players in the hotel sector. It set up a hotel industry working group consisting of inspectors, instructors, industrial doctors and communications departments. An initiative was carried out in particular with Sofitel Hotel, at the request of the management. The training objectives for this hotel were to develop an autonomous, permanent preventive approach within the hotel, based on ergonomic analysis of the chambermaids' actual work, and to reduce the work stress involved.

Greece – Risk assessment in the hotel sector in Athens

The Hellenic Institute for Occupational Health and Safety in collaboration with five five-star and six-star hotels, carried out a risk assessment study in Athens. The purpose of the study was to investigate working conditions, in order to develop a model risk assessment for the sector. The methodology followed included administration of a subjective questionnaire for risks in the workplace and taking industrial hygiene measurements for noise, lighting, dust, chemicals, thermal environment and biological agents such as legionella. In addition, targeted medical surveillance took place. The basic working areas examined were the kitchens where the preparation of cold hors d'oeuvres and hot snacks takes place, boilers, hotel rooms and lobbies.

Italy — Health and safety in the hotel sector: guidelines for operators and a pamphlet for workers

The project aims at developing a protocol on the main work-related risks in hotels, focusing also on hygiene and sanitary requirements in accommodation facilities and the restaurant industry. This protocol has been presented and approved in meetings held with the Associations of hotel keepers, local trade union associations, and workers' safety representatives. Guidelines have been produced and distributed to hotel operators. Furthermore, a convention was organised in 2004 at Chianciano Terme to introduce the project and to present 'Safety and health in the hotel sector — A few helpful hints', an information pamphlet for personnel, containing brief messages and vignettes, illustrating the correct behaviour to be adopted.

Italy — Safety enhancement in swimming pool chlorination systems

This involved analysis of the causes of accidents, and investigation of the main techniques for the treatment of thermal swimming pool waters, integrated control of the interactions between the various system plants that incur water quality control (chemical, hydraulic, electrical, and electronic), definition of enhancement procedures, identification of methods of communication and the dissemination of information.

Italy — Hotel distance learning, a training plan for hotel operators

The aim of this project is to provide enterprises in the hotel industry with an organisational and methodological training instrument that meets the requirements and needs of employers and their employees who are hired on atypical or standard employment contracts.

Slovenia — Terme Radenci

The targets for this three-year project are: (a) to reduce the frequency of injuries by 10 %, (b) to reduce the negative influence of poor health and safety in the workplace, reducing absenteeism by 0.5 %, (c) to comply with the law, and (d) to eliminate fire risks.

Spain — Substitution of beds

This project involves the substitution of traditional rigid beds by new units that include a hoisting mechanism to reduce physical effort in the tasks performed by maids in hotel rooms. The idea is to introduce a lifting mechanism to elevate the beds and adapt the job to workers, making it more ergonomic. Both the preventive service and workers' representatives demanded such a measure based upon the available information, and on similar experiences in other hotels. Action was taken to reduce back injuries in the group. It involved trade union reps, employees, the staff of the preventive services, the mutual insurance company, and the manufacturing company.

Examples of good practices in restaurants/catering***Finland — Participatory ergonomic intervention in the workplace: randomised controlled trial and ethnographic study***

In 2003 there were 22 600 different professional kitchens in Finland. A participatory intervention project in communal kitchen work began in 2002. The field phase

involving 119 kitchens in Vantaa, Turku, Espoo and Tampere was finalised at the end of 2004 and follow-up continued until the end of the 2005. The study aimed to investigate the effectiveness of participatory ergonomic interventions in the prevention of work strain and promoting musculoskeletal health and general wellbeing among kitchen workers. Another important goal of the study was to scrutinise how the workplace culture interacts with the effects of the interventions.

Finland — Can improvement of work and work process knowledge support wellbeing at work?

In a multi-level intervention 123 kitchen workers participated aiming to improve their work, work process knowledge, wellbeing, and work ability. The intervention was based on systematic and participative analysis and improvement of work process. Assessments of psychosocial work factors, conceptual mastery of work, wellbeing and work ability were followed-up. Both quantitative and qualitative workload decreased, and job control increased. Also, during the intervention, the clarity of work roles and work process knowledge improved, and mental wellbeing increased. The results of the interventions seem to be promising on all levels.

Finland — Good practice to prevent stress and burnout in the restaurant sector

The aim of the intervention was to study supervisors' burnout and stress, and to evaluate the feasibility of prevention groups in the catering and restaurant business. The groups aimed to alleviate stress and burnout during major changes in the organisations and in work life. The competence to control one's work and to have realistic personal work goals was assumed to decrease stress and enhance psychological wellbeing and productivity in the long run. The intervention measures were expected to improve the managers' ability to cope with stress, and to increase group cohesiveness.

Germany — Feuchtarbeit

Three regional OSH authorities in the west of Germany (North-Rhine Westfalia) started, in 2001, a common project to reduce the high number of skin diseases due to wet work in canteen kitchens. Among the reasons for the diseases were low levels of implementation of good practice and non-compliance with existing regulations. The action consisted of four major parts: identification and assessment of the status quo regarding skin diseases in four large hospital canteen kitchens; development of a prevention strategy to introduce good OSH-practices; testing of the prevention strategy in other hospitals and similar workplaces; and dissemination of the strategy. The institutions and all interested parties and enterprises now have practical leaflets at hand, which can be used in all types of kitchens.

Netherlands — Contract catering

Reduction of workload and absence rates in contract catering is the aim of a continuing state-supported OSH agreement ('arboconvenant') between the social partners and the government from 2004 to 2007. The government and employers contribute 50 % each to the budget. The target is to reduce the workload and the rate of absenteeism by a significant degree. The project has a strong focus on dissemination, risk assessment and training of line managers.

UK — Fast food restaurant owners ponder options

A local authority environmental health officer (EHO) visited a fast food restaurant (one of a chain) to investigate a slip accident which broke the arm of a female employee. The EHO identified several good aspects about the safety standards on site — a generally positive company attitude to safety, adequate training, well-kept documentation and records, proper floor cleaning systems — but the servery area was found to be very slippery. The nature of the business meant that the floor in the busy servery area was bound to become wet at some stage. When the EHO spoke to members of staff they stated that the incident ‘had been waiting to happen’.

UK — University kitchen case study

Workers in kitchens perform many tasks, which pose a risk of musculoskeletal discomfort. But it was found that aches and pains experienced by employees were not reported, due to employees not being aware that their discomfort may have been related to work. Employees often thought that their discomfort was related to their age, making comments such as ‘when you get to my stage in life you have to expect the odd twinge or ache’.

Examples of good practices in clubs and bars

Estonia — Safety in two clubs

The administrators of a nightclub and a lounge bar made changes to their work places to reduce the hazards and risks associated with the noise, vibration, use of equipment and temperature changes related to night time work environments of a social nature. The changes were extensive, including the amplification level of music, the bar areas, the kitchen areas, the entrances and the floors.

Sweden — Kroger mot Knark – Clubs Against Drugs

Thirty-three clubs are jointly working to provide a drug-free, safer work place for employees. The restaurants have developed a policy that outlines how to handle drug-users (both guests and co-workers). The project also provides guidance and training on, for example, how a doorman can recognise drug-users and how to design a safe club. An action group representing the Licensing Board, the Police Authority, the National Institute of Health, the County Administration, the Swedish organisation for restaurant owners, the trade union and leading restaurants has been mobilised and meets regularly.

Examples of good practices in the Horeca sector

France — Partnership in the Horeca sector on different risks and ergonomic problems

The Aquitaine regional health insurance fund (CRAM) proposed in 2004 to support the project for collective action initiated by the local OHS service, in partnership with the departmental hotel industry trade associations, and to assist enterprises in the hotel and restaurant industry in occupational risk prevention. The overall initiative included the production of a film and a practical guide to ergonomics in the hotel and restaurant industry and the funding of innovative projects in this sector.

Netherlands — Werkdruk

The outcome of the agreement between the social partners, and related activities, was to reduce stress in the Horeca sector in the Netherlands from 2000 (possibly extended to the follow-up agreement for the catering sector in 2005). The main aspects of the action were an information campaign, an Internet website, very practical, well structured and well designed guidance tools and documents, and the use of risk assessment tools for workload in Horeca.

5.1. EXAMPLES OF GOOD PRACTICES IN HOTELS

5.1.1. The chambermaids' work: Ergonomic approach — France



Key points

- Creation of a hotel industry working group by the Île-de-France Regional Health Insurance Fund (Cramif).
- Development of an autonomous, permanent preventive approach in an hotel.
- Ergonomic analysis of the actual work of a chambermaid so as to reduce stress and pain.

General framework

The occupational health and safety issues in the sector are as follows.

- The sector is constantly adapting to trends in society (customer demand and fashion).
- It faces problems of recruitment, employee loyalty, absenteeism and fear of MSD risk (musculoskeletal disorders).
- It acts pre-emptively for occupational injury and disease prevention.

More than 200 000 employees are concerned (Source: Cnamts 2004, hotel industry branch (hotels with and without restaurants)).

The Île-de-France regional health insurance fund (CRAM) therefore decided to undertake a review of the working conditions of chambermaids, the initial aim of this initiative being to create and disseminate a supporting document to raise awareness among the players in the hotel sector.

Special framework and background

Cramif's approach therefore began with the following observations.

- Hotels are faced with difficulties concerning their chambermaid personnel in a changing environment: occupational injuries, absenteeism, demotivation, recruitment problems, population ageing, etc.

- The hotels' response to these problems is to organise training sessions for chambermaid personnel, focusing on gestures and postures.

Accordingly, Cramif set up a hotel industry working group consisting of inspectors, instructors, industrial doctors and communications departments, in which the French national research and safety institute INRS took part (providing assistance and advice, a work and safety review, etc.) together with occasional guests such as ergonomists, the ARACT, etc.

Description of the action

The objectives of this working group were to capitalise on experience and propose paths of action (either extending the actions underway or developing new actions such as training of reference groups, creation of awareness-raising tools and establishment of contact with trade associations, societies, etc.).

An initiative was carried out in particular with Sofitel Hotel, at the request of the management. The reference group for this hotel was formed of two chambermaids, two housekeepers, a human resources assistant, a member of the CHSCT (committee for health, safety and working conditions), a maintenance employee and an instructor from the ACCOR Academy. The training objectives for this reference group were to develop an autonomous, permanent preventive approach within the hotel, based on ergonomic analysis of the chambermaids' actual work, and to reduce the work's stress and pain.

Key aspects of this training

- *Mobilisation*

The players were mobilised chiefly by the presentation of the group's approach and the results to the hotel management, the partners (industrial doctors, Île-de-France Regional Health Insurance Fund (Cramif), instructors from the academy, etc.) and to the other floor staff teams.

- *Training*

Training for the Sofitel reference group was provided by dispensing theoretical knowledge and through practical work in real-life situations to learn how to analyse work activities in order to look for solutions for improvement.

- *Implementation*

Finally, in 2005, the first occupational health and safety measures were implemented. They consisted of a new work organisation, i.e. the establishment of an operating procedure for room cleaning and the appointment of expert chambermaids for training new recruits and supervising compliance with the procedures, and the purchase of new equipment.

In 2006, new measures were introduced, especially concerning work organisation.

For example, the process of integration was formalised with the expert chambermaids, the breakdown of working hours was modified (to create a better balance between working hours and rest periods), a catalogue of ideas was introduced, research was carried out on less painful work methods, and a document was produced summarising all the good practice rules of the job and ideas and tips found during the group work.

Work was also carried out on cleaning performance aids, with a constant search for suitable high-quality equipment.

The rooms were reconfigured based on identification of the painfulness of work, and training was provided following the changes in work organisation.

At present, a practical data sheet dealing specifically with chambermaids' and valets' work is in preparation; it describes the sector, the job, the need to understand the actual work activity, and pointers to attenuate work constraints. The latter may be, in particular:

- with regard to work organisation; the work pace (number of rooms in a given time), freedom of personal organisation, impact of quality requirements, etc.
- with regard to tools and equipment; considerations before making a new purchase (of vacuum cleaners, trolleys, etc.), appropriate tools, choice of maintenance products, storage, operating instructions, etc.
- with regard to premises and furniture; type of materials, shape, weight of furniture, space and accessibility of equipment and decorations, layout of ancillary rooms (linen room, pantry, etc.).
- with regard to training; creation of internal resources for research on the work, the participatory approach, professionalism and enhancement of the job's image.

This project was followed by the publication of the practical data sheet (autumn 2006), an article in *Travail et Sécurité* (Work and Safety) a review of the INRS (autumn 2006), the manning of an exhibition stand at the Equip'hôtel show, and attendance at conferences (November 2006).

New data sheets are expected to be created on other jobs, or else specific brochures on the hotel industry.

Results and evaluation of the project

An evaluation of this project was made through the questionnaire 'one year later'. In the second quarter of 2006, questionnaires were produced by the two leaders of the reference group and questions were asked by the two chambermaids in the reference group. The questions prepared made it possible to gain an impression of a representative sample of chambermaids (10 in all) of different ages, length of service in the establishment and morphology (size).

The overall situation for Sofitel is as follows.

- Improvement in the work atmosphere: development of mutual aid between chambermaids and job enrichment.
- Reduction in the number of occupational injuries (two fewer injuries = seven in 2004, five in 2005 and a single one in the first half of 2006). Increase in occupational health and safety and raised team awareness of the various risks related to gestures and postures.
- Reduction in the time to make the bed: average reduction of three minutes 15 seconds for twin beds (which represents a time saving of 48 minutes and 45 seconds per day) and of one minute 35 seconds for a large bed (which represents a time saving of 23 minutes and 51 seconds per day). (Comparison between February 2005 and August 2006).
- Chambermaid satisfaction: with respect to the equipment installed, the new work organisation and follow-up by expert chambermaids (positive feedback confirmed by means of the 'one year later' questionnaire).
- Transmission of good practice rules: conveyed by expert chambermaids trained in the ergonomic approach (role as catalyst in team cohesion).
- But difficulty in finding equipment for cleaning bathrooms: problems faced regarding the functionality of telescopic handles (end-piece hard to fit) and their quality (sponge).

Following this initiative, the training department of ACCOR extended this approach to 10 Sofitel hotels in France during 2006. All the Sofitel hotels in the French network are encouraged to develop this training within two years, on a voluntary basis.

Problem identification and description

The problems faced in putting the project in place are:

- poor understanding of the objective of the approach;
- scepticism from the chambermaids (waiting for results);
- difficulty of mobilising the reference group to maintain a group dynamic;
- work organisation (finding the time to meet).

The solutions adopted are:

- communication with the personnel to have them support the project;
- mobilisation of certain heads of department;
- follow-up by and involvement of two Cramif members;
- immediate action by introducing occupational health and safety measures.

Assessment

The factors of success of this action are:

- involvement of the reference group in a large-scale project;
- preliminary training carried out by Cramif;
- inter-department discussions;
- recognition of the chambermaids' job;
- involvement of the floor service team, which helped improve the work atmosphere among the floor staff;
- encouragement of mutual aid between chambermaids, hence reducing the chambermaids' isolation and stress.

Transferability

This action can be transposed to other countries and other hotel groups.

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5.1.2. Risk assessment in the hotel sector in Athens, Greece



Key points

- Hotels are complex work environments with multiple health and safety hazards. These may include physical, chemical, biological and ergonomic hazards.
- Our ability to involve workers in the hotel business is considered by far the greatest success in this study. This helped us to develop its approach and methods.

General framework

Due to its tourism industry, Greece has a large numbers of hotels and accommodation units employing many workers in a diverse number of activities. For this reason we chose to investigate a number of activities and services in the hotel business for potential health and safety problems, with the ultimate aim of developing a model for risk assessment for hotel employees.

Description of the action

The study was brought to completion in three phases:

- (1) literature research
- (2) field study, and
- (3) evaluation of experimental results and conclusions.

In the first phase, basic information about the hotel business was sought. This included an inventory of hotel businesses and their number of employees, legislation concerning regulations and support systems for the business, and good practices concerning health and safety measures.

The second phase contained the main body of the study and included the following.

- The filling of questionnaires. Here employees were required to provide information on health and safety aspects for each group work or service activity.
- Formation of a model for assessing and preventing occupational hazards.

Statistical elaboration of the questionnaire showed that the prevalent health hazards are poor air quality, due to dust, and high noise levels. Safety hazards identified included slippery floors and falls, and possible explosions from the misuse of combustible materials. It should be noted that a significant percentage (35 %) of workers stated that there was inadequate information and generally a lack of training on matters of health and safety in their workplace. In addition, the employees seemed to place emphasis on ergonomic hazards arising from intense working rhythms, high levels of responsibility, mental stress and from manual handling of loads such as stacks of plates, trolleys, linen, etc. Within this field study, measurements were made of noise levels, thermal stress, suspended solids, carbon dioxide and carbon monoxide levels, and for pathogenic and non-pathogenic micro-organisms.

The main sections or activities that were examined were:

- the boiler room
- hot and cold plate kitchens
- the housekeeping section
- offices and reception desk.

Noise levels were measured using a dosimeter, calibrated according to the relevant technical specifications. The noise level value was estimated using the method published in the Presidential Decree 85/1991, in compliance with the method published in the European Directive 86/188/EOK.

An examination of the stationary measurements revealed that the equivalent continuous noise levels (Leq) ranged from 63.9 dB(A) to 96.0 dB(A). According to the Presidential Decree 85/1991, a limit value of 55dB(A) is set for an office work environment and a limit value of 90 dB(A) is set for the boiler room. In the office work all six noise level measurements exceeded the set 55 dB(A) limit value, while in the boiler room only one of the two measurements exceeded the 90 dB(A) limit value.

Light intensity or illuminance was measured with an illuminance meter. Since Greece does not have legislation regarding light intensity levels, our results were compared with acceptable light intensity values (for different work activities) recommended by the British and American Illuminating Engineering Society (IES). The results were expressed in lux units. Our measurements showed that for each work activity examined the measured light intensity was below the accepted level.

Thermal stress was determined using a thermal environment station. The method followed was according to the international standards, ISO/DIS 7726, ISO/DIS 7730 and iso/dis 7243. having worked out the predictive mean vote (pmv) and the predictive percentage dissatisfied (PPD) it was found that 86 % of the workers were working in a thermal stress zone and 14 % in a thermal comfort zone.

As for carbon dioxide (CO₂) and carbon monoxide (CO), in no circumstances did we find concentrations above the threshold limit values (tlvs). these are, according to the American Conference of Governmental Industrial Hygienists (ACGIH) published in 2005, 5 000ppm for CO₂ and 25 ppm for CO. Despite this result, 33 % of measurements were equal to or above 600 ppm for CO₂ and a large number of measurements were found to be as high as 11 ppm for CO₂.

In the hot and cold plate kitchens, where a large number of workers were involved and where cooking procedures generate heat, it was observed that temperatures and CO₂ and CO concentrations were slightly elevated with respect to other areas of activities.

Air was sampled for the presence of micro-organisms. This was done in the hot and cold plate kitchens, linen cupboards and laundry rooms. Pathogens such as E.Coli, Salmonella and Staphylococci were not detected. However, non-pathogens such as yeasts and other species of fungi were found in the kitchen areas. From these observations suggestions were made to facilitate the renewal of air in the kitchens. Also, in conjunction with the National School of Public Health, water was sampled from the air-conditioning system and the water supply system for the presence of the gram negative aerobe responsible for legionella disease. Of the 57 sites from which samples were taken, two (from the cooling system), exhibited the presence of this bacterium.

Climate and surrounding temperatures in Horeca

High surrounding temperatures can lead to discomfort and even heat stress. Heat stress occurs when the body fails to control its internal temperature. Different factors, such as air temperature, clothing, work pace and the amount of humidity can contribute to heat stress. Some people are more susceptible than others. A worker's age, medical factors and physical characteristics can influence individual tolerance. Symptoms can vary, ranging from an inability to concentrate and severe thirst to heat rashes, muscle cramps, heat exhaustion (weakness, headaches, etc) and heat stroke (hot and dry skin, fatigue, accelerated pulse, unconsciousness, confusion, convulsion) (HSE, 2003).

Waiting, kitchen and laundry staff are most at risk. Causes can be heat from machinery and cooking equipment, worsened by poor ventilation (ILO, 1998). Temperatures in the kitchen can sometimes even exceed 30°C (dry temperature, WBGT-index: 26.8) (Devliegher, 2002).

Additionally, the combination of high temperatures with draughts due to air conditioning, open doors, alternation between warm (humid) and cold environments (e.g. storage rooms), exposure to steam and cooking fumes, etc., create thermal discomfort. Poor ventilation, bad smells and toxic substances in the air (e.g. smoke — see below) are a considerable problem in the sector (Klein Hesselink, 2004). Especially in the catering subsector, the temperature in the production area is kept low to maintain the hygiene standards of the food. According to a case study in airport catering (Devliegher, 2002), adequate clothing can prevent the cooling down of the body, but the hands suffer from these temperatures; it hinders finger dexterity and can lead to cutting injuries.

Results and evaluation of the project

The questionnaire was generally well accepted at all hotels and the response was high, except in one case, where a particularly small reply level was noticed. This was attributed to intense working rhythms and lack of disposable time. In this particular hotel a change in management had recently occurred. The new management was indifferent to the distribution of the questionnaire, and their general attitude created an atmosphere of uncertainty and general anxiety.

From this study a number of conclusions can be drawn about the state of health and safety in the hotel business. For a number of areas, such as the hot and cold plate kitchens and the laundries, where unfavourable working conditions may prevail, recommendations were made for improving the work environment. The observations and conclusions derived from the study could be used to conduct seminars and instruct many more employee groups in the hotel business.

Problem identification

The study faced a problem in sampling the hot and cold water circulatory system for the legionella bacterium. Due to full or near full accommodation, the management was unable to make available to us more than two or three rooms at a time. For this reason it was difficult to obtain representative samples for given time periods. A third problem faced in the study was due to the multiple tasks assigned to the safety officers. Although each hotel had its own safety officer, they not only had to oversee matters on health and safety but were often obliged to perform other duties, which tended to

impede them in their official task. In addition, the intense working rhythms observed in the majority of hotels imposed restrictions on the movement of the safety officer. This meant that at times it was difficult for us to have easy access to the different sections of the hotel and at times we were unable to have the assistance of the safety officer, during sampling or during on-the-spot measurements.

Assessment

Our ability to involve workers in the hotel business is considered by far the greatest success in this study. This in turn enabled us to better record and register the health and safety problems in their work place.

Transferability

The approach used to conduct this study could be used as a guide for the assessment of occupational hazards in the hotel business. The reason for this is that the study was able to obtain a holistic picture of the problems encountered in this sector.

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5.1.3. Targeted plan for health and safety in the hotel industry, guidelines for operators and brochure for workers — Italy



Key points

- The aim of the project is to gain more detailed knowledge of accidents and why they happen
- This knowledge has led to guidelines being made available for the benefit of workers in the sector.

General framework

The tourist zone of Valdichiana Senese has about 400 hotel facilities, 200 agri-touristic facilities and 150 bed and breakfasts.

The hotel accommodation sector in the area of Valdichiana Senese consists of small and micro-enterprises which report difficulties in applying the rules on prevention (regarding safety of workers and food safety).

It emerges, from an historical analysis of the activities of the prevention services of the LHU (Local Health Unit), that the hotel industry has only marginally been included in targeted plans, as in many cases surveillance is bound up with investigation of accidents. Furthermore, it should not be forgotten that this sector is of some importance in our territory both as regards the number of local units, which is

approximately 500, and the number of employees (1 100 for the thermal pole of Chianciano Terme alone) relative to the presence of thermal centres and the corresponding tourist flows. Another feature which distinguishes this working sector is the high turnover of workers on a seasonal contract, partly of non-EU origin, which can make it difficult to create coherent training programmes and to plan for prevention activities in the working environment.

The new problems that came in the wake of the development of the rules (especially on chemical risk, fire prevention, and food safety) and the specificity of the 'hotel' working environment make it necessary to provide suitable working instruments (guidelines, protocols) for personnel whose function is that of surveillance and control.

Special framework and background

Accident indexes (of frequency and gravity) in the sector are comparable to those in other manufacturing sectors, but some workstations (for example, kitchens) report indexes comparable to sectors where an elevated risk has been highlighted (e.g. in the metal and mechanical sector).

Involved in the project are the Prevention Department of LHM 7 of Siena, trade union organisations and the association of hoteliers, the Bilateral Tourism Agency of Chianciano, in the Tuscany Region.

The control and surveillance project is targeted at the local area of Valdichiana Senese. The guidelines and information brochure, due to their content, may be circulated to operators (employers, designers, advisers, workers, trade union organisations and trade associations) from all other territories.

Description of the action

The aim of the project is to gain more detailed knowledge of accidents, based on the recording and analysis of data provided by accident reports, through a computer database. Further detail is provided by accident investigations which the service carries out as part of its institutional function. This greater knowledge has led to guidelines being made available for the benefit of personnel in the sector (managers, employers, workers, advisers, trade associations, etc.), in harmony with the rules and based on the experience of the control agency (Operational Unit — PISLL, Accident Prevention and Safety at Work of LHM 7 of Siena). This working instrument was made available with the collaboration of trade associations and trade union organisations, a convention was organised for the purpose and an information brochure was circulated. Following these initiatives, a surveillance and control operation was conducted involving all the enterprises in the sector which were situated in the territory (Valdichiana Senese). These activities are now all conducted by the Operational Unit of the PISLL.

The Operational Area for Prevention of the zone of Valdichiana Senese has, for about seven years, been directing a targeted plan for the hotel and accommodation sector, after having drawn up a protocol dealing with the main risks relating to hotel working environments ('guidelines for personnel in the hotel sector'), with reference also to the hygiene and sanitary requirements for accommodation facilities and the restaurant industry.

This protocol was clarified during informative meetings with the hotelier associations and the trade union organisations. Following circulation, a process of verification of the guidelines' implementation was conducted, which lasted five years.

The results of the study were circulated at the convention held at Chianciano on 2 April 2004, with the aim of spreading the word and deepening technical understanding of the key risks in relation to health, safety and food hygiene, in collaboration with trade organisations, universities and ISPESL.

The convention was also the occasion on which to present a brochure displaying short messages and vignettes aimed at encouraging suitable behaviour by workers in keeping with the aims of prevention.

It was also agreed that orientation should be provided for the development of a training model for workers which would take account both of the results of the research and of the peculiarities of the work contract character (seasonality, precariousness and high turnover), also taking into account the multi-ethnic origin of workers in this sector. As a consequence of this policy, collaboration with ISPESL arose in order to develop a computerised training tool for the purpose of training personnel in the sector.

The main means used in carrying out this project are as follows.

(1) Guidelines for Personnel in the Hotel Sector

These are subdivided into three main areas.

- Hygiene and safety prevention at work where the risks inherent in the different working environments are identified and described, such as in the kitchen, laundry and ironing-room, sanitary services, car repair workshop and garage, office and porters lodge, and in the different working phases: room cleaning and maintenance, table service, etc.
- Hygiene in accommodation facilities.
- Food hygiene.

(2) Information brochure 'Health and safety in the hotel sector'

This brochure gives short messages and vignettes aimed at encouraging suitable behaviour by workers in keeping with the aims of prevention. Useful information and advice are provided on the main risks present in working environments, relating to portable ladders, manual handling of loads, food preparation machines in the kitchen, electrical hazards and risks of a sanitary/environmental kind, product hygiene and legionnaires' disease.

(3) Financial resources

A total of EUR 8 000 has been required each year, to which should be added the cost of personnel engaged as follows:

- two prevention experts at 10 % of their hourly commitment (350 hours);
- one work physician at 10 % of his hourly commitment (175 hours);
- one engineer at 10 % of his hourly commitment (175 hours).

Results and evaluation of the project

The data available following seven years of surveillance and control in the hotel sector by the Operational Unit of Hygiene and Safety Prevention at Work and the Operational Unit of Hygiene and Public Health, allows the evaluation of factors such as:

- frequency of accidents;
- percentage of workers complying with the compulsory training requirements/controlled workers;
- percentage of firms complying with the compulsory training requirements/controlled firms;

- percentage of firms complying with the requirements for compulsory prevention in the workplace/controlled firms;
- percentage of firms complying with the requirements for food safety /controlled firms.

The data are currently nearing completion.

Problem identification and description

The practical problems in attracting enough support were:

- maintenance and updating of information tools, with frequent variations in content and constant and unexpected changes in the rules;
- initial suspicion amongst operators in the sector, who feared disadvantageous economic consequences and the possible requirement to make interventions, especially of a structural kind, at a time when the market might be contracting.

Transferability

In the future it is planned to promote interventions coordinated with other LHU prevention departments (in Pistoia, Padova, Venezia, Marche) which have already initiated specific interventions in the sector to give wider circulation to initiatives of a regional character.

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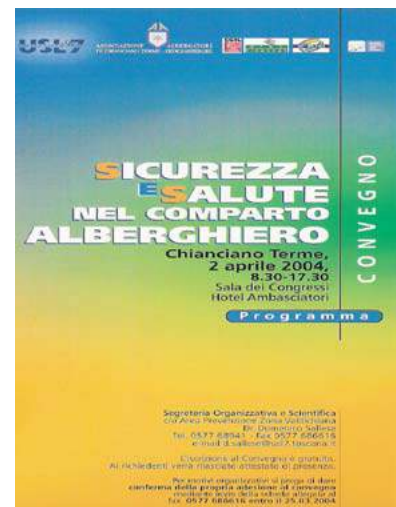
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Cover of the brochure 'Health and safety in the hotel sector — useful advice'



Poster for the convention at Chianciano, 2 April 2004

5.1.4. Safety enhancement in swimming pool chlorination systems — Italy

Key points

Major actions included:

- analysis of the causes of accidents;
- investigation of the main techniques for the treatment of thermal swimming pool waters;
- integrated control of the interactions between the various system plants that incur water quality control.



General framework

The working process focused on the water treatment plants for swimming pools in order to reduce the accidental spillage of chemical products and consequently to prevent possible intoxication of bathers from gaseous chlorine inhalation.

Special framework and background

The reason for undertaking the action was the analysis of the accidents that occurred over time in the Euganean Hill thermal district.

Initiators and groups involved from the outset were: Local Health Unit of Padua, Regional Agency for Environmental Prevention and Protection in Veneto (ARPAV), Association of Thermal Hotel Keepers of Abano Montegrotto.

Description of the action

The first action was the creation of a mixed working group made up of technicians from control agencies and representatives from the associations of entrepreneurs that are participating together in order to identify the necessary interventions required to avoid further accidents.

The major actions consisted of the analysis of the causes of accidents, investigation of the main techniques for the treatment of thermal swimming pool waters, integrated control of the interactions between the various system plants that incur water quality control (chemical, hydraulic, electrical, and electronic), definition of enhancement procedures, identification of methods of communication, the dissemination of information and sharing of work experience.

These actions led to the creation of guidelines for the management of chlorination system plants, covering both the management aspects and the system plant modifications aimed at improving safety.

No change of methods, targets etc., occurred during the action, which required about 400 man-hours to complete the guideline, and involved around 20 individual technicians, designers and plant system managers.

Results and evaluation of the project

Comparison of the situation before and after the circulation of the guidelines shows that no further accidents have been recorded. Moreover, the quality of service offered to tourists, as well as working conditions, seem to have improved as a direct result of system plant operators' enhanced professionalism and improved awareness.



Problem identification and description

One feature of the Euganean Hill thermal pole is its high number of bathing establishments (approximately 200), considered a key resource from the viewpoint of tourism. In fact, swimming pools are becoming an indispensable aspect of thermal establishments, annexed to hotels, that are used by all age groups, not only for recreation, but also for curative purposes and for activities associated with well-being. Such demands have pushed entrepreneurs in this sector to make long-term investments, proposing efficient and ever more complex structures, designed to accommodate the multiplicity of services requested by clientele (covering fitness, rehabilitation, hydro massage and cures). It is therefore of fundamental importance that water treatment system plants will be able to guarantee the highest conditions of safety both for in-house guests and for employees.

To date there have been gaps in the provisions relating to auxiliary plants in swimming pools, probably because of the range of different professional competencies necessary to understand the different parts of the systems themselves. This fact has probably contributed to the creation of certain critical junctures in the management and maintenance of treatment plants; in certain cases accidents have occurred which have seriously compromised the safety of users. This is the context within which, on the initiative of the ULSS 16 (Health Social Local Unit) of Padua, the working group was set up which drafted a 'guideline for safety' with the intention of enhancing understanding of these problem areas amongst managers and technicians, encouraging the spread of information and promoting those remedial interventions deemed appropriate, by means of the Association of Thermal Hotel Keepers.

Also included within the guideline, in addition to some provisions of a technical nature, is information of a general nature that will increase understanding of the most important variables contributing to safety, for those who are not employed in this sector. Such information does not pretend to be exhaustive, but is to be seen as a summary of the main features of those systems used in water treatment.

The analysis of accidents has permitted certain conditions to be identified under which there is a risk of uncontrolled emission of high-concentration chemical agents into the main pools. The study of the international literature on the subject, as well as examination on a local scale, reveals that significant accidents have occurred which have had serious consequences due to exposure to those chemical agents most commonly used in water chlorination: powerful acids and sodium hypochlorite. Injuries from exposure to such substances are rare, though always possible, but they are more frequent where there is exposure to chlorine gas emitted from the hypochlorite-acid mixture. These cases understandably get higher exposure in the media, and may lead to alarmism amongst swimming pool users in general.

The following are two categories of interventions required to minimise risk:

- plant restructuring and safety logics;
- aspects relating to management and the spread of knowledge.

As to the first point, the required modifications to systems for the chlorination of chemical products in liquid phase by volumetric pumps have been identified, with the introduction of a safety rationale in the electrical connection and the insertion of a safety flow switch capable of interrupting the flow of reagents where there is a blockage in the recirculation system.

As regards the aspects relating to management and the spread of knowledge, on the basis of the experience acquired, it has been shown that even a well planned system is not immune from the risk of accidents, whenever those persons in charge of the

operation of the system lack the requisite knowledge. The issue of suitably qualified personnel employed to deal with such systems is still live; there is currently no precise body of rules on the subject, which brings us back to the general rules provided for by the corpus of safety norms. While there has been quite careful supervision over the years, through sporting federations, of the professional recognition given to bathing attendants who act as lifeguards, the training of personnel employed to manage such systems has been neglected in light of the fact that they have nearly always been entrusted to this professional group. This specialist area is considered to be growing in importance, particularly due to the increase in complexity and the automation of control systems, which have become ever more widespread over time. Therefore the contents of the guideline aim at making a training instrument available which is uncomplicated, even for personnel who are not highly specialised.

Difficulties have also been encountered in acquiring technical information due to the evident reticence of companies that supply the systems. Nearly all chlorination plants today are lacking instruction manuals that can be easily understood and used by non-specialised operators with just an average qualification. Furthermore, standardised schemes for plants with information regarding their safe management are rarely made available.

It is important to stress the fact that different kinds of expertise required for the construction of water treatment systems do not tend to be coordinated amongst themselves. It has been shown that having different systems — which taken individually, turn out to be well-designed — may not guarantee optimal safety. For instance, a firm which provides automatic chlorine control systems for swimming pool water is rarely concerned with the electric cabling of the dosing pump; on the other hand, the installer of electric cabling is unaware of the key importance of the chemical system. Even updated versions of the UNI standards fail to confront the problem of plant safety in an integrated way, citing general considerations and failing to lay down a strict logic of control to guarantee safety, even in cases of anomalous functioning.

Assessment

Objectives have been met regarding the immediate improvement of the structures. Still only partially achieved is the objective to raise awareness among industrial designers, constructors and maintenance staff. The involvement of the Association of Thermal Hotel Keepers of Abano Montegrotto has encouraged dissemination of the document and greater awareness amongst entrepreneurs. It is significant that enhancement techniques set out in the guidelines can be extended to all system plants, even where their application might vary, depending on the area involved.

The logic of improving the quality and safety of the systems of chlorination has a strong foundation which is also shared by control agencies and trade associations. On the other hand, the industrial designers and suppliers of system plants are less interested in taking on the role of guarantors of the total safety of the chlorination system plants, in that they are not regarded as commercially viable. Even the current Italian provisions (Law 46/90, UNI standards) do not approach the subject in an integrated way. Finally, it should be stressed that the State-Region's agreement of the 16 January 2003 calls for the adoption of a self-control plan for aspects relating to the sanitation and safety of swimming pools, to be compiled by the manager even where there are obvious difficulties in getting hold of complete information on the nature of the systems in question and on the overall logic behind their assembly. In addition, it is considered to be important as a future development, to encourage the integration of diverse documents, as defined by the policy norms. Currently the following have been laid down.

- A 'manual of use and maintenance' called for by UNI 10637 in paragraphs 7.2 and 7.3 (including analyses of failures and of the maintenance log. Such a document, in the survey carried out, was rarely found or, if it was, contained obvious deficiencies).
- A 'self-control manual' including the analysis of sanitary risks and the register of technical-functional requirements of the system, drafted in accordance with paragraph 6 of the State-Region's agreement of January 2003.
- A 'corporate risk assessment document' made compulsory by Legislative Decree 626, for all those aspects to do with the risk analysis of plant systems, the equipment, the working environment, the area open to the public, the chemical and biological agents.
- The 'declarations of conformity' of the various systems when viewed individually, which taken together comprise the chlorination system as a whole (electric-hydraulic).

It is perfectly clear that the documentation should be brought into a coherent management instrument, so as to avoid superfluous superimposition of documents which can cause confusion or, even worse, multiply bureaucratic functions, with poor added value. It is believed, in fact, that it is impossible to approach aspects of sanitary hygiene, relative to the management of system plants, without taking into account the influences on safety and technical knowledge of the system plants. Thus it is necessary to produce an instrument capable of connecting and cross referencing the various documents, if necessary even referring them back to technical attachments, so that the duties of the persons in charge of system plants can be fulfilled in a coherent and comprehensive way.

Transferability

The contents of the guidelines are applicable across the board for all types of swimming pool system treatment plants, and they encourage the spread of knowledge.

The system plant alterations are the responsibility of entrepreneurs and they have sought variable expenses of between zero and about EUR 60 000, depending on the features of the system.

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Contact with dangerous substances (chemical and biological) in Horeca

To ensure the hygiene of hotels and catering venues, use of different kinds of chemicals is widespread. Workers can be exposed to potentially dangerous chemicals such as oven and floor cleaners, disinfectants, soaps and detergents, pesticides, etc. Ammonia, frequently used as a cleaning agent, and chlorine solutions used as a disinfectant in dishwashers, can cause skin, eye and nose irritation. Employees most at risk include chefs and cooks, cleaners and waiting staff. Contact with and inhalation of these products can cause skin dermatitis and respiratory diseases such as allergies, asthma, etc.

It is not only chemical products that lead to negative health effects. Biological agents also cause problems. Occupational dermatitis can be caused when skin is, or has been, in contact with chemical or biological agents at work. Symptoms include itching skin, redness, blistering of the skin etc. Hands and forearms are most affected (HSE, 2000). The type of substance determines the seriousness of the disease. Occupational dermatitis is not only caused by chemical substances. Certain types of allergens in food (flour, vegetables, proteins, etc.), or natural products (e.g. latex or rubber gloves) can also be the cause. Prolonged and frequent use of water can also weaken the skin, which makes it more vulnerable to dermatitis. According to the Health and Safety Executive (2000), prolonged contact with water, soaps and detergents causes about 55 % of dermatitis cases in the UK every year. About 40 % of dermatitis cases in the industry were caused by contact with foods such as flour/dough, fruits (especially citrus fruits), vegetables, spices, fish and meats.

Meding (2000) reported a difference between the number of reported work-related skin diseases among men and women. Epidemiological studies of hand eczema also showed that women, especially young women, are more affected than men. The most common type is irritant contact dermatitis, often caused by frequent wet work. Since no differences in skin irritation exist between men and women, the higher prevalence of irritant contact dermatitis is most likely due to exposure, occupational as well as non-occupational. Many female-dominated professions such as catering and cleaning occupations involve extensive wet work.

The interdisciplinary skin disease prevention programme in the baking, hotel and catering industries (Bauer et al., 1999) studied the occupational exposure of employees and their individual occupational disease stories and the efficiency of prevention programmes. The results showed that most of the occupational skin diseases were caused by a lack of or unsuitable skin care and protection. The implementation of focused prevention activities leads to improvement or even disappearance of the symptoms of skin diseases.

Food preparation contains risks of infection by bacteria that can spread from food, or the lack of personal hygiene (e.g. hand washing after toilet use). Chambermaids and cleaners can be exposed to biological agents in waste or towels and bed linen (e.g. blood and other body fluids) while cleaning bathrooms and toilets. It is recommended that kitchen workers as well as housekeepers are offered vaccination against tetanus and hepatitis B.

Oven cleaners can release toxic vapours. Another important risk is the unwanted mixing of dangerous substances, producing gases (e.g. toxic poisoning caused by contact of bleach or decalcifiers with and acid) (Roskams and Hermans, 2003).

5.1.5. Distance learning for the hotel sector – training project for personnel in the hotel industry — Italy



Key points

- Testing out a participative model of prevention actions intended to resolve specific difficulties in the sector in the area of training.
- Production of software and a CD-ROM for distance training.

General framework

The project is aimed at employers and employees in the hotel accommodation sector. It is intended to confront the sector's specific difficulties in the area of training in prevention, required by standards on health and safety at work, and hygiene in the area of food and accommodation facilities.

The model will be applied in the tourist area of Chianciano Terme and the Valdichiana where there are around 400 hotel facilities, 200 agri-tourism facilities and 150 bed and breakfasts.

Special framework and background

Following around seven years of vigilance and control of the hotel industry, the Operational Area of the LHU 7 (Local Health Unit) of Siena — the zone of Valdichiana — organised a convention held at Chianciano Terme on 2 April 2004. From this it emerged that hotel industry personnel (trade associations and trade unions) complain about the singular difficulty of creating consistent training plans in line with the planning of prevention activities. The LHU is engaged in preparing a project financed by the Tuscan Region, inspired by the rationale of the development pact (signed and agreed by the Tuscan regions and the trade associations, both employer and trade union), which provides for the participation of all interested parties.

The aim of the project is to test out a participative model of prevention actions intended to resolve specific difficulties in the sector in the area of training, such as:

- high turnover of personnel;
- seasonal nature of the business;
- precariousness of the work;
- high number of non-native born workers;
- need for certification of training provided for by regional rules.

The project was created by ISPEL which has looked after the software, and by the LHU 7 of Siena which has provided the material relating to training and documentation, and it has been financed by ISPEL and the Tuscany Region. The Hoteliers Association of Chianciano Terme has provided space and equipment to set up an IT classroom for free attendance by employers and workers. Confcommercio (Italian General Federation of Commerce and Tourism) will provide workers with tutoring and will coordinate administrative/teaching support with a view to certification of the training to meet regional standards. The LHU will provide assistance and tutoring to employers and workers. Trade unions will provide the support necessary to properly disseminate and promote the product.

The trial will be carried out at the local level in the area of Chianciano Terme, but its aim is to assess the feasibility of applying the model at the regional level and to other tourist areas at the national level.

Description of the action

The promoters of the ISPEL initiative, the LHU 7 of Siena in collaboration with the Hoteliers Association, trade unions and the Tuscany Region, all hope to provide businesses in the hotel industry with a training tool which is geared to the needs and requirements of employers and of their workers hired under atypical or standard employment contracts. The trade associations are providing the IT classroom for free attendance by workers, supervised and assisted by Confcommercio, which will certify some training modules. The trade unions will provide certain equipment, the LHU has helped to prepare the IT product for the technical materials and is coordinating the project and providing tutoring to the workers, while ISPEL has prepared the software.

In this way, interested parties (employers and employees) will have very easy access to a training service offering training materials validated by accredited bodies, and high-quality professional, technical and logistical back-up.

The software has been produced for employers' self-teaching and for their employees, and provides for a differentiated training programme which can be tailored to the specific duties performed, depending on the tutor's initial definition of a user profile:

- clerk and receptionist
- kitchen assistant
- barman
- waiter
- chambermaid
- porter
- maintenance man
- car park attendant
- laundry operator
- lifeguard.

The product is also provided on CD-ROM, to be distributed within firms. The software is user-friendly and allows users to integrate the training programme with images, photographs and maps of their own facility.

An online version of this software will also be provided to carry through the experimentation in freely open classrooms placed at the disposal of the Hoteliers Association for all workers in the sector. In this case, it will be for the personnel of the LHU to coordinate the training programme for the workers in accordance with their particular tasks.

As for training content, the product is divided into two areas, 'prevention at work' and 'Hygiene and public health', each one comprising two modules:

The 'prevention at work' module includes:

- general section;
- risks specific to the hotel industry;
- risks specific to the tasks identified in the hotel industry.

The 'Hygiene and public health' module includes:

- hygiene in accommodation facilities;
- food safety (simple activities in compliance with DGR (Resolution of the Regional Council) 1038/04).

A system of assessment with a multiple-choice questionnaire has been devised.

Where the experiment has a positive outcome and establishes a fully applicable model, the institutional bodies involved plan to hand over the system and the tools of the project — without charge — to other organisations assigned to the training activities who declare an interest in continuing the process and ensuring its safe future.

- Finances available for the action (incl. personal resources):
 - production of the software (EUR 29 200);
 - production of the documentation and the technical contents (*);
 - availability of the facility and premises;
 - availability of infrastructure, equipment and hardware;
 - Logistical assistance;
 - Technical assistance, teaching and tutoring (*);
 - Dissemination and advertising;
 - Maintenance of facilities and equipment;
 - Maintenance of the software and informational materials.

(*) Two prevention experts at 10 % of their hourly commitment (350 hours), a work physician at 10 % of his hourly commitment (175 hours) and an engineer at 10 % of his hourly commitment (175 hours).

Results and evaluation of the project

The data which will become available, following a period of observation of one year from the first experience, allow certain indicators to be assessed such as:

- the frequency of accidents;
- the percentage of workers complying with the compulsory training requirements/controlled workers;
- the percentage of firms complying with the compulsory training requirements//controlled firms;
- the percentage of firms complying with the requirements for compulsory prevention in the workplace/controlled firms;
- the percentage of firms complying with the requirements for food safety/controlled firms.

Problem identification and description

There were long delays in accomplishing the project during all phases of financing and organisation, despite the interest and goodwill demonstrated by all parties concerned and by the social partners. This was due to the complexity of the model and the large number of organisations involved.

Practical problems were faced in attracting enough support (there were costs of maintenance of facilities and equipment, and maintenance of software and updating information was required due to constant and unexpected changes in the body of rules.)

No person directly or indirectly involved has to date demonstrated any signs of antagonism. It is possible that where the true purpose of the project is not properly understood by everybody concerned, persons operating in the field of education might possibly interpret the project to their potential detriment. This danger is to be discounted: the purpose of the project is not to break into the training market but to put on trial an innovative and participatory model of preventive actions which, once validated, can then be expanded in a freer manner to other areas to benefit other parties.

Transferability

The novelty of the model proposed lies in the participation and involvement of all interested parties in the issue of prevention in these areas:

- hygiene and safety in the workplaces;
- food hygiene and hygiene requirements in accommodation facilities.

ISPESL will distribute for free the CD-ROM to encourage maximum distribution locally and nationally.

It is hoped in the future to promote interventions in tandem with other Departments of Prevention of the LHUs (Pistoia, Padova, Venezia, Marche) which have already initiated specific interventions in the sector, so that there can be a wider circulation of regional initiatives.

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5.1.6. Health and safety management system in the Radenci health resort — Slovenia



Key points

- Setting concrete quantitative OSH targets can support the application of the relevant policy.
- Training of all employees is essential in order to improve working conditions.
- The main goal is to ensure a safe and healthy environment for employees and clients of Terme Radenci.

General framework

Terme Radence is among the three most distinguished spas in Slovenia. Its basic activities are:

- health and spa tourism.
- hotel and catering (gastronomy).
- sports and recreation.
- meetings, congresses and seminars.

- programmes for health and prevention.
- rehabilitation (after cardiac and vascular operations).
- wellbeing and beauty programmes.
- summer holidays with all-inclusive programmes.
- seasonal holidays.
- thermal spa with water surface of 1 460 m².
- hotel capacities: 641 beds.

In 2005, Terme Radenci employed 337 workers, of whom 215 are women and 122 men. The average age of employees is 43.6 years.

The company has been certified as meeting several quality standards, namely:

- ISO 9001:2000 (quality management systems), since 1997, and ISO 14001:2004 (environmental management systems), since 1999;
- OHSAS 18001:1999 (occupational health and safety management systems), since 2005;
- HACCP (hazard analyses critical control points), since 2002;
- EFQM Excellence Model, since 2002;
- 20 Keys, since 2002.

Thus, the health and safety programme initiative comes as a natural continuation, once this certification was acquired and implemented in the company's management system.

Special framework and background

The Terme Radenci d.o.o. has developed a health and safety policy with the following general goals.

- (1) Meeting legal requirements;
- (2) Activities for continuous improvement through the annual plans;
- (3) Comply with the demands for health and safety in any new activity which is planned to take place in the hotel.
- (4) Replace dangerous materials with non-dangerous ones such as new types of detergents which have less harmful effects on employees.
- (5) Audit systematically the state of health and safety.
- (6) Inform employees about their own responsibilities in health and safety.
- (7) Inform trade unions and workers' councils when accepting new regulations.
- (8) Create a synergy to improve partnerships, relations with customers and the local community.
- (9) Assure financial and other necessary resources for health and safety.
- (10) Have health and safety policy documented and make it available to the public, including guests, citizens of Radenci, employees and business partners.

In addition, every year the company set distinct quantitative targets for OSH improvement for a three-year period. Last year, goals were set for the period 2005–2007, and this year plans are for the period 2006–2008. In order to reach these goals, the company determines a programme which must be completed by the end of each year.

The targets of these OSH improvement programmes are the following:

1. reduce the frequency of injuries by 10 % (frequency of injuries is defined as the number of accidents at work/working hours X 200 000);
2. reduce negative influences on the health and safety of employees at work (including smoking and drinking) to reduce absenteeism by 0.5 % ;

3. meet legal obligations;
4. ensure that there are no fires.

Description of the action

In 2005 a total of 22 different programmes were introduced; 17 were successful, four were carried over to 2006, and one was unsuccessful because of equipment failure. For 2006 the company has organised 10 programmes. The information below indicates the programmes to be implemented in 2006, as well as the persons responsible and the respective cost.

Organisational measures — Training

Resources for education and training for health and safety have been provided for in the annual budget. We provide internal training for every employee in Terme Radenci.

The average number of training hours per employee in 2005 was 11.48 hours, of which health and safety training took 3.14 hours per employee (in 2004, this was 2.64 hours per employee) totalling 1 058 hours of OSH training (in 2004, this was 925 hours).

The company provides the information bulletin 'Srečko advise and warn' for attention and continuous improvement (KC Varstva PS SAVA).

Technical measures — Ergonomics

A new kitchen was installed and equipped for employees, with ergonomical design and brand new furniture and apparatus. Some of its features included:

- higher desks;
- furniture repositioned at a lower level in order to avoid overstretching postures among employees;
- drawers put below desks, instead of chests;
- ergonomically designed desks, whose height can be easily adjusted.

Results and evaluation of the project

Work-related accidents

In Terme Radenci accidents at work have been monitored since 1998, and systematically processed and analysed since 2002.

Table 4: Number of injuries in the period 2002–05

	In the work place	On the way to work	Near-miss incidents	R	IO
2002	6	7	0	13.67	0.23
2003	3	2	3	43.33	0.37
2004	8	1	1	20.11	0.46
2005	11	5	6	15.11	0.49

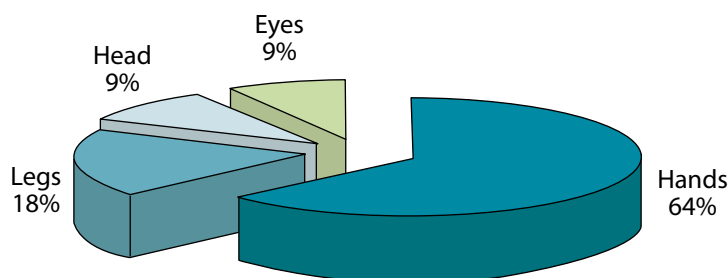
R = seriousness – average number of lost work days per injury with absence from work
 IO = disablement index – number of lost work days per employee

The number of serious injuries has been decreasing since 2003, and so there are fewer work days lost per injury. The increase in the disablement index (IO) is due to the decrease in the number of employees.

The most common reason for injuries is still the human factor. In 9 % of cases injuries occur because of losing control over objects, in 28 % because of losing control over machines and in 27 % of cases injuries occur because of careless walking.

Among employees hand injuries occurred the most (64 %), followed by leg (18 %), and then head and eye injuries (9 %).

Figure 2: Injured parts of the body



Sickness status means temporary absence of the employee from work due to illness, injury, nursing, escort or any other medical reasons.

Table 5: Sickness status at Terme Radenci compared with the Slovenian average and regional average

	Terme Radenci		Slovenian average		Region of Radenci average	
	% BS	IO	% BS	IO	% BS	IO
2002	4.56	14.23	4.70	14.0	4.43	—
2003	4.42	13.81	4.65	13.7	4.58	—
2004	5.26	16.43	4.56	13.7	4.81	—
2005	4.10	12.80	4.28	12.5	4.36	—

% BS = sickness status – percent of lost work days per employee

The percentage of sickness status has been decreasing from 2002 to 2005, except in 2004. Terme Radenci is below the Slovenian average and also below the Radenci region average. The disablement index, which shows the number of lost work days, is also decreasing as sickness rates decrease, but in this case the company is slightly above the Slovenian average.

In Terme Radenci there are 27 disabled persons employed, of whom 24 have a level-three disability. Two of them have a level-two disability. Altogether just over 8 % of employees in the organisation are disabled. No employee has become disabled during the last five years.

Objective rotation of employees (due to retirement) was 6 % in 2005 (in 2004 it was less than 2 %), whereas subjective rotation of employees due to other reasons (terminated work contracts, terminated time-limited work contracts, change of employer, etc.) was 6 % (in 2004 it was 4.8 %). The low rotation clearly shows that employees feel part of the company and have a high level of commitment to it, which was also shown by SIOK research (3.43 %).

Health status analysis of Terme Radenci employees shows that about 30 % of employees smoke.

Table 6: Percentage of smokers

	Women	Men	Employees
2002	16.3	46.1	27.1
2003	22.2	30.7	32.0
2004	23.4	38.9	27.7
2005	24.3	41.9	33.8

Problem identification

One OSH programme was unsuccessful because of equipment failure.

Assessment

The major success factor was the fact that specific resources for education and training for health and safety have been included in the annual budget.

Another main success factor is the systematic and integrated way that safety matters are addressed in Terme Radenci. Employees are shown how to perform their tasks safely in the workplace and develop their safety awareness in their personal life as well, an attitude that they convey to their families.

Transferability

The commitment of the management to the accomplishment of the goals that have been set could be a good example for enterprises of the same size and capacity. This commitment is expressed mainly by the provision of adequate resources (financing the HSE system), auditing and evaluation of the programmes undertaken, and an effort to increase the OSH training hours per employee.

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<http://www.terme-radenci.si>

**5.1.7. Substitution of beds, Meliá Hotels, Balearic Islands, Spain****Key points**

The introduction of beds with a lift mechanism in hotels can reduce the efforts that chambermaids have to make in bed preparation and in floor cleaning.

General framework

Making beds is one of the usual tasks carried out by hotel maids. The task of making single or double beds involves adopting forced postures, crouching and several

stretching and twisting movements to arrange the sheets and blankets under the mattress. Maids also handle heavy pillows. They usually push trolleys loaded with sheets, blankets, towels, cleansers, soap, gifts and brochures for the guests.

They use vacuum cleaners to clean the bedroom floor and they have to carry them from one room to another. To clean under the beds they have to crouch and to drag or push the beds. Certain old-style beds in luxury hotels are quite heavy and moving them requires a considerable physical effort.

Special framework and background

The idea of introducing a lifting mechanism to elevate the beds and adapt the job to workers had been identified as a possible solution some time ago. Both the preventive service and workers' representatives demanded such a measure based upon the available information, and on similar experiences in other hotels.

Action was taken to reduce back injuries in the group. It involved trade union reps, employees, the staff of the preventive services, the mutual insurance company, and the manufacturing company. A project was initiated both by trade unions and preventive

Ergonomic conditions: physically demanding work, manual handling and strenuous positions

Working in the Horeca sector is characterised as physically demanding and strenuous. Ergonomic risk factors include prolonged standing and static postures, carrying and lifting and repetitive movements. This can cause all kinds of musculoskeletal disorders such as back pains, neck and shoulder strains, muscle fatigue and upper limb problems. These factors are often combined with other unfavourable conditions due to poor design of workplaces such as different floor levels, and working in narrow spaces.

Research by Grimaud, et al. (2002) found that carrying plates on a tray happens less often than would be assumed. Waiting staff are frequently involved in the delivery of ingredients and other goods. Strenuous positions such as in carrying loads are often aggravated by frequent climbing and descending of stairs. Physically demanding work for waiting staff includes carrying heavy plates, bending and reaching to set tables, putting packages on shelves, etc.

Key risks for hotel cleaners arise from making beds, vacuuming, working in bent, twisted and other uncomfortable postures while cleaning, handling trolleys and trays etc. Receptionists, waiting and kitchen staff, and porters have to deal with long periods of standing upright (ILO, 1998).

Repetitive activities in kitchens such as chopping, washing dishes, stirring, etc. can lead to potential MSDs such as carpal tunnel syndrome, tendonitis, etc. (HSE, 2006; Klein Hesselink et al. 2004).

A study by Frumin et al. (2006) on work-related musculoskeletal disorders among hotel housekeepers in 107 hotels in the US, found that overall housekeeping jobs in hotels have a very high (76 %) risk of low back injuries. This is especially the case for the making of beds (70 %) and bathroom cleaning (74 %). This even exceeds the risks of nurses in the hospital sector. Repetitive work such as cutting, peeling, the use of machines, making beds, serving food, etc. are widespread (Kluwer, 1999).

services, during which they acknowledged the need for this action to be taken. The employer eventually approved and implemented the measures. The initial target was to address musculoskeletal disorders during the bed-making and room cleaning processes in the hotels of the Melia brand, part of the tourism group Sol-Melia with a regional scope.

Description of the action

Training and providing information on musculoskeletal disorders has been carried out in the company since 2000, through a trade union initiative in cooperation with the preventive service and the employers. Training activities included workshops, in which maids participated, to raise awareness of the risks related to their daily tasks, especially risks of musculoskeletal disorders.

The preventive service had also studied the statistics on absenteeism and noticed that maids had high indicators; 33 % of total sick leave in the hotels of the group were registered among maids and 40 % of this was due to back injuries.

Preventive criteria for the acquisition of new beds included a mechanism to elevate the bed, thus making the maids' work easier. The idea was to lift the bedstead to reduce lower back efforts and torsion. Workers could use a lever to place the bedstead in either of two positions: 'high' or 'low'. The high position makes it easier to clean that part of the floor under the bedstead.



A hydraulic company developed a prototype model. The modified beds can be raised to a height of 90 cm, which makes it possible to clean and the vacuum underneath, with no need to move the bed.

A preliminary assessment was carried out on the model by the preventive service and experts of the mutual insurance agency (Mutua Universal). The assessment consisted of watching a worker perform her tasks and taping the scene for ergonomic research. Three different methods were used for research:

- postural research, comparing the posture adopted with the regular beds and with the new prototype;

- bio-mechanical research to define the movements involved;
- research on physical load, measuring heartbeat rates.

The findings were presented as a paper at the National Congress of Occupational Medicine (2002) held at Palma de Mallorca.

The opportunity to replace the beds came when a thorough overhaul was conducted in one of the hotels: the Palas-Athenea in Palma de Mallorca. A total reconditioning was carried out, aimed at raising the quality standard of the facility from Sol standards to Melia's (a higher category), including the upgrading of the infrastructure.



Adjustable bed designs

Results and evaluation of the project

Workers and their representatives expressed a high level of satisfaction with this solution. A significant reduction of absenteeism among maids was observed within the next two years. The reduction of efforts in the arrangement of beds and the cleaning of the rooms was highly valued.

Problem identification and description

These improvements and the higher category achieved by the hotel generated a side effect: an increase in the number of rooms to be cleaned by one maid and an increase in the tasks to be carried out in each room. Workers complained about an intensification of work and the extension of their responsibilities to additional tasks (to empty and clean flower vases, to fold toilet paper, to bring and assemble advertising material stuff (brochures and gifts for the guests) and other similar assignments).

During health surveillance activities, the Preventive Service staff identified complaints among the chambermaids concerning shoulder aches and strain. A new risk assessment was carried out to find the reasons and to identify the efforts related to the new work process. As a result, a new protocol was implemented for bed tasks specifying which parts of the process must be carried out when the bed is lifted or lowered (for example, spreading the sheets in the lower position, since it is the most adequate method, and then to continue with the bed lifted).

Assessment

The replacement of beds in the rest of the hotels has not been completed yet. Improvements were carried out as part of the firm's investment project to enhance the quality of the facilities in order to meet market requirements. It also complies with the investment plan supported by the Balearic Islands Authority Tourism Department, to encourage public and private investments in order to attract younger, 'quality', tourism.

Balearic Island's Health and Safety Secretary of the Union of Hotel Workers' of Comisiones Obreras expressed the Union's dissatisfaction with the pace of the process. According to them, the reason behind the slow pace is that the replacement schedule does not depend on the preventive requirements (effectively recognised by the employer) but on the general restoration plan that is being carried out by the company in different hotels of the Meliá brand in the Balearic Islands.

Thus, it can be said that linking preventive measures to a company's general improvement plan has the advantage that the company is ready to accept a plan that requires a vast investment effort. But at the same time, it has the inconvenience of depending on strategic changes in the company, more than on the company's preventive policy and programme.

Transferability

The action is transferable to any facility of the hotel sector, and has in fact been implemented in other hotels of the Sol-Meliá group in Europe. Today the group has 350 hotels and 85,000 rooms in 30 countries, although only 180 of them use the Meliá brand.

Quotes

'The introduction of such measures definitely improves working conditions although the number of tasks to be performed by the maids has also increased.' (Ginés Díez González)

'The introduction of this measure was a central move to improve maids' ergonomic working conditions.' (Antonio Siquier)

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5.2. EXAMPLES OF GOOD PRACTICES IN RESTAURANTS AND CATERING

5.2.1. Participatory ergonomic intervention in kitchen work: a randomised controlled trial and an ethnographic study on work development — Finland



Key points

- This project involved ergonomic changes in kitchen work carried out by kitchen workers themselves, and facilitated by workshops of trial kitchens and ergonomists.
- Good solutions were shared during the interventions phase and included on an Internet database.
- A study was carried out on the effects of workplace culture on intervention and its effectiveness.

General framework

In 2003 there were 22 600 different professional kitchens in Finland; 1 500 of them were in staff restaurants and more than 5 700 kitchens belonged to a public body, such as a school. These kitchens employed more than 70 000 workers. Communal kitchen workers have more hospitalisations than their age group on average. Their health and physical ability to work is also poorer than any other occupational groups in the municipal sector. They estimated their work to be physically more strenuous and to have a faster pace than all the other workers surveyed. Kitchen assistants also considered themselves more likely to be exhausted by their work and to risk losing their ability to work.

A participatory intervention project in communal kitchen work started in 2002. The field phase with 119 kitchens in Vantaa, Turku, Espoo and Tampere was finalised at the end of 2004 and follow-up continued until the end of the 2005. In 2005, focus group interviews were conducted to evaluate the success of the project. The result of the scientific study and publication of an Internet database is anticipated during 2006–2008.

Special framework and background

The project is carried out by the Finnish Institute of Occupational Health and Work Research Centre in Finland. Following the participatory methodology, individual changes in the kitchen work were both planned and implemented by the workers and managers of the workplaces. During the field phase, the ergonomists and scientist mainly had a supporting and monitoring role in the action.

The study aimed to investigate the effectiveness of participatory ergonomic interventions in the prevention of work strain and promoting musculoskeletal health and general wellbeing of kitchen workers. There are few scientific studies showing the effectiveness of ergonomic interventions on health. Kitchen workers were selected because their work includes heavy physical and psychosocial demands and the

workers have plenty of musculoskeletal symptoms. In kitchen work, work tasks and workplaces are also quite similar in different organisations and countries.

Another important goal of the study was to scrutinise how the workplace culture interacts on the effects of the interventions. The ethnographic culture analysis aimed to describe the positive and negative features of the kitchen work and work environment as perceived by people in different occupations and positions in kitchens. This part of the study was conducted in four kitchens in one of the participating cities.

Description of the action

The interventions were conducted in 59 trial kitchens, and 60 other kitchens were monitored for reference. Both the trial and reference kitchens were in communal schools, day-care centres or senior care homes. Altogether, the kitchens had 504 participating employees. The selected kitchens were randomly allocated either to the trial or reference group. Nine to 12-month-long interventions were carried out in series of four trial and four reference kitchens. The targets for the ergonomic changes were selected by the kitchen workers who were also performing the actions to improve their working conditions.

After the randomisation, all the employees of the four trial kitchens in the series were invited to the first preparatory workshop. In this workshop, the ergonomists presented basic information about the ergonomic problems relevant to kitchen work and the results of the ergonomic risk assessment in the participating kitchens. Ergonomic changes were advised to target tasks that were performed by several workers, that were physically strenuous, and that were repeated weekly, or those that involved a sudden risk of overloading the worker. The workers were also taught to analyse their work. After the workshop the workers analysed their work and selected one to four targets for development in their kitchen. The targets and plans were accomplished in the second preparatory workshop a month later.

Later during the intervention period, six three-hour-long workshops were arranged so that staff from the kitchens visited each other. In these workshops, the ergonomists lectured first on specific issues in kitchen work, such as repetitive work. Then the participants discussed the progress and further actions of the ongoing developments. The kitchens also had the opportunity to consult the ergonomist during the implementation phase. Good solutions encountered during the developing work were collected into an idea folder that was used to disseminate the experiences during the project. The reference kitchens continued their usual activity during the intervention phase.

An ergonomic risk assessment in the workplace was performed before randomisation in all kitchens. After the intervention period all the trial kitchens and one of the reference kitchens were assessed. The targets of the interventions were video-recorded before and after the changes, whenever possible. Additionally, the workers filled in questionnaires on their health and work strain before the intervention, during the intervention period and immediately after the interventions were completed, and one year afterwards. The ethnographic study was based on interviews, observations, and free-form writing from the participants. The whole intervention was evaluated by focus-group interviews of three to four representatives of both workers and managers in two of the cities and questionnaires filled in by the workers.

The study was carried out with the financial support of the Finnish Work Environment Fund, Academy of Finland, Ministry of Labour and Local Government Pensions Institute.

Results and evaluation of the project

At the base line, the reference and trial kitchens were similar with regard to the variables in the questionnaire, proving that the randomising was successful. The response rate to questionnaires was over 90 % . Over 400 changes were completed, most of them being targeted at work organisation, methods and habits, machines, equipment and tools, and layout and furniture. Most of the interventions were directed at dish washing, and preparing and serving food.

An important practical outcome was an Internet database on good practices identified in the project. Over 100 examples were included in the database, which is freely available on FIOH's website at <http://www.ttl.fi/keittiovinkit>. Keywords on tools, working methods and ergonomic issues were attached to the examples as well as photographs taken during the intervention. Each entry lists the benefits and potential problems related to the case. The database is provided in simple and clear language applying terminology that is familiar to kitchen employees.

In the baseline questionnaire, most of the respondents reported that they had had plenty of musculoskeletal symptoms during the past three and 12 months. Workload was considered to be most burdening in cleaning and maintenance, dishwashing and receiving and storing goods. Over half of the workers replied that they had suffered from stress to some extent during the past year. Less than half of the workers felt that they have plenty of possibilities to influence decisions concerning themselves in their workplaces.

According to the ethnographic study the excessive workload and pressing pace of work was considered to be the central burdening factor. On the other hand, workers considered the fast pace of work with numerous tasks meaningful if the atmosphere prevailing in the kitchen is positive, open, happy, and functional. Another important observation of the culture study was that employees committing themselves to a larger entity such as a day-care centre, are likely to cooperate better and cause less conflicts than workers committing themselves just to their own job, closest colleagues and the kitchen.

The ethnographic study also revealed that the kitchens conducted the intervention in two different modes. In more hierarchically and supervisor-centred kitchens, the development project was not a shared endeavour but was carried out mainly by the head of the food producing unit. This decreased the motivation of the employees and caused passivity and disappointment. Another mode of action was based on collective responsibility and shared development, in line with the principle that 'everybody does everything'.

The research group is continuing the analyses on the effectiveness of the intervention. Preliminary results are presented in the literature listed. The results will be discussed in detail in scientific papers and two academic dissertations to be published in 2007–2008.

Problem identification and description

The lack of resources, in terms of money, personnel and time, was the major hindering fact for the entire project. The cities did not allocate extra money to the kitchens and therefore procurements had to be modest. Significant changes would have required financial investments. The development work was carried out as an extra work and it had to fit in with the tight schedules of the kitchens. Vacations and renovation work in the kitchens forced changes of plan several times.

The developments were also hindered by problems in the cooperation and collaboration between the different stakeholders. For example, the cooperation with the technical personnel in charge of delivery and transport did not work until the ergonomists arranged a meeting with the kitchen employees and the technical personnel to discuss the ergonomic aspects of their cooperation. Many everyday flaws and problems were

brought up and entered into the agreement. Also the managers and administration from the cities were often cooperating less than the workers appreciated.

According to the ethnographic study, the most important obstacles to developments were the resistance by some individuals against the change, passivity, and outright refusal to make jointly accepted changes in their work. This reveals the power of the routines, negative attitudes and commitment to one's own work only; changes may represent a threat to one's work and job security. Simultaneously to the intervention, some cities were reorganising their Food Services, including some participating kitchens. The kitchens were also faced with demands for higher efficiency of the work.

Assessment

The participatory intervention model proved to be feasible. The cooperation with the stakeholders, including the administration and management of the food services of the cities, was generally good. According to the questionnaire on the success of the intervention, the participants were generally satisfied with information transfer, practical arrangements, and learning during the intervention. The changes in the kitchens were rated to be of satisfying or very satisfying quality by over 60 % of the respondents. The respondents were most satisfied with the professional skills of the ergonomists and workshop arrangements, and least satisfied with the collaboration between the kitchens and the support from the city administration.

In the focus group interviews, the employees valued the workshops that kept the process underway and nurtured discussions on the work tasks and conditions, both within and between the participating kitchens. The sharing of experiences enhanced collective learning and creativity in finding the solutions. The idea folder of good solutions also helped to find solutions and to develop them further. The attendance at workshops was over 60 % in every city. The process improved team spirit and raised awareness of the importance of work habits and methods. The questionnaires filled in for scientific purposes were considered strenuous. The workers also felt that they did not have enough time to consider the ergonomics together within the kitchen. Often the paper work was delegated to the head of the food producing unit. To the disappointment of the employees, managers and the administration in general were often too busy to attend the workshops.

Even though this kind of participatory approach was not familiar to the kitchen employees, the interventions were mainly successful and the workers enjoyed the opportunity to make choices concerning themselves and the entire kitchen personnel. As key success factors for this project, the ethnographic study highlighted the inspiring and motivating attitude of the ergonomists and appreciative attitudes of the participating employees. Still some participants complained that they would have needed more detailed and thorough guidance in the first stages. Sometimes the employees also felt that their views were ignored in the development process.

As there was no additional money to spend on the development project, more significant changes in the design of the worksite and processes were not possible. On the other hand, this made the participants consider what can be done with almost no expense.

Transferability

The participatory intervention in kitchen work was a significant undertaking both to study the effectiveness of the participatory intervention and to improve working conditions. For the participating kitchens, it lasted a year from the planning phase to completion and took several person-months. This kind of participatory work development should, however, be a continual process in all workplaces.

The model of participatory work development itself proved to be effective. A lighter version of this model could be feasible when applied by workplace OSH personnel and/or occupational health services. An important feature of this model is the sharing of knowledge in regular meetings. The workshops maintained progress as the kitchens did not want to report to each other that nothing had been done since they met in the previous workshop.

The idea folder that was built up during the interventions contained simple descriptions of the solutions within the kitchens. It boosted the exchange of information between the kitchens and it is used further in the Internet database, with pictures and clear instructions to improve kitchen work.

Cooperation with the manufacturers of kitchen equipment and furniture could potentially lead to improvements in kitchen work. The ergonomists will try to convey the knowledge gained in the study to the designers of kitchen equipment and furniture. Additionally, workplaces in general would benefit from procurement registers on good equipment, tools and furniture. During the project, this sort of knowledge was accumulated by the researchers, but has not yet been formulated in listings or databases.

Both the participants in the interventions and the researchers recommend that information on (ergonomic) risk assessment and practical solutions to work should be included in the vocational training in kitchen work.

Quotes

Quotation by Professor Riihimäki (Stranius, 2005): *'Decisions on procurement should not be based just on the cheapest price, but should consider also ergonomics and usability. The consequences and long-term economy should be evaluated throughout the procurement chain. Equipment that is cheap to purchase may become expensive when it makes workers fall ill.'*

Quotation by a participating worker in the focus group interview after the intervention phase (Työn kehittäminen, 2005): *'Nowadays, when I need something, I can also give ergonomic reasons for my inquiry. Now that we have made some comparisons between different tools, we can think whether a tool is good for me or for us in the kitchen.'*

Quotation by another participating worker in the focus group interview after the intervention (Työn kehittäminen, 2005): *'We are not used to being asked about these things, and I and my work community can improve something here.'*

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5.2.2. Facilitating wellbeing at work in restaurants — Finland



Key points

- A multi-level intervention programme was planned to improve the work process, workers' work process knowledge, and wellbeing among personnel in school kitchens.
- The outcomes of the development programmes were evaluated at several levels.
- The results showed that the participants were more satisfied with their job, they had more mental resources, and they suffered from fewer psychological symptoms.

General framework

A municipal organisation produces food for children and personnel at 85 schools at Espoo, the second largest city in Finland. Approximately six million meals are served every year in

the schools. The work in school kitchens is similar to work in restaurant kitchens, but only one to three workers usually work in one kitchen. One hundred and twenty-three school kitchen workers participated in the evaluation study of the training programme. The participants were women, and the majority of them were over 45 years of age. Their basic education was low, with 60 % of the respondents having only a primary level school education and 35 % educated up to a junior high school level or a comparable level.

Special framework and background

As knowledge and learning are important for the development of organisations, it is necessary to promote their advancement. In the present study, changes in work process knowledge, wellbeing and work ability were studied in a group of school kitchen workers after a multiple intervention aiming to improve the work process knowledge, work, and wellbeing of the workers.

The questions addressed were the following.

- Did the work process knowledge of the participants improve?
- Did the psychosocial work factors change?
- Did wellbeing and work ability change?

Description of the action

The intervention consisted of the implementation of a programme that lasted two years and included several phases. The first phase aimed to improve work process knowledge and included the following elements.

- The analysis and development of kitchen work (two days). The main method involved acquiring learning based on the analysis of the work process.
- The development of work in district teams (24 x two hours). The analysis and development of work continued in district teams. The commune was divided into 10 districts and eight school kitchens belonged to one district team. The number of participants in one team varied. Each team had chosen its own objectives to be developed. Acquiring learning was also the principal method in this phase.
- Sharing the development ideas and results of improvement work with all workers (three days).
- Training in the use of electronic equipment in the school kitchens (two x six hours), lecturing and learning from experience (rehearsing the task).

The second phase of the intervention was meant to improve functionally the capacity of workers, and included participation in group exercises one hour a week and participation in special 'days to find out different ways to support the work ability of personnel' (five x one days).

The final phase of the intervention was based around health promotion and was organised for special groups, which included:

- a weight-watchers group for those suffering from excess weight ;
- a group to discuss health issues among women over 45 years ('Senioriitta').

Other interventions were directed to special groups such as the leaders of the organisation or the teams. Most of the interventions were organised during working hours, and participation was generally compulsory.

Results and evaluation of the project

The outcomes with regard to learning were evaluated by measuring the conceptual mastery of work, a method of studying work process knowledge. Measuring the basic

concepts of the work process is a prerequisite for participating in the creation of work process knowledge. The methods aim to measure knowledge of the permanent or potential characteristics of the target system stored in the long-term memory. The questions deal with the work process: for kitchen work the questions dealt with the raw materials and the right way of handling them, kitchen hygiene, client service, guaranteeing the quality of meals, and knowledge of efficient ways of working.

Questionnaires were used to get an indication of the participants' work characteristics and wellbeing. The participants were asked to fill out the questionnaires before and after the intervention programme.

The results showed that significant changes were realised after the intervention. The participants were more satisfied with their jobs, they had greater mental resources, and they suffered from fewer psychological symptoms.

Problem identification and description

Previously it has been shown that open dialogue is an essential catalyst in the process of developing professional qualifications. Nevertheless, conceptual mastery was not perfect, even after the interventions. This shows that there is a continuous need to analyse and develop work in school kitchens.

Assessment

In the follow-up measurement, most of the psychosocial factors at work that are essential for wellbeing were assessed more positively than at the beginning of the intervention.

The workers' conceptual mastery of their work improved. A development programme based on systematic analysis of the work process can improve work process knowledge of kitchen work. Nevertheless, conceptual mastery was not perfect, even after the interventions. This shows that there is a continuous need to analyse and develop work in school kitchens.

Wellbeing at work requires positive work characteristics, good conceptual mastery of the work processes and their realistic appraisal. In this study participants were more satisfied with their jobs, had greater mental resources and suffered from fewer psychological symptoms after the intervention.

The results of this multi-level intervention are very positive from the viewpoint of worker wellbeing. However, further statistical analyses are needed to be able to gauge the role of various interventions in the improvement of work and work process knowledge, wellbeing, and work ability among the personnel.

Transferability

This type of intervention can be transferred easily to other organisations and countries.

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5.2.3. Good practice to prevent stress and burnout in the hotel and restaurant sector — Finland



Key points

- The supervisors' discussion groups are effective and well suited to the prevention of supervisors' stress in the hotel and restaurant sector.
- Discussion groups have positive effects on the social effectiveness of work teams and on attitudes towards the organisation.

General framework

Figures from several countries indicate that occupational stress, including burnout, is a growing problem (1). The most common definition describes burnout as a prolonged response to chronic stressors in a job, consisting of three elements: overwhelming exhaustion, feelings of cynicism and detachment from the job, and reduced professional efficacy, that is, weakened feelings of competence, successful achievement, and accomplishment in one's work (2).

Supervisors can be assumed to be a high-risk group for work stress and burnout. They usually work alone without colleagues in their work units, and it is their responsibility to give support to their personnel. The risk factors for stress and burnout include role conflicts and unrealistically high demands placed on workers themselves.

Therefore, in the hotel and restaurant sector, there was a clear need to develop and evaluate a new type of work counselling for preventing work stress and burnout.

The main aim of the study was to examine the feasibility and effectiveness of the work counselling groups for managers in the hotel and restaurant sector.

Job-related stress in Horeca

Working in this sector is often reported to be physically demanding and tiring. The long working hours, working under time pressure and with a large workload at peak times, work requiring a high degree of flexibility, performing different tasks at the same time, repetitive tasks, etc. contribute to the job-related stress in the sector. In the *Fourth European working conditions survey*, 75 % of workers in the sector mention that they have to work at very high speed and 66 % have to work to tight deadlines. Only 48 % say they have enough time to get the work done (Parent-Thirion, et al. 2007).

According to the report by Houtman, et al. (2002) the hotels and catering sector has a high proportion of work-related stress problems. This is also confirmed by Isusi (2003) who carried out research on working conditions in Spain.

A Dutch study by TNO assessing workload and stress in the hotels and restaurants sector (N=8000) found that 30 % of workers have to deal with a high workload and stress and 11 % suffered from burnout. Reception desk workers reported the greatest levels of stress (41 %). The report identifies the main reasons of stress among four groups of workers: waiting staff, kitchen workers, receptionists and others (TNO, 2001).

A report on the working conditions of hotel guest room attendants in several hotels in Las Vegas (Krause, N., et al. 2002) examined the levels of stress that this

category of workers experienced in their jobs. It also examined the impact of restructuring and new practices to cut costs, including lean staffing and greater productivity demands. Seventy-five percent of the guest room attendants questioned mentioned having to work very fast, and 88 % reported having constant time pressure due to the heavy workload.

Group of workers	Causes of stress
Waiting staff	<ul style="list-style-type: none"> ■ Short cyclic tasks repeating the same tasks over a short period of time. ■ Dependency on customers for the execution of tasks: no possibility to execute tasks quicker. ■ Lack of autonomy, lack of organisational tasks and contact with others, difficulties in organising work, lack of good management.
Kitchen workers	<ul style="list-style-type: none"> ■ Short cyclic tasks. ■ The fact that the worker is strongly tied to one work station. ■ Dependency upon client. ■ Lack of control over work, lack of contact with others and lack of good management.
Reception workers	<ul style="list-style-type: none"> ■ Too many things needing their attention at the same time. ■ The fact that the worker is strongly tied to one workstation. ■ Slow machinery. ■ Short cyclic tasks. ■ Lack of autonomy, lack of organisational tasks, difficulties in organising work.
Others (housekeepers, management, administrative staff)	Lack of autonomy over tasks, high degree of complexity, lack of contact with others, lack of information and difficulties in organising tasks.

Special framework and background

It was hypothesised that recession affects burnout and stress in supervisors, but that group counselling lessens the effects of the recession. A field experiment was conducted with two intervention groups and one control group. The experimental groups were of two types; one was directive, where discussions were focused and controlled by the counsellor, and in the other group non-directive ways of support were applied; that is, the participants were allowed freely to decide what matters they wanted to discuss.

The intervention was planned to increase social support at work and bring more clarity to work roles to prevent stress and burnout. The groups aimed to alleviate stress and burnout during major changes in organisations and working life. In the counselling groups it was possible to discuss openly work-related problems and thus develop a clearer view of personal work goals and common expectations about the role of supervisors in the changing environment. The competence to control one's work and having realistic personal work goals was assumed to decrease stress and enhance psychological wellbeing and productivity in the long run. The intervention measures were expected to improve the managers' ability to cope with stress, and to increase group cohesiveness.

In the experiment groups, the supervisors discussed their work problems, and analysed their work goals and roles over half a year.

Description of the action

The participants included 21 supervisors, all women. Small groups of supervisors consisted of six to eight participants. The directive group differed from the control group; the mean age was slightly higher than in the other groups. The other intervention group did not differ from the control group. The mean ages of the groups varied between 38 and 40 years.

Measurements consisted of questionnaires, interviews, and open-ended questions. The researcher collected the information and participated as a passive member in the group discussions. Group leaders were trained in work counselling. Statistical methods were used to analyse the data.

In the pre- and post-measurements, the respondents were asked about their organisation and work role. Manager's stress and burnout was measured using the Maslach's Burnout Inventory, with translated and modified items. The questions from the OSQ (occupational stress questionnaire) about work strain were included. Stress symptoms were measured using a 12-item scale. Role conflict was examined through five questions.

The project was funded by the Finnish Work Environment Fund and Finnish Institute of Occupational Health.

Results and evaluation of the project

Supervisors' stress factors at work and in private life

Supervisors were asked to list the most stressful factors in their work and life in general. Problems connected with the recession were the most commonly mentioned stress factors. The fear of losing one's job was especially stressful.

Table 7: The stress factors of supervisors

Stress factors	No answers	%
Economic recession	65	29.1
Company, work community	62	27.8
Haste, hurry	41	18.4
Private life	34	15.3
Self, own capabilities	21	9.4
Total	223	100.0

Group differences in satisfaction with the organisation's efficiency, and personnel management

The general trend was that in the intervention groups satisfaction with the organisation's efficiency, personnel management, and physical and psychological wellbeing increased, whereas in the control group the level of satisfaction fell over time.

Role conflict and role clarity

Role conflict decreased in the non-directive group, but in the control group and directive group role conflicts appeared to increase. Role clarity decreased in all three groups. Role conflict and role clarity are connected with work stress. When the support from managers decreases and work role problems increase during recession, the symptoms of burnout and stress tend to increase.

Burnout

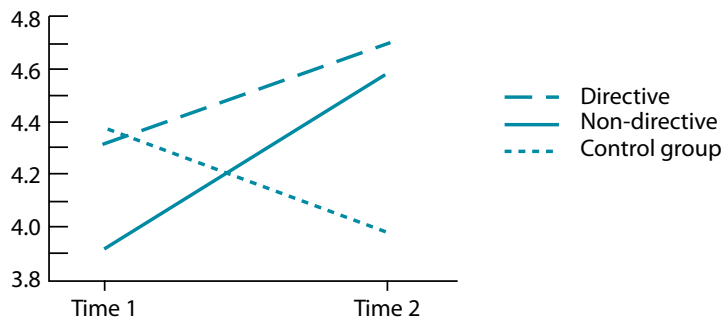
Those supervisors who in the beginning phase valued their own work goals, and were committed to them, had fewer burnout symptoms in the end phase. The analysis indicated

that burnout symptoms are connected with the amount of autonomy at work, the relationship with the supervisor, and how realistic and valued people’s own work goals are.

Work goals

The work goal index, the commitments to goals and the estimated likelihood of being able to achieve their goals did not vary between the groups or over time. However, the reported benefits of having personal work goals were greater in discussion groups and increased during the sessions (see Figure 1).

Figure 3: Joy about the personal goals



The effects of recession and group work on team effectiveness and burnout

Group work had a positive effect on team effectiveness. In the control group team effectiveness, group cohesion and satisfaction with the supervisor decreased during the study. At the same time, symptoms and loneliness increased. This may have been caused by the worsening economic situation in the firm and in the country. However, in the directive group team effectiveness increased, while in the non-directive group it remained the same.

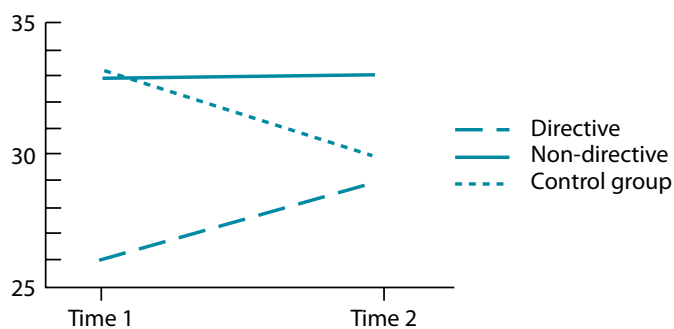
The hypothesis was that recession causes psychological strain on supervisors, but the group discussions and sessions, when they offer social support, buffer its effect.

The recession increased exhaustion and decreased the feeling of personal accomplishment, which are sub-factors of burnout. Burnout symptoms increased in all groups over time.

Social effectiveness of supervisors’ teams

The effect of time was different in the different groups. Figure 2 shows that in the directive group the supervisors’ team effectiveness increased, while in the non-directive group it remained the same. In contrast, in the control group team effectiveness decreased.

Figure 4: Social effectiveness of teams



There may be mild buffering effects in the intervention groups against the negative effects of recession. The small number of participants, however, prevents this mild effect from being statistically significant.

Before and during the study the economic situation was worsening in the country, and especially in the hotel and restaurant sector, so it was important to take these circumstances into consideration.

Problem identification and description

The groups did not have a significant decreasing effect on burnout. However, because of the short duration of the programme, it may have been unrealistic to expect an actual decrease in burnout levels.

Assessment

The results showed that the supervisors' discussion groups are feasible and well suited to prevent supervisors' stress in the hotel and restaurant sector. The supervisors felt that they gained support from each other. They had an opportunity to see that they were not alone with their problems in a changing situation. The positive effects of supportive discussion groups were seen in the satisfaction with the organisation and the social effectiveness of their own work teams. In sum, using discussion groups seems to be an effective method to prevent and tackle stress and burnout in the hotel and restaurant sector.

Transferability

The use of discussion groups is a feasible method, and as a means of preventing work stress and burnout it can be easily applied in other countries and other sectors and work environments. However, it could be an advantage to continue the discussion groups for longer than half a year.

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5.2.4. Wet work — prevention of skin diseases due to permanent work with water in large canteen kitchens — Germany

Key points

- Reduction of skin diseases and irritation due to permanent work with water in canteen kitchens.
- Introduction of better skin protection, skin protection plans and guides on how to use the right gloves.
- An initiative to implement good practice in line with German regulations for wet work. The project started in 2001 and lasted until 2004.

General framework

In general 20 % of kitchen personnel suffer from a skin disease or irritation. The prevalence of some skin diseases is twice as high as in the general population.

Funding for the activities came from the cooperating partners. The lead partner was the Landesanstalt für Arbeitsschutz, and the other two were regional organisations responsible for OSH in the public sector (the hospitals involved were in the public sector).

Special framework and background

The reason for undertaking the action was the high number of skin diseases, the low application of good practice and the low degree of implementation of existing regulation. In total all three partners together spent 465 person days on the project between 2001 and 2004.

The basic regulation is the German TRGS 531: 'Gefährdung der Haut durch Arbeiten im feuchten Milieu (Feuchtarbeit)' ('Skin risks due to work under wet conditions'). It foresees classical prevention and protection elements as technical and organisation protection, planning of the work and protection measures, availability of PPE, planning of PPE use, instruction and information, availability of skin protection and skin care products and medical examination.

Initiators and groups involved from the outset were:

- Landesanstalt für Arbeitsschutz NRW (Regional Agency für OSH NRW): <http://www.arbeitsschutz.nrw.de/lafa/index.html>;
- Rheinischer Gemeindeunfallversicherungsverband (Association of statutory accident insurance organisations of the Rhine Communities): <http://www.rheinischer-guvv.de/aktuell.php?mld=1>;
- Gemeindeunfallversicherungsverband Westfalen-Lippe (Association of statutory accident insurance organisations of the Westfalen-Lippe Communities): <http://www.guvv-wl.de>;
- four canteen kitchens in hospitals in the region.

Description of the action

The general approach can be described in two steps:

- (1) identification of the status quo regarding skin diseases and risks to the skin in canteen kitchens;
- (2) development of a help tool in the form of an information package for use in all types of kitchens.

Physicians studied the status quo in four large hospital kitchens and suggested a number of changes in these four kitchens, together with external and internal OSH-specialists. For dissemination purposes they developed an information package.

The action consisted of four main parts.

- (1) Identification and assessment of the status quo in four large canteen kitchens. This part included a survey of the employees, work place visits to assess the technological situation, the organisation of work, the organisation of protection measures and the medical examination of skin diseases;
- (2) Development of a practical prevention strategy;
- (3) Test of the prevention strategy in other hospitals and similar work places;
- (4) Dissemination of the strategy.

Identification and assessment of risks

In total 97 employees participated in the survey and the medical examination (between 35 % and 45 % of all employees in these kitchens); 85 % were female, 68 % had worked for more than 10 years in a kitchen and approximately 80 % worked full-time. Approximately 88 % worked two hours or more per day in water or with wet materials, 30 % worked four to six hours and 23 % more than six hours per eight-hour shift. The employees wore gloves of different types most of their working time.

Approximately one third never used protective skin creams or skin care cosmetics; only around one third were aware of skin protection plans.

The visits to workplaces showed that basic parts of the existing regulation were not being implemented. There were a number of typical problems.

- Only in one kitchen were liquid-tight gloves for cleaning and disinfection available. Elsewhere, inadequate disposable gloves were used.
- Instructions on how to use which types of gloves ('Handschuhplan') were missing in all kitchens.
- No skin care products were available.
- Plans for skin protection and care ('Hautschutzplan') were available but these plans were in the form of standardised posters from producers of skin care products and tailored for hospitals, not for kitchens in hospitals.

The medical examination covered 97 persons, almost half of the personnel employed. Thirty-eight percent had acute skin irritations. The number of persons with atopic eczema was 7.2 % (in the general population this figure is 3 %); 4.3 % had psoriasis, which is also considerably higher than in the general population.

The employees had a number of proposals to improve the situation, mainly concerning information, instruction, detailed plans and better availability of skin protection and care products.

Development of a prevention strategy

Based on the survey and on the information from the visits, the proposals from the employees and the medical examination, the three partners developed a prevention strategy. This consisted of:

- a standard letter to OSH-representatives in canteen kitchens (as a model for OSH authorities);
- a standard letter to the management in canteen kitchens;
- a leaflet 'OSH and wet work in kitchens';
- a leaflet 'Skin protection, skin cleaning and skin care in kitchens', including a standard skin protection plan;

- a leaflet on liquid-tight gloves in kitchens, including a standard glove plan;
- standard instruction on wet work;
- tips on how to instruct and inform employees.

Testing of the tools

The tool (i.e. the full information package) was tested in the two pilot hospital kitchens and two others. This test phase led to small changes in the content of the leaflets.

Dissemination

Finally the information package was disseminated via the project partners. The dissemination covered mainly canteen kitchens in the public sector.

Results and evaluation of the project

The target groups were workers, OSH specialists and management; the action was regional, and the results can potentially be transferred nationwide and to all other sectors with kitchens.

The main result is the published information package for better skin protection for wet work in kitchens. This package is also available via the Internet. The project was not evaluated by external evaluators; the authors themselves claim success, because the information package could be prepared and successfully tested.

The results can be used for other professions and workplaces in the Horeca sector. The Horeca sector has not been the target group for dissemination, although problems in the larger kitchens or the catering sector are similar.

Problem identification and description

There were minor problems concerning the participation and the commitment of the hospitals. It was stated by one of the interview partners that some persons who did not participate in the survey might have been afraid that serious skin disease would be detected. These persons might have seen a risk to their jobs or to their traditional working style in the survey.

Assessment

It seems to be necessary to develop for each problem of that size and structure some detailed OSH-instructions and an information paper. There are no figures or reports regarding the active dissemination.

The most successful element is very probably the combined approach of survey, workplace visits, medical examination and the test of the tools.

Transferability

All leaflets and guides can be used for kitchens outside the hospital sector. The preventive approach can be transferred easily to other countries.

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5.2.5. Reduction in workload and sick leave rates in contract catering — Netherlands



Key points

- A state-supported agreement (‘Arboplusconvenant’) between the social partners including a variety of activities.
- Targets:
 - reduction of sick-related absence by 20 %, from 9.3 % to 7.4 % ;
 - reduction of mental workload (stress) by 20 %, from 41.5 % to 33.2 % ;
 - reduction of high physical loads by 15 %, from 34.5 % to 27.8 % ;
- The project started in 2005 and will last until 2007. It was based on a former agreement which lasted from 2002 to 2004.

General framework

In total around 20 000 employees worked in the contract catering sector in the Netherlands in 2003. Compared with the Horeca sector generally the average age is much higher; more than 50 % are over 40 years old, while in the Horeca sector this figure is 18 % . Also, employees spend much longer in the same company (36 % over 10 years; in Horeca this figure is 21 %).

Special framework and background

The main reason for undertaking the action was a high rate of sickness and absenteeism. The covenant was a follow-up to a former covenant running from 2002 to 2004 (‘Covenant Arbo- en Verzuimbeleid Contractcatering’, referred to as the ‘first covenant’).

The budget for this action was EUR 1 million. The Ministry for Social Affairs and Employment (Ministerie van Sociale Zaken en Werkgelegenheid — <http://www.min.szw.nl>) provided 50% of the finance. The other 50 % was provided by the employers’ organisation VeNeCa (Vereniging Nederlandse Cateringorganisaties — <http://www.veneca.nl>) and the two trade unions FNV Horecabond (<http://www.Horecabond.fnv.nl>) and CNV Bedrijvenbond (<http://www.cnv.nl/home/>).

Part of the practical project was contracted to other organisations close to the branch, that were familiar with OSH-topics. These were:

Stichtingen Contractcatering (SCC) which deals with issues concerning the quality of services and of work, as well as working time, labour agreements, labour rights, etc.

Employers' organisations and trade unions are both represented on the board (<http://www.stichtingencontractcatering.nl/netbook.php?op=cms&pageid=1>).

Stichting Kwaliteit van de Arbeid (SKA), a subdivision of the Stichtingen Contractcatering (<http://www.stichtingencontractcatering.nl/net-book.php?op=cms&pageid=1>).

Opleidingen Contract Catering (OCC, a catering company which also gives professional advice to other catering (<http://www.sabcatering.nl/nl/1024/index.htm>).

TNO Kwaliteit van Leven/Arbeid, a large scientific organisation, has a 'quality of life/work' subdivision dealing with work organisation and OSH problems (http://www.tno.nl/kwaliteit_van_leven/arbeid/).

During the period of the first covenant the baseline of workload rates and absence rates had already been measured. The values were:

- 9.3 % for illness-related absence.
- 41.5 % for mental workload (stress).
- 34.5 % for high physical load.

The strategy for reaching the targets was to extend and disseminate the successful initiatives of the first covenant to the whole branch, and to develop a branch-wide approach ('Plan van Aanpak').

Description of the action

The main tools used in this action were:

- introduction and dissemination of a branch-wide risk assessment tool;
- development of a training tool for executive personnel;
- facilitation of personal advice by OSH experts;
- testing of the impact of training measures in pilot companies;
- introduction of four-weekly 'werkoverleg' (discussions and meetings about work organisation) in pilot companies;
- measures to introduce a decision committee on problems of reintegration after long periods of sick leave;
- education of employees as prevention specialists ('preventiemedewerkers').

Risk assessment Tool

Until now, while there is a general RI&E tool for the Horeca sector, a specific tool for the catering sector has not been available.

The Stichting Kwaliteit van de Arbeid (SKA) foundation published, in 2006, an OSH manual for line managers in contract catering enterprises (at the work floor level). This manual consists of four chapters:

- the results of the first TNO study of the reasons for sick leave;
- a risk identification and evaluation tool;
- information about ergonomics;
- information about stress.

The development of a training tool for executive personnel

After a test phase in 2006 the training material was ready for use in seminars from September 2006 ('Training Cachend leidinggeven'). The training course or seminars are offered by Opleidingen Contract Catering (OCC). A list of accepted trainers is available from OCC.

The training material is developed according to the practical needs of the contract catering branch. The seminar can be adjusted to different needs and types of catering, such as in-flight catering, catering for schools or catering for enterprises. As well as the production of training material the projects aims to provide practical personal advice from OSH experts.

Pilot companies

The impact of the training measures was tested in pilot companies, and four weekly 'werkoverleg' were introduced in these pilot companies.

Measures to introduce a decision committee

According to Dutch legislation a committee of employers and employees ('geschillencommissie') needs to be established to take decisions concerning work organisation for employees coming back after a longer period of sick leave. This committee was established in 2006.

Communication measures

The project has a website, 'Contract Catering — Gezond werken da's-pas-lekker' (Healthy work — that fits well) at <http://www.das-pas-lekker.nl/net-book.php>

This is the central node for communication between the partners in the covenant, the project group and the target group, and for dissemination and publication of activities. A main focus is on the training of executives, line managers and supervisors.

Results and evaluation of the project

The project is still running; a full evaluation is planned in 2007.

Problem identification and description

The first covenant showed that the covenant can be much more effective if it is possible to reach the whole branch through large-scale activities.

Assessment

Tools have now been developed as planned. The drivers for success include:

- tripartite approach
- size of the action
- financial means available
- focus on the executives
- help that has been made available.

Transferability

Catering is a high-risk sector, with high levels of stress and physical workload. The results of the activity can be transferred to other branches with a similar exposure profile.

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5.2.6. Fast-food restaurant owners ponder options: which is the right slip prevention option for us? — UK

Key points

- A local authority environmental health officer (EHO) visited a fast-food restaurant to investigate a slip accident and found the servery area very slippery.
- The EHO used this floor roughness information together with the Slips Assessment Tool software, which takes into account information about work activities, the environment, likely spillages and many other relevant factors.
- The assessment indicated that there was a significant risk of slip injury.
- The owners decided that the best option was, as the EHO had originally suggested, to tackle the problem in the work environment (through re-flooring).
- The slip accident rate was reduced by 70 % since the replacement of the floor covering, and staff on site were much happier with the conditions.

General framework

Slips and trips are the most common cause of major injuries at work. They occur in almost all workplaces. In the UK, for example, 95 % of major slips result in broken bones and they can also be the initial causes for a range of other accident types such as falls from a height. Slips and trips account for 33 % of all reported major injuries, 20 % of injuries resulting in more than three days' absence, and 50 % of all reported accidents to members of the public. They also cause an average of two fatalities per year in the UK (<http://www.hse.gov.uk/slips>).

The costs of slips and trips are significant. The cost to employers is £512 million per year and to the health service £133 million per year. In addition, they have incalculable human costs.

However, simple cost-effective measures in workplaces can reduce these accidents. The present action is one example of the use of a Slips Assessment Tool.

Most frequent causes of slips, trips and falls

The main causes of slips, trips and falls are wet and slippery floors due to contamination (food waste, oil, etc) but they also include surrounding humidity in kitchens, obstacles in pathways (boxes, carts, garbage containers), falling objects, and people falling from a height (HSE, 2005; ILO, 1998).

Differences in floor levels pose a real problem to kitchen and waiting staff, whether they are carrying loads and trays or not (Klein Hesselink et al. 2004). Accidents can cause sprains, broken limbs, injured necks and backs, cuts and bruises from falling, and other injuries from falling onto or into machinery, or into deep fat fryers, etc. (ILO, 1998).

Peebles et al. (2005) studied the most common causes of individual slips and trips, within the retail, food and drink, manufacturing, leisure and service sectors, and found that individuals most commonly slipped and tripped on stairs and steps, accounting for 19 % of the investigated slips and trips. Uneven ground and temporary obstructions also commonly lead to incidents.

Special framework and background

A local authority environmental health officer (EHO) visited a fast-food restaurant (one of a chain) to investigate a slip which had broken the arm of a female employee. The EHO identified the fact that there were several good aspects about the safety standards on site — a generally positive company attitude to safety, adequate training, well-kept documentation and records, proper floor cleaning systems — but the servery area was found to be very slippery. The nature of the business meant that the floor in the busy servery area was bound to become wet at some stage. When the EHO spoke to members of staff they stated that the incident ‘had been waiting to happen’.

Investigation revealed that several floor areas had been replaced in the past. However, the floor covering in the servery seemed to be original, having been in place for more than 17 years. The EHO looked at the accident records and found that there was a higher incidence of slip incidents in the servery than elsewhere. Discussion with the Duty Manager revealed that the company response to this had been to deploy ‘Caution! Slippery floor’ signs.

The owners arranged for testing to be carried out on the floors to find out about surface roughness. This was found to be quite good in most areas of the premises but not in the servery. The original tiling in the servery had very low surface roughness — much less than was needed to be able to provide grip in a kitchen/servery situation. The EHO used this floor roughness information with the Slip Assessment Tool software, which takes into account information about work activities, the environment, likely spillages and many other relevant factors. The assessment indicated that there was a significant risk of slip injury — an indication borne out by the area’s incident history.

Description of the action

Slips Assessment Tool (SAT)

The SAT is a freely-downloadable computer software package that allows an operator to assess the slip potential of pedestrian walkway surfaces. The SAT is used in conjunction with a small, portable surface micro-roughness meter, which users must obtain separately.

The package is easy to use and prompts the operator to gather relevant information concerning floor surface properties, contamination, cleaning regimes, footwear, etc. When all of the information has been entered into the package, a slip risk rating is produced. This will assist the user in determining whether site conditions are likely to give rise to a high or low risk of slipping.

The data can be entered into a laptop computer (pre-loaded with the SAT software) on site for an immediate assessment of slip risk. This is the preferred method of operation. Alternatively, data can be recorded on site using a proforma and entered into a PC later.

The assessment can then, if desired, be repeated using alternative data such as different cleaning regimes or footwear types, etc. This will produce a different [theoretical] slip risk rating. This is a very powerful way of demonstrating the importance of various slip risk control measures.

Results and evaluation of the project

The company was advised that the floor surface in the servery was at the heart of the problem and that the floor should be the first thing to be looked at. The owners, however, wanted to try some special ‘anti-slip’ overshoes for their staff and, despite the

EHO's advice that the working environment should be put right before the use of personal protective equipment should be considered, the overshoe trial went ahead at three of the owners' sites.

Experience showed that the (mainly young) staff were reluctant to wear the overshoes (a fashion issue!), enforcing the wearing of the overshoes impaired good staff relations, and a good fit was hard to achieve as only small, medium and large sizes were available for the trial, which increased tripping problems. Although the overshoes did provide extra slip resistance (and so might be a viable option in some circumstances) the associated problems at the site negated the benefit.

Finally, the owners decided that the best option was, as the EHO had originally suggested, to tackle the problem in the work environment. The relatively small cost of re-flooring (extended by the company to areas beyond the highest risk servery) led to the conclusion that it would probably have been cheaper in staff and administration time to have pursued this option at a much earlier stage. Technical specifications for the proposed floor covering were obtained to ensure that it was suitable for the purpose — providing good slip resistance and being readily cleanable to meet food hygiene requirements.

Problem identification and description

Even if the EHO advised that the floor surface in the servery was at the heart of the problem, the owner wanted to try some special 'anti-slip' overshoes for their staff and despite the EHO's advice, the overshoe trial went ahead at three of the owners' sites.

Assessment

A subsequent review showed that the slip accident rate had reduced by 70 % since the replacement of the floor covering and that staff on site were much happier with the conditions.

Transferability

The concept is easily transferable to other countries and other sectors.

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5.2.7. MSDs in a university kitchen — UK

Key points

- Employees in a university kitchen over the course of a working day were responsible for performing different tasks, which contributed to their experiencing a variety of aches and pains.
- Employees did not link the discomfort that they felt to their jobs.
- The management conducted a risk assessment of the kitchen duties that highlighted the tasks that employees felt were the most arduous.
- The management implemented changes to the equipment, which reduced the risks to staff.

General framework

The Health and Safety Executive (HSE) notes that musculoskeletal disorders (MSDs) are the most common occupational illness in Great Britain, affecting one million people a year. MSDs can consist of problems such as low back pain, joint injuries and repetitive strain injuries.

(<http://www.hse.gov.uk/msd/index.htm>)

HSE research shows that in 2004/05 1 012 000 people in Great Britain suffered from a musculoskeletal disorder which, in their opinion, was caused or made worse by their current or past work. This equates to 2 400 per 100 000 people (2.4 %).

The knock-on effect of MSDs is that an estimated 11.6 million working days (full-day equivalent) were lost in 2004/05. On average, each person affected took an estimated 20.5 days off work in that 12-month period. This equates to an annual loss of 0.50 days per worker.

It has been suggested that the incidence of MSDs can be considerably reduced by interventions incorporating all of the following elements:

- senior management commitment.
- worker involvement.
- risk assessment.
- control measures.
- training, and
- medical management.

(<http://www.hse.gov.uk/msd/experience.htm>)

Special framework and background

The tasks that workers were required to perform in the kitchen during a working day were very diverse, and ranged from preparing food, taking food to the distribution area for waitresses to take to customers, washing pots and pans and cleaning the cooking equipment.

Specifically, the musculoskeletal risks for work in this area were of four types:

- Lifting heavy items, such as heavy pots, pans and the pushing and pulling of trolleys laden with food.
- Performing repetitive tasks, such as repetitive lifting, the lowering and carrying of food, products, trays, pot and pans, and continuous engagement in repetitive actions such as buttering, cutting and slicing of bread and other food items.
- Adopting poor working postures, such as leaning forward when cleaning pots and pans in the sink, twisting the upper body when reaching into ovens for cleaning purposes, engaging in awkward postures when obtaining items from shelves.
- Using a large amount of force to clean pots, pans, ovens and other equipment.

Description of the action

The management of the organisation carried out a risk assessment of the kitchen. They involved the employees in the process, as they were the ones with first-hand knowledge of the tasks that they performed on a daily basis.

The musculoskeletal risks were reduced by offering the employees different ways to conduct tasks or by changing the work environment to eliminate risks.

Lifting heavy items

Employees were told to use only those pans that were necessary for the task. Employees had been unnecessarily using larger pots and pans for cooking a small amount of food.

Employees were told not to carry pots and pans that were full of materials (food, water for cleaning, etc.) but to use a trolley to move the pans around the kitchen area.

Staff had reported problems when cleaning the pots and pans in the sink. Products were required to be scrubbed clean of food residue before the pots and pans were placed into the dishwasher. The staff were required to hold the pots and pans under the tap whilst filling them with water and detergent. Once the pots and pans began to fill with liquid employees found it arduous to hold the pots and pans under the tap. Management installed a 'water jet sprayer' so that staff could apply water to the required area of the pan without having to hold the pan under the tap.

There was a lot of repetitive carrying of loads to and from the food storeroom and the food preparation area. Employees would carry numerous items of product from the stores to prevent them making a number of trips backwards and forwards. Therefore management installed chilled food storage facilities within the food preparation area, and the repetitive lifting and carrying of loads from the food storeroom was eliminated.

Furthermore, management redesigned the sandwich preparation area so that items to fill the sandwiches were held in containers in the preparation area. This again prevented numerous trips to the food storeroom.

Employees reported discomfort when loading the dishwasher with the heavier pots and pans. This was due to the fact that the employees were required to reach into the dishwasher to place the pots and pans at the rear of the dishwasher. Holding loads away from the body places greater biomechanical stress on the lower back. Due to other problems with the dishwasher, management decided to replace the dishwasher and purchase one in which the tray to hold the pots and pans can be pulled towards the employee, eliminating the requirement to lean and stretch into the dishwasher while supporting a heavy load.

Management also noticed that employees were regularly placing loads down and picking them up again to open the oven/storeroom doors. Management replaced the handles of the doors with ones that can be readily opened with the employees' elbows and therefore a substantial amount of the manual lifting and lowering was eliminated.

Reducing repetitive actions

The inclusion of chilled food storage facilities within the food preparation area reduced many of the repetitive carrying tasks.

Staff and management set up a job rotation system so that employees were not performing the same task for the entire working day. For example, staff would spend a few hours working in the sandwich preparation area and then move to a different task, therefore reducing the employees' exposure to the risk factors associated with sandwich preparation (for example continual bending and twisting of the wrist when buttering the bread).

Improving working posture

From discussions with employees it was established that washing pots and pans for an extended period of time caused them aches and pains, particularly in the lower back. From observing the employees performing the task it was established that the aches and pains were due to employees adopting a forward leaning posture over the sink and placing biomechanical stress on their lower back.

The sink had an unnecessarily large protruding front edge that employers were required to reach over in order to access and clean the pots and pans in the sink. The sink was replaced with one with a narrow front edge so that employees could

position their body closer to the sink and therefore eliminate the need to bend forward to access the sink.

Cleaning the glass inside ovens caused the employees to adopt a twisting posture to access all of the inside of the cooker. This was a particularly arduous task which few employees wished to undertake. Management replaced the ovens with ones in which the glass interior was attached with a hinge and therefore when it required cleaning staff swung the glass interior out of the oven and cleaned it whilst maintaining a neutral posture.

A review of the shelving highlighted the fact that items that were regularly used were being stored in difficult to reach positions that caused employees to adopt poor postures in order to reach into the shelves and retrieve the items. Therefore management reviewed all of the items and placed the most commonly used items in the most accessible positions, i.e. on shelves at waist height and within easy reach. Shelves were then labelled so that items were not stored elsewhere.

It was also noticed that gaining access to floor-standing cupboards caused employees to crouch down and reach into the cupboard, thereby placing pressure on their knees. All floor-standing cupboards were removed and replaced with drawers that easily slid out for employees to gain access.

Reducing force

Employees informed management that scrubbing pots and pans before placing them into the dishwasher proved to be arduous. Therefore, management bought new strong bristled scrubbing brushes to reduce the amount of force required to remove baked food stuck to the pots. A sufficient number of spare scrubbing brushes was also purchased so that the ones being used could easily be replaced once they had become less effective due to use.

The dishwasher included a door that had to be pushed upwards in order to place items into it. Over years of use the door had become stiff due to age and poor condition. Staff reported that it was particularly difficult to open the door and a large amount of force in an upward direction was required to open it. The new dishwasher has a pull-down door that is well maintained and requires minimal force to open it.

Management also undertook a maintenance review of all cupboard and storeroom doors. The door to the chilled food storeroom regularly became stiff and difficult to open due to the necessity to maintain the temperature of the products inside. A special hinge was fitted to the door and the door was counter-balanced so that it opened and closed with minimal force.

Problem identification and description

The staff were directly involved in the process, and they seem to have responded well to the changes.

Assessment

The intervention seems to have been successful. As one employee said, after the management had a special hinge fitted to the chilled food storeroom so that it opened and closed with minimal force: 'I don't know if it was counterbalanced or the name of the hinge, it was just a lot easier to open and then swung open easier, instead of closing and employees having to put their leg against the door to keep it open.'

Transferability

This type of risk assessment that directly involves staff can be transferred easily to other organisations and countries. This is especially so as the kitchen environment is similar across organisations and countries.

EXAMPLES OF GOOD PRACTICES IN CLUBS AND BARS

5.3.

5.3.1. Safety in two clubs with respect to lights and noise — Estonia

Key points

- The administrators of a nightclub and a lounge bar made changes to the workplaces to reduce the hazards and risks associated with noise, vibration, use of equipment and temperature changes related to nighttime work environments of a social nature.
- The changes were extensive, covering the amplification level of music, the bar areas, the kitchen areas, the entrances and the floors.

General framework

Within Europe, 20 % of the workforce is employed at night (European Communities, 2004). The health problems associated with night work are well documented (see Fujino, Iso, Tamakoshi, Inaba, Koizumi and Kubo, 2006; Haus and Smolensky, 2006) especially with respect to alertness and fatigue (<http://www.hse.gov.uk/pubns/dis4.htm#10>). Additionally, other research has found that night workers make five times as many serious mistakes and are 20 % more likely to suffer severe accidents (Hazel ewood, 2003), with more fatal accidents occurring between midnight and 06.00 than at other time of the day (European Communities, 2004). The European Working Time Directive (<http://www.incomesdata.co.uk/information/worktimedirective.htm#Article8>) restricts the number of hours for night workers to an average of eight hours in any 24-hour period, and requires employers to provide a free health assessment at regular intervals. Further, employers need to ensure that this category of workers has appropriate health and safety protection in respect of work.

In addition to dealing with the effects of night work, some of these employees may have to function in noisy conditions. Overall, research has shown an increase in the number of European workers who state that they are exposed to intense noise (47 % in 2000, an increase of 4 % from 1990) and those who state that they have to work amidst intense noise (29 % in 2000, up 2 % from 1990; see Renault, no year).

This research illustrates the importance of improving working conditions for those who need to work at night and under adverse conditions.

Noise in Horeca

Noise can cause permanent hearing loss. Anyone who is exposed to noise is at risk. Factors that affect the hazardousness of noise are impulsiveness (sound peaks), frequency (in Herz) and length of exposure. Noise can also interact with other workplace risks such as exposure to chemicals (ototoxic agents) which may increase the risk of hearing loss, and have an effect on the cardiovascular system by increasing blood pressure and causing stress.

Workers especially exposed to high noise levels in hotels and catering are kitchen staff, waiting staff, and laundry staff.

According to the Fourth European working conditions survey (Parent-Thirion, A, et al. 2007) 29 % of workers in the sector are exposed to noise and more than 4 % consider that they are at risk of developing hearing problems (Eurostat, 2004). Noise can lead to mental fatigue, reduce levels of concentration and lead to injuries. In restaurants noise levels tend to be high due to customers talking, staff shouting orders, clashing dishes, glasses, cutlery, different kitchen appliances, ventilation and hoists (Roskams and Hermans, 2003).

A study by Christie and Bell-Booth (2004) mentioned that the average noise level in restaurants is mostly up to 80 dBA and can even reach up to 110 dBA.

An important feature playing a prominent role in noise level is the architecture of the building. According to the study, the materials most often used in bars, restaurants and cafés, i.e. polished timber, tiled floors, or concrete ceilings were acoustically reflective. The fact that the material has to be cleanable and durable has an impact on the acoustic qualities and increases the resonance of the room. The predominant noise sources in all venues (bars, cafes, restaurants) are the other occupants and the music played. Another important source is kitchen noise, e.g. grinders and coffee machines.

Special framework and background

The company, Pro Personal OÜ, runs a nightclub, and employs 64 members of staff, who either work in the 'Hollywood' nightclub or the 'Kaheksa' lounge bar. Both of these businesses are open mostly during the night (the lounge also opens during the daytime from 12 noon). The nightclub has a large dance floor and a balcony, and six bars. Different kinds of music are played and events with live music are organised. The club can hold up to 1 000 people. Food is offered at the lounge bar, and the bar offers seating for 90 people.

It was decided to improve some of the features in the nightclub and lounge as part of occupational health and safety activities for 2005.

Description of the action

The head of the Work Environment Council decided to make ergonomic changes to different aspects of the nightclub and lounge. These changes involved the lighting, the noise levels, the equipment, the ventilation, surface areas and clothing for staff in respect of harsh weather conditions.

Lighting

The lighting in the nightclub was subjected to several changes. Additional lighting was installed in all the bars of the club. This local lighting allows the barman to ensure that he has sufficient light on the workstation. See Picture 1.





Picture 1: A barman's workstation with local lighting

The lighting in the ticket office of the club has been improved, allowing the barman to regulate it himself. At the entrance of the nightclub the light filters have been changed for weaker ones for better penetration of light, which helps the security guards when they are doing their security checks.



Picture 2: Steps with light painting in the club

Between the different floors in the nightclub, 'light painting' has been installed to ensure better distinction of steps and thus prevent patrons from stumbling. See Picture 2.

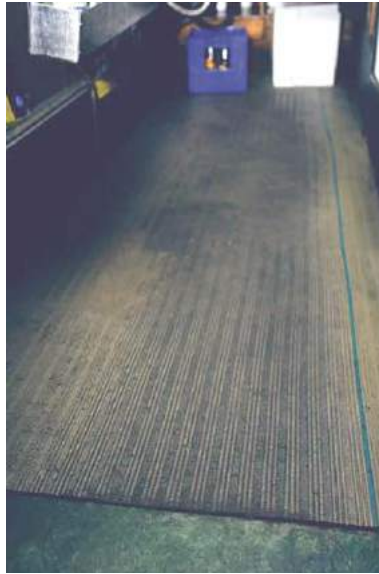
Noise

The changes to noise levels were based on the risk analysis that Professor H. Kahn conducted. It was decided to restrict the amplification level of music. The noise limit was extended up to 89 dB (A), the intensity level of the control scale was marked on the DJ's switchboard, and it was prohibited to exceed that volume (Pictures 3 and 4).



Pictures 3 and 4: A sign on the amplifier and a reminder for the DJs

In order to reduce noise and vibration a special floor covering (comparatively thick and rubberised) was ordered from AS Puhastusimport and placed behind all of the bars. See Picture 5.



Picture 5: A barman's workstation with a new floor covering

The other transformations in respect of reducing the impact of noise levels were to have audio protective equipment (earplugs) always available at the night office and to nominate a dedicated member of staff to provide them. A rest room has also been made available with permitted noise levels, adequate lighting and normal microclimate, for members of staff who are continuously exposed to noise.

Ventilation

The proper operation of ventilation systems has been ensured. The temperature has been stabilised at 20°C, and arrangements have been made to clean and maintain regularly the ventilation systems. During winter an electric radiator will be placed at the inner door of the entrance to the club to ensure that warmer air is available there. Additionally, at the main entrance of the ground floor a new and powerful blast heater has been installed. See Picture 6.



Picture 6: A blast heater at the entrance

Surface areas

Anti-skid strips have been placed on the edge of the stairs of the main staircase. See picture 7.



Picture 7: Anti-skid strips on the stairs

In addition, anti-skid strips were stuck to the edges of shelves in the bars so that bottles, glassware and other items placed on the counters would not fall down due to the vibration.



Picture 8: Anti-skid strips on counters in the lounge bars

Equipment and clothing

The following changes were made to address the health and safety needs of members of staff.

- All of the work equipment (e.g. knives, scissors, corkscrews for wine bottles) have been checked, and inappropriate items have been replaced.
- As the kitchen tended to overheat, a new induction stove was purchased. This has improved working conditions in the kitchen by reducing the temperature.
- A more powerful air-conditioner has been fitted in the kitchen to replace the old unit. In addition, more effective air filters were installed.
- Barmen and assistant barmen are provided with wristbands (elastic bands to keep wrists warm) in order to prevent injuries in the joints and pain in the wrist.
- In order to make the work of assistant barmen safer, a new workstation with adjusted height has been procured.
- Security guards have been provided with protective clothing that serves also as a uniform. The new uniforms have the logo of the company, and include warm coats and gloves for working outside.

- An assessment was carried out of the schedule of staff working in more difficult conditions. This has resulted in security guards replacing each other outside in cold weather every 20 minutes. Those employees who work in bars are allowed breaks in their work.

Results and evaluation of the project

The evaluation included carrying out a risk analysis of the work environment and assessing feedback from staff. Staff meetings are held on a weekly basis, and either monthly or twice a month, issues are raised in respect of the working environment, for which realistic solutions are sought. There is a continuous dialogue with the staff in order to ensure that the appropriate issues are addressed.

Problem identification and description

The nightclub is a protected historical site and, as a result, there are restrictions on the amount and type of changes that can be carried out at the site. For example, the installation of lifts is prohibited, meaning that goods and materials have to be carried by hand around the site. In general, all work that needs to be done needs to comply with the limitations imposed by the historical status of the nightclub.

Due to the nature of the business, the management acknowledged that there are some areas in which they would not have maximum impact. For example, the lighting will never be exactly as required for the environment, the music will be loud and the physical and physiological aspects of night work should be considered at all times.

Assessment

Overall, the intervention has met its objectives. However, some issues remain to ensure that staff follow-through on agreed changes. For example, there is a maximum limit on how loud the DJs can play music, but they do cross the limit at times. The management is at present trying to resolve this issue to ensure that it is technically impossible to exceed the established limit. Additionally, while all of the staff are provided with earplugs, some of them do not wish to use them.

Transferability

This type of risk assessment and intervention can be transferred easily to other organisations and countries. Nightclubs and lounges tend to be similar, and mainly cater for a young clientele.

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5.3.2. Kroger mot knark — Clubs Against Drugs — Sweden



Key points

- To develop a policy that outlines how to handle drug-users (both guests and co-workers), and how to intervene in such a situation.
- To provide guidance and training on the issue.
- To create a tool for prevention of drug abuse among employees.
- To decrease drug use among guests and employees.
- To create a safer and healthier working environment for club employees.

General framework

Alcohol and drug abuse are among the greatest threats to people's health and wellbeing. Closer contact with other European countries and a change in attitudes will probably lead to increased drinking and drug use, and therefore also increased harm. Moreover, recreational drug use in nightclubs has increased, which poses serious risks for the health and safety of employees working in the clubs. These changes subsequently make greater demands on health promotion and require intervention and the search for new methods of prevention.

Recreational drug use may reduce performance efficiency and safety at work (HSE 2004). The accident rate for substance abusers is about four times that of an average worker. Up to 40 % of workplace deaths and about one half of workplace injuries can be linked to substance abuse. The victim could be the abuser, a co-worker, a customer, or a member of the public (Loup 1994).

Survey results among 445 employees in Stockholm show that many employees have observed drug use among guests and that the prevalence of drug use among employees is higher than in the general population. Eighty-three percent reported having seen guests high on drugs during the last six months and 43 % have seen guests high on drugs every week in licensed premises. Almost half (46 %) said that they have actually seen someone taking drugs at a licensed premise during the last year. Sixty percent of employees reported having used drugs at least once (Gripenberg, 2002).

Special framework and background

The 'Stockholm prevents alcohol and drug problems (STAD) project' is Sweden's largest investment in long-term development work within the alcohol and drug prevention field. Kroger mot knark (Clubs Against Drugs) is one of the 20 sub-projects of STAD, being conducted in the Stockholm area, with a focus on central and western districts.

The STAD Project, which started in 1995, is funded by the City of Stockholm and Stockholm County Council. The overall objective of the project is to identify, test and evaluate promising methods for the prevention of alcohol and drug problems. This long-term effort has yielded a large bank of knowledge for preventive work. Evaluation is being carried out in cooperation with the Department of Public Health Sciences at the Karolinska Institute.

The general aims of the project are as follows:

- to develop and test methods for the prevention of alcohol and drug problems;
- to encourage interest in preventive measures in the business community, and amongst authorities and associations, with the ambition of transforming the work carried out in the project into regular activities;
- in the long run to reduce alcohol and drug-related harm and diseases.

Groups involved from the outset included the Licensing Board, the Police Authority, the National Institute of Health, the County Administration, the Swedish organisation for restaurant owners, the trade union and leading restaurants.

Description of the action

Clubs Against Drugs was initiated by the STAD project in 2003 in order to reduce recreational drug use in bars/nightclubs/restaurants in Stockholm. The project focuses initially on premises which see high levels of recreational drug use (e.g. nightclubs). Thirty-three clubs are jointly working to provide safer drug-free workplaces for their employees. The restaurants have developed a policy that outlines how to handle drug-users (both guests and co-workers), how to intervene in such a situation, etc. The project also provides guidance and training on the issues, e.g. of how a doorman can recognise drug-users and how to design a safe club.

Owners of 'high-risk' nightclubs with late opening hours are actively and publicly engaged in efforts to reduce the use of drugs. The owners participate in different working groups and meet on a regular basis, and have formally created the 'Clubs Against Drugs' association. All members have signed a declaration committing them to engaging in drug prevention work in nightclubs.

The intervention strategy is to decrease the availability of drugs and opportunities to use drugs via changes in the physical environment, introduction of drug policies and training of staff. An action group representing the Licensing Board, the Police Authority, the National Institute of Health, the County Administration, the Swedish organisation for restaurant owners, the trade union and leading restaurants has been mobilised and meets regularly.

The pre-emptive alcohol and drug programme for restaurants is a tool for prevention of alcohol and drug abuse among employees. The programme, along with the alcohol and drug policy, is aimed at creating a workplace without alcohol and/or drug abuse. The programme consists of a training programme for all employees, additional training for managers and other key personnel, testing and rehabilitation.

The participating clubs are as follows: Berns, Blue Moon Bar, Café Opera, East, Köket, Laroy, Riche, Spy Bar, Sturecompagniet, Sturehof, Alladin, Hotellet, Loge, Nox, Olssons Video, Solidaritet, Storstad, The Lab, The Plaza Club, Undici, White Room, Bar 54, Café Tivoli, Clarion Hotel, Gondolen, Göta Källare, Koh Phangan, Kvarnen, Ljunggren, Metro, Patricia, Restaurang Göteborg and Snaps.

Policy work

Written policy documents have been developed and implemented in the high-risk premises. The staff receive written drug policy information and training, after which they sign the policy.

Training

The programme involves targeted training: one-day policy training for owners of nightclubs, one-day training for serving staff, two-hour policy training for managing staff, and a two-day drug-training programme for doormen.

The drug training for doormen covers the medical effects of drug use, how to recognise drug-impaired guests, how to intervene appropriately, alcohol and drug laws, laws and regulation for licensed doormen, and conflict management. The topics covered are discussed in groups and practiced in role plays. In order to pass the course and receive a diploma the doormen must score 70 % or above in a written exam.

Training programme for all employees

The training programme consists of information given to all employees and additional information given to new employees. The information may be given in meetings, other training programmes, etc. and it may be posted on bulletin boards or sent to the employees by mail. The purpose of the training programme is to maintain and strengthen the current policy.

The training programme may include the following:

- the effects and consequences of alcohol and drug abuse, from a personal as well as a professional standpoint;
- the consequences if the policy is not adhered to;
- rehabilitation and support;
- resources outside the workplace — support and help for the addicted.

New employees must be informed of the alcohol and drug policy of the restaurant.

Everyone in a managerial position, as well as other key personnel, will receive additional training annually. The purpose is to increase the knowledge of and ability to deal with abuse within the work- force.

The training programme may cover the following:

- the effects of alcohol and drug abuse on both the workplace and on society as a whole;
- how to implement the alcohol and drug policy, testing, testing positive, rehabilitation and rehabilitation resources;
- how to inform all employees of the alcohol and drug policy of the restaurant;
- how to read the signs of abuse, suspicion of abuse, if the employee is under the influence of alcohol and/or drugs and how to document suspicions of abuse;
- secrecy.

A film about drug use in clubs has been produced as part of the project.

Testing

Testing must always be performed in a correct and reassuring way in order to: prevent (wrongful) positive tests and assure all employees that the tests are being handled properly and that the risk of manipulation of the tests is non-existent.

The routines for testing (from actual testing to lab results) must always ensure that no employee is wrongfully accused of alcohol and/or drug abuse. It is therefore vital that all testing should be done by medical personnel and that the analysis be conducted by an approved laboratory.

Rehabilitation

It is the responsibility of the employer to ensure that rehabilitation and treatment will be available to an employee when substance abuse has been confirmed. The purpose of the rehabilitation and treatment is to break the employee's pattern of alcohol and/or substance abuse in order to allow the employee to return to work. Employees should be encouraged to seek help for their addiction outside the workplace, e.g. from the AA (Alcoholics Anonymous).

Rehabilitation may include counselling, self-help, institutional treatment and day care treatment. Whatever the method of rehabilitation, there must always be a consensus between the rehabilitation provider and the employer.

Enforcement

The Police Authority has developed a specialised group, the Club Commission, targeting drug-related crimes at nightclubs. The Club Commission takes an active role in the project, participating in meetings, planning and lecturing, and inviting doormen to regular meetings. Furthermore, monitoring of and sanctions against nightclubs have also increased.

PR campaigns and media activities

A number of media activities are conducted in order to mobilise important target groups, increase awareness of the problem, and to gain community support for the intervention. The project was announced on both national and local TV news, on radio, and in newspapers. A PR campaign was initiated at the end of March 2004. The PR work consisted of a press conference, advertisements in news media and activities at the clubs. A website was also introduced.

Funding

The project activities are funded by STAD project, Police and MOB (Mobilisering mot Narkotika). The STAD project is funded by the City of Stockholm and Stockholm County Council.

Results and evaluation of the project

Drug use has decreased in the participating clubs. This has had a positive impact on the health and safety of club workers.

The STAD project's various sub-projects are evaluated continuously. Evaluation is being carried out in cooperation with the Department of Public Health Sciences at the Karolinska Institute.

The evaluation of the STAD project showed, for example, that police-reported violence decreased by 29 % in the project area during the first three-year observation period (Wallin, et al. 2003).

An evaluation of the physical environment and in-house policy work has been initiated in all the nightclubs. A specific checklist is used and the results are discussed in order to focus on possible improvements.

The results of the evaluations are utilised for improving working methods and materials. The results are continuously presented to, and discussed with, various target groups participating in the projects, e.g. serving staff and the police.

Examples of methods used in the evaluation are questionnaires, focus group interviews, observation studies and registry studies.

- More information about evaluations can be found in STAD's report series (only available in Swedish) (see <http://www.stad.org>).
- Evaluation and research in the STAD project is conducted in collaboration with the Karolinska Institute, Department of Public Health Sciences. For further information see scientific documentation on the website <http://www.stad.org/>

Assessment

Evaluation and assessment of the project are under way. Intervention activities will continue.

Transferability

The intervention is easily transferable to other countries.

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5.4. EXAMPLES OF GOOD PRACTICES IN THE HORECA SECTOR

5.4.1. Ergonomic approach in the hotel and restaurant industry — France

Key points



- A project bringing together the various occupational health and safety services and the hotel industry trade association.
- Overall initiative including the production of a film and a practical guide to ergonomics in the hotel and restaurant industry.
- Funding of innovative projects in this sector.

General framework

The number of occupational injuries and diseases in the hotel and restaurant sector is high. Numerous occupational injuries can occur, in particular:

- falls and slipping.
- accidents related to handling and manual operations.
- injuries caused by hand tools.
- falls from a height.
- burns.
- road traffic accidents, and so on

Moreover, cooking is an activity involving major risks, including: slipping, falls, cuts, noise, etc.

Occupational health and safety therefore has very important economic and social implications in the hotel and restaurant sector.

Special framework and background

There are nearly 6 000 establishments in the hotel and restaurant business in the Aquitaine region: 1 500 hotels with restaurants and 4 200 restaurants and café-restaurants.

For more than 15 years, the Aquitaine regional health insurance fund (CRAM) has established various contacts with the organisations representing this industry, in order to raise its awareness of and allowance for safety and working conditions as early as possible before building or altering their premises, and also to improve the health of employees.

A first 'Convention Régionale d'Objectifs' (regional target agreement) was signed on 29 November 1989 for a three-year period between CRAM Aquitaine and the hotel industry association at that time.

A second regional target agreement signed on 30 January 1995 for a three-year period set a threefold target:

- to encourage allowance for safety in the workplace design stage, especially by installing appropriate equipment;

- to improve working conditions and reduce risks for users;
- to incorporate a training programme for all employees, including management staff, concerning occupational risks and food hygiene.

This second regional target agreement had a far more significant impact than the preceding one, especially due to the promotion campaign carried out by the FRIH (regional hotel industry federation) and the SGIHG (general hotel industry trade association for the Gironde region) which had 900 members at the time.

Approved by all the departmental hotel industry federations, this agreement asserted the will of the industry and CRAM Aquitaine to develop a safety policy for the firms in the region. A rider for an additional year was signed on 19 January 1998.

Then, departmental hotel industry trade associations (UMIH: Union des Métiers de l'Industrie Hôtelière) were set up to replace the FRIH and SGIH organisations, and the CRAM developed its initiatives in partnership with them. The CRAM also took part in the National Congress of the UMIH in La Rochelle on 5 December 2001 to describe the initiatives taken in the Aquitaine region and encourage their promotion.

The approach of CRAM Aquitaine having been judged highly positive by the French national health insurance fund for employees (CNAMTS) and the national UMIH, a partnership charter was drawn up to commit the industry to a Convention Nationale d'Objectifs (national target agreement) which was signed on 5 September 2001 for a period of four years.

The CRAM implemented 28 occupational health and safety contracts within the framework of this national target agreement, which represents an amount of about EUR 500 000 assigned by CRAM Aquitaine for the improvement of employees' working conditions and health. Enterprises themselves invested about EUR 2 150 000 over the four years. The financial aid from the CRAM represents 23 % of this amount.

To date, 68 restaurants and hotel/restaurants in the Aquitaine region have benefited from the advice and financial assistance of CRAM Aquitaine to a total of EUR 1 189 200, for an investment by enterprises in working conditions and safety amounting to EUR 5 030 000. CRAM Aquitaine's contribution therefore represents about 24 % of these investments.

Again, in order to raise corporate awareness and promote occupational health and safety, CRAM Aquitaine occupational health and safety service and the hotel industry trade association of Dordogne acted as partners to raise awareness among enterprises in the hotel and restaurant industry in Dordogne concerning the risks related to their business and workstation ergonomics.

Description of the action

CRAM Aquitaine proposed, more than two years ago, to support the project for collective action initiated by the Périgueux OH&S service, in partnership with the UMIH of Dordogne, and to assist enterprises in the hotel and restaurant industry in the occupational risk prevention approach.

The tripartite agreement signed on 22 May 2003 defined the following aspects in particular.

The Risk Prevention Service of CRAM Aquitaine:

- Produced an instructive film illustrating the benefits of adopting an ergonomic approach in the hotel industry, and the proposed risk prevention initiatives. It is a collection of first-hand accounts by company managers that enabled the production

of this awareness-raising film entitled 'Ergonomic approach in the hotel and restaurant industry: A new key to progress'. The film was produced by a team from CRAM Aquitaine, a cameraman, a director, a safety inspector and an engineer in partnership with an ergonomist and industrial doctors of the Périgueux OH&S Service. It was previewed at the symposium organised by the Périgueux OH&S Service on 27 October 2003 at the International School of Management in the Hotel, Restaurants and Tourism Industry, at Savignac les Eglises for all the industry players in the 'département'.

- Disseminated the film, 'Ergonomic approaches in the hotel and restaurant industry — A new key to progress', on VHS cassettes and CD-ROMs in the leading establishments. Since its production, almost 1 000 copies of the film have been disseminated, either at general meetings of the UMIH or via ergonomists and the Prevention Institution. During the Equip'Hôtel trade fair held from 5 to 9 November 2006, the film was shown on closed-circuit TV on the stand of CRAM Aquitaine (in partnership with the national institute for research and safety (INRS) and the Île-de-France regional health insurance fund (CRAMIF)), and the latter organisation hopes to disseminate nearly 400 additional CDs.
- Raised awareness regarding occupational risk prevention and assessment.
- Financially assisted eligible enterprises through OH&S contracts.

The UMIH of Dordogne:

- led the industry down the path to modernity with the support of all the partners and the institutional resources able to help in this;
- provided information on this approach and raised awareness among its relays and members;
- taken part in writing and promoting the single document on occupational risk assessment;
- facilitated the appointment of resource personnel.

The Périgueux OH&S Service:

- wrote the 'ergono-guide', a practical guide to ergonomics in the hotel and restaurant industry;
- organised and funded the symposium of 27 October 2003;
- made ergonomists available to support the action of the industrial doctors;
- presented the multi-disciplinary project at the National Congress of Occupational Medicine in Bordeaux in June 2004.

The ergono-guide was presented in May 2006, on the occasion of 'OH&S seminars' organised by the INRS. Five hundred copies have been disseminated to date, chiefly to enterprises in the Dordogne region, and 50 to the INRS, to the 'Conseil Général' (County Council), the Regional Council and the UMIH. The OH&S Service plans to print 500 additional copies which will be available at the end of October.

Dordogne has more than 700 representatives of the hotel and restaurant trades, a sector of activity and employment which is now tending to evaluate occupational risks and to improve working conditions

Results and evaluation of the project

A success, this project is continuing with the preparation of a practical guide on the ergonomics of design and use of work premises and equipment. This guide is produced by CRAM Aquitaine, in partnership with the regional directorate for labour, employment and vocational training (DRTEFP) for Aquitaine, UMIH Aquitaine, the labour inspection doctors, the local UMIH organisations and a consulting firm.

Five thousand copies of this guide were presented at the Equip'Hôtel trade fair which takes place in Paris from 5 to 9 November 2006. The UMIH is in charge of its promotion.

The factors of success of this project were strong mobilisation of the OH&S services and a precisely defined partnership with a very clear breakdown of tasks among the various institutions that took part in it.

To illustrate this project, below are three accounts of various innovative initiatives that were carried out within the framework of this project.

Jacqueline Leymarie, Auberge de la Truffe (Sorges)

'Following collective consultation with the personnel, and an architectural plan, we contacted the industrial medicine service, who spoke to us of "ergonomics", which was a new word for us. We contacted CRAM Aquitaine who, in addition to their advice, helped us financially. Since then, we are far better organised in the kitchen. Risks are limited on both the physical and mental levels: there are fewer risks of burning, very sharp scissors are stored in the right place, and we have a non-skid floor, maintenance of which is facilitated by a cleaning unit accessible to everyone. With regard to ergonomics, the work tables are positioned at the correct height, and seats are available for certain jobs. We are able to manage working hours suitably. Working in a pleasant place is important for personnel: they are less edgy and less stressed, their loyalty has increased, and this year we had no absenteeism.'

Jacky Vasseur, Relais des 5 Châteaux (Vézac)

'Thanks to the creativity of the cooks and the organisation of operations backstage, working conditions have improved. Everyone can now move about in the kitchen without interfering with others, resulting in a time saving with regard to service. When I lose employees, it is either because they have set up in business for themselves, or they have gone on to be chefs in big kitchens.'

Dominique Duc, Auberge de la Petite Reine (Siorac en Périgord)

'By making the workplace pleasant, it is easier for my employees to be friendly with the customers. I started by trying to make the day easier for my employees. I positioned all the equipment so that employees would not need to climb a stepladder or constantly bend down. I ask my employees to keep the kitchen impeccable: time is saved and cleanliness is ensured. As regards deliveries, when building the kitchen, I provided for a delivery quay with access ramps for the trolleys, to avoid fatigue; when the delivery service arrives, all my team comes to receive the goods, thus reducing stress. I spent no extra money on creating conditions of safety for my employees. Finally, by providing my team with an efficient work tool, of good quality and in sound condition, there is a 99 % return on investment.'

Problem identification and description

Since 1992, CRAM Aquitaine has been working with the restaurant and catering business. However, occupational injury and disease prevention is not one of the prime concerns of company managers. It is necessary to have a strong presence in the field, but unfortunately CRAM does not have the resources for this.

Occupational risk prevention is a long-term task, and CRAM does everything possible to establish partnerships. These require a very strong presence and monitoring, without which the initiatives taken are diluted over time.

On the other hand, those restaurant operators who clearly understood that it was important to allow for safe working conditions in the design stage, or during revamping of the premises, are true promoters of occupational risk prevention.

Assessment

The project enabled CRAM Aquitaine (both in its services and its actions) to become better known to those in the business who are members of a trade association. The latter make more allowance for occupational risk prevention on an everyday basis, although they account for only 20 % to 30 % of the industry. The others are not members and are therefore not well-informed.

The OSH contracts enabled them to be aided, but the national target agreement has expired since September 2005, and for the time being it has not been renewed. Those in the industry cannot understand why this is: some of them have plans for improvement requiring major investment, and without aid from CRAM this becomes very difficult.

Transferability

This project can be transferred to other countries and sectors, but it requires major deployment of the occupational health and safety services.

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Violence, harassment and discrimination in Horeca

According to the working conditions survey of the Eurofound (2000), 12 % of hospitality workers experience intimidation, the second highest figure of all the sectors surveyed and 3 % higher than in the overall economy. The European Agency for Safety and Health at Work (2000) has also identified the sector as a high risk sector for physical violence; 8 % of hotel and restaurant workers (ESWC data, 2000) have been subjected to intimidation while at work during the last 12 months.

In the last few decades, personally attending to customers has gained importance throughout the service sector and in hotels and catering, and awareness has increased regarding the importance of employee behaviour and attitudes towards customers. Hotel and restaurant workers need a customer service orientation and a focus on customer satisfaction. But they may be confronted with excessive demands from clients and customers leading to abusive behaviour (Vittorio Di Martino, et al. 2003).

A large number of employees in hotels and catering work directly with their clients, as service suppliers, e.g. waiting staff, or less directly as cleaning staff or chamber maids. This can be a source of stress (ILO, 2003). A survey by Grimaud,

et al. (2002) indicates that 42 % of employees consider relations with clients as a stress factor. Almost 37 % have suffered sexual harassment. Vittorio Di Martino, et al. (2003) sees an increased risk of exposure to violence for employees working at the interface between the organisation and public, and especially those workers who work with cash or have an enforcement capacity, such as security guards.

Physical as well as verbal abuse and aggression is a problem in the sector. Although the risks tend to be higher in bars and pubs where customers drink more alcohol, workers in restaurants and especially fast-food venues and takeaways also have a high risk of being confronted with violence and harassment. Vahtera and Pentti (1999 in ILO, 2000) highlight the vulnerability of waiting staff. They analysed figures from 1990 and 1997, and in both years 75 % of waiters reported experiencing violence from time to time.

5.4.2. Reduction of workload in the Horeca sector — Netherlands

'HAPPY HORECA'



Key points

- A state-supported agreement ('Arboconvenant') between the social partners to reduce workload by 10 % in three years.
- The agreement included a set of activities and provided useful practical information and working materials.
- The project and its outcome and success were carefully evaluated and the results quantitatively measured.

General framework

The project covered three typical occupations in the hotel and restaurant sector — work as receptionists, kitchen personnel and waiters. A fourth group of mixed occupations was classified under 'Others'.

In total the Horeca sector in the Netherlands in 2000 employed more than 266 000 people in 27 000 enterprises. For 2004 this figure is estimated at 319 000 people; 24 500 or 91 % of the enterprises were SMEs under 20 employees. Most of the employees (141 000 or 53 %) worked in these small enterprises.

The budget for this project was 4.5 million Dutch Guilders or approximately EUR 2 million. The Ministry for Social Affairs and Employment (SZW) met 50 % of the expenditure. The other 50 % was covered by the employers' organisation Koninklijk Horeca Nederland (KHN), and the trade unions supported the project by personal participation. The costs for the industry were finally calculated as approximately EUR 1.8 million and EUR 200 000 for personal support.

Special framework and background

The main reasons for undertaking the action were:

- high workload;
- a rate of sickness and absenteeism above the average.

The activity was carried out by five organisations: the employers' association (KHN) and its knowledge and innovation centre (BEHC), two trade unions (FNV, CNV) and the Ministry for Social Affairs and Labour (SZW).

- (1) Koninklijk Horeca Nederland (employers' federation) — www.Horeca.org
- (2) Bedrijfschap Horeca en Catering (Knowledge and Innovation Centre for the Horeca sector) — <http://www.bedr-Horeca.nl/index.jsp>
- (3) FNV Horecabond (trade union) — <http://www.Horecabond.fnv.nl>
- (4) CNV Bedrijvenbond (Christian trade union) — <http://www.cnv.nl/home>
- (5) SZW Ministerie van Sociale Zaken en Werkgelegenheid — <http://www.min.szw.nl>

The main target was a reduction in workload by 10 % .

Measures to reach this target included:

- measuring of the baseline at the start of the project in a minimum of 1 000 enterprises;
- management of discussions and meetings regarding work organisation ('Werkoverleg');
- implementation of job enrichment, job rotation and job enlargement measures;
- approaches to improve the organisation of work processes and the technology and equipment in workplaces;
- assessment of technical conditions in relation to workload;
- measures to avoid the incorrect payment of wages;
- measures to train personnel in dealing with aggressive customers;
- testing of workload-reducing measures in eight pilot companies.

The three strategies to reach the target can be summarised as awareness-building, communication improvement and solution support.

Description of the action

The main methods used in the action were an information campaign, an Internet website, practical, well-structured and well-designed guidance tools and documents, and risk assessment tools for workload in Horeca.

Evaluation

The 'Quick Scan Werkdruk' is a software-based tool for identifying the structure and degree of workload in workplaces. Quick Scan Werkdruk is a measuring tool developed by TNO and adopted in the Horeca sector (TNO, Arbeid, 2005).

The Quick Scan was used at the beginning of the period of the covenant to identify the zero point or baseline. At the end of the period the Quick Scan was again used to assess the outcome of the action concerning workload. The Quick Scan Werkdruk was filled in by more than 5 500 employees or self-employed people.

Participation

Around 25 % of Dutch Horeca enterprises introduced the 'Werkoverleg'. These are meetings to discuss the organisation of work.

According to the final measurement ('Eindmeting', TNO Arbeid 2004) approximately 20 % used job rotation as a method to reduce workload.

Approximately 15 % of all the enterprises introduced cooperation and development dialogues.

Around 7.5 % of the companies with a total of 80 000 employees carried out a risk assessment (TNO Arbeid, 2004).

About 4 800 enterprises concluded an agreement with OSH Services ('Arbodiensten') to improve the working conditions. This is a step beyond the period of the covenant to improve working conditions and to support companies in the reintegration of sick employees.

During the action a seminar, 'Omgaan met agressie' ('How to deal with aggression'), was organised and 864 employees participated. The problems of sexual harassment, bullying and discrimination ('intimidatie, pesten, discriminatie') were tackled in these seminars and in team dialogues.

During the seminars on aggression the problem of sexual harassment and bullying by colleagues and supervisors came up as a problem. The project did not offer specific seminars on these issues but introduced the topics into its handbook on team dialogues ('Sammenwerkings-gesprekken').

Guidance tools

During the project a number of practical guidance tools for different aspects were developed. Sixteen areas or topics have been tackled:

Management measures:

- meetings: the benefit of openness,
- cost reduction with reduced sick-related absence,
- time-planning and good balance,
- job rotation,
- fast cooking, but without hurrying,
- less work through smart buying,
- sales centres.

Personnel measures:

- development dialogues — talking together about the future,
- cooperation discussions — working, and working together,
- motivation and reward,
- leadership (de situatie de baas),
- training on the job: learning from colleagues.

Measures regarding working conditions:

- the benefits of investment in staff and equipment,
- ergonomics and physical load,
- ergonomics and RSI,
- better cleaning.

Communication measures

The project emphasised the need for effective communication measures. The evaluation report quantified these measures in figures (KPMG BEA).

- 125 presentations in Horeca, with 2 600 participants, were organised;
- More than 36 000 handbooks were distributed;
- More than 50 000 visitors looked at the 'HappyHoreca' website. The former website <http://www.happyHoreca.nl> is now: http://www.rie.nl/contentpage.php?page=ries&branche_id=350

- More than 350 000 copies of the newspaper-like publication with four pages of information were distributed.

Other project measures

The project promoted a number of accompanying measures:

- technical improvements (better ergonomics, reduced risk of accidents, ventilation etc.);
- better time-planning;
- improved payment through better organisation.

Results and evaluation of the project

The evaluation included a quantitative survey on the measures introduced in the companies. A mainly quantitative evaluation was carried out in 2004 by TNO Arbeid (TNO Arbeid, 2004). A more qualitative assessment was published by KPMG (KPMG BEA, 2004).

The figures in the following table show how many people participated in the first and second Quick Scan Werkdruk and what percentage of them suffered from overload ('werkdruk-die-leidt-tot-overbelasting').

Table 8: Developments in the number of employees suffering from excess workload from 2000 to 2004

Profession	Number in 2000	Result 2000	Number in 2004	Result 2004
Receptionist	162	40.9 %	140	45.4 %
Kitchen	789	32.7 %	645	29.4 %
Waiter	1 396	33.1 %	1 382	27.5 %
Others	601	36.7 %	466	32.1 %
Total	2 948	34.2 %	2 633	29.7 %

Four and a half percent fewer employees suffered from overload over the period. This is a reduction of 13.2 % on the baseline, i.e. the target was reached. Additionally, the number of sick-related days in absence was reduced from 2000 to 2004.

Table 9: Developments in the number of employees absent from work due to sickness from 2000 to 2004

Percentage of employees absent from work due to sickness in the last 12 months	Result 2000	Result 2004
Never	56.1	58.8
Less than 1 week	20.5	24.3
1–2 weeks	11.0	9.0
2–6 weeks	6.6	4.1
6–13 weeks	2.6	1.7
More than 13 weeks	3.2	2.1

These figures show a clear reduction in workload.

The total rate of sick-related absence was reduced from 3.8 % in 2000 to 2.6 % in 2003. The number of people taking early retirement decreased from 0.65 % in 1998/1999 to 0.1 % in 2003 (KPMG BEA 2004).

According to TNO the Dutch hotel and catering industry has saved EUR 7.2 million as the result of the reduction in workload and its effect on sick-related absence.

Problem identification and description

The target reduction in workload could not be achieved for all functional groups. The receptionists complained about increased workload; the rate grew from 40.9 % in 2000 to 45.4 % in 2004. In its final report TNO ARBEID identifies as a reason for this negative development the growing number of different work tasks given to receptionists (TNO Arbeid, 2004).

There is no indication that hostility was encountered from any of the groups.

Assessment

The major goals were achieved. The project is very well documented and evaluated.

Success factors include:

- tripartite approach,
- size of the action,
- financial means available,
- focus on communication and awareness, and
- the set of very well-developed help tools that came out of the action.

The project promoters could clearly show that reduction in workload was a win-win situation, employers and employees.

Transferability

After the Horeca project two other 'Arbo-Convenants' were introduced in the sector. The methodology of these projects is similar to that of the Horeca-Covenant; they are similarly organised and financed.

In the catering sector two connected covenants were introduced, the first from 2002 to 2004, and as a follow-up to 2007, the 'Arboplusconvenant Contractcatering inzake verzuim- en reïntegratiebeleid werkdruk en licha-melijke belasting' (OSH agreement on Contract Catering concerning measures on absence and reintegration, stress and physical load).

The follow-up covenant had three main targets:

- a reduction in sick-related absence by 20 % from 9.3 % in 2003 to 7.4 % in 2006;
- a reduction in the percentage of employees exposed to stress from 41.5 % to 33.2 % (a 20 % reduction);
- a reduction in the percentage of employees exposed to heavy work from 44.5 % to 37.8 % (a 15 % reduction).

The budget was EUR 1 million, shared equally between the Ministry SZW and the social partners.

The current 'OSH agreement in the recreation sector — swimming baths — concerning measures on absence and reintegration, physical load, aggression and exposure to climate, noise and substances' works with similar quantitative goals and a similar budget.

Quotes

Van Schie, BHenC:

'Expenditure on reducing workload brings savings of two or three times the amount. Employers and employees who used the HappyHoreca tools emphasised that the reduction of workload leads to much greater job satisfaction among employees, to higher satisfaction among guests and to growth in turnover.'

'Vermindering van te hoge werkdruk verdient zich dubbel en dwars terug. Ondernemers en werknemers, die HappyHorecainstrumenten gebruiken, hebben aangetoond dat het verminderen van de werkdruk leidt tot veel meer werkplezier voor werknemers, meer gastentevredenheid en toename van de omzet.'

Penders FNV:

'Employees can actively take measures to reduce their workload, because their employers support them. But the success will be effective, if the enterprises really recognise the significance of HappyHoreca. Many enterprises have not perceived the value of HappyHoreca. There is still a lot to do.'

'Werknemers kunnen actief iets doen aan het verminderen van werkdruk als hun werkgevers daarin willen meegaan. Maar 't succes wordt pas substantieel als bedrijven het belang van HappyHoreca blijven onderkennen.... Veel bedrijven hebben nog geen kennisgemaakt met HappyHoreca. Er valt dus een hoop te doen.'

Schormann KHN:

'Employers in the Horeca sector are open to creating good working conditions. Safe and better organisation leads to better service and a greater rate of return. The employer has to work together with his employees safely and effectively.'

'Horecaondernemers staan open voor goede arbeidsomstandigheden. Zeker als beter functioneren leidt tot betere service en beter rendement.... De ondernemer moet dat samen met zijn medewerkers goed en veilig organiseren.'

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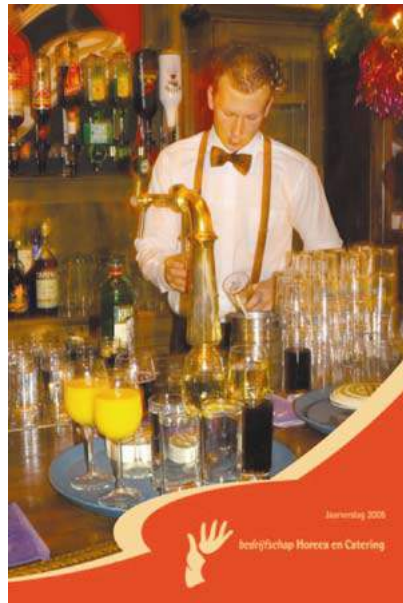
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CONCLUSIONS OF CASES

5.5.

5.5.1. Qualitative assessment of the cases

Of the actions described in this report, only a minority have been evaluated. It must be said that some of them were undertaken only very recently, or are still merely at the planning stage; we therefore do not have sufficient hindsight to assess their impact.

It should also be specified that, when they have been performed, the evaluations mostly concern the view of the target enterprises regarding the benefits or relevance of the proposed approach or support, or the level of satisfaction of the beneficiaries rather than the actual impact of the action on the state of health and safety in SMEs.

Although it is hard to measure the effectiveness of the preventive measures described in this report, it is possible to derive from them some useful information for those who would like to adopt similar approaches.

A number of important key results can be summarised according to the significant characteristics of the cases. In most of the cases the initiators and contributors aimed to reach a set of targets. The case studies are categorised by their key success factors.

Consequences of the measures described on the frequency level of occupational injuries

Several of the actions described had the direct objective of reducing the number of occupational injuries and diseases.

In the case of a fast-food chain in the United Kingdom, all that was needed was to change the floor surfacing to reduce accidents due to slipping by 70 % .

Following the investigations of accidents that have occurred in system plants of hotel swimming pools in Italy, a mixed work group was established. Technicians from control agencies, together with representatives from the associations of entrepreneurs, participated together in order to identify the necessary interventions required to avoid further accidents. Guidelines have been drafted for the management of chlorination system plants, containing both the management aspects and the system plant modifications aimed at improving safety.

No further accidents have been recorded since the circulation of the guidelines. The quality of services offered to tourists, as well as working conditions, seems to have improved as a direct result of system plant operators' enhanced professionalism and improved awareness.

Good risk assessment

Another recurrent objective in this sector is to improve risk assessment. As we have seen, there are numerous risks in the Horeca sector, due to the great variety of working environments.

This is shown in particular by the study performed in the hotel sector in **Greece**. This study, carried out in the field and in which the workers were closely involved through questionnaires, allowed recommendations to be published, which could be used during seminars and training courses for employees in this sector.

Understanding of accidents, based on the recording and analysis of data provided by accident reports, can also give many indications and can facilitate guidelines being made available for the benefit of personnel in the sector (managers, employers, workers, advisers, trade associations, etc.), in harmony with the rules and based on the experience of the control agency (**Italy**). This working instrument was made available with the collaboration of trade associations and trade union organisations, and a convention was organised for the purpose and an information brochure was circulated.

Involvement of the workers in risk assessment enabled the managers of a university kitchen in **England** to obtain satisfactory solutions for the prevention of musculoskeletal risks for workers.

Following the risk assessment, the administrators of a nightclub and a lounge bar in **Estonia** made changes to the work places to reduce the hazards and risks associated with the noise, vibration, use of equipment and temperature changes related to nighttime work environments of a social nature. The changes were extensive, covering the amplification level of music, the bar areas, the kitchen areas, the entrances and the floors.

Successful partnership for large-scale actions at the regional, national or sector levels

The success of a project is also largely due to the partners taking part in it. In the case of information campaigns, it is very important that all the representatives of this sector should be involved in the campaign, to ensure its success.

A project in the **Netherlands** had the objective of reducing workload by 10 % in three years in the Horeca sector. Five organisations took part in the action: the employers association, the knowledge and innovation centre, two trade unions and the Ministry for Social Affairs and Labour. The primary means used in the action were an information campaign, an Internet website, very practical, well-structured and well-designed guidance tools and documents, the use of risk assessment tools for workload in Horeca, and the support of solutions. The campaign was a big success as the major goals were achieved thanks to the tripartite approach, which allowed the campaign to reach a very large public, and the size of the action.

The same type of agreement was also put in place in the catering sector in the **Netherlands**, and also shown to be very successful. This experience showed that the covenant could be much more effective if it is possible to reach the whole branch with large-scale activities. A main area of focus was the training of executives, line managers and supervisors.

The success factors of a French regional project in the Horeca sector in Aquitaine were strong mobilisation of the OSH services and a precisely-defined partnership, with a very clear breakdown of tasks among the various institutions that took part in it.

Worker involvement

Generally, worker involvement in the project is decisive in its success. In particular, by asking them for their opinion and impressions concerning their work and observing their working environment and conditions, one can meet workers' needs by achieving a truly satisfactory solution. The observation work performed in the MELIA hotel chain in the Balearic Islands (**Spain**) enabled management to find a solution to the problems faced by chambermaids when making beds. Workers and their representatives expressed a high level of satisfaction with this solution. A significant reduction in absenteeism among maids was observed within the next two years. The reduction of efforts in the arrangement of beds and the cleaning of the rooms was highly valued.

However, these improvements and the higher category achieved by the hotel generated a side effect: an increase in the number of rooms to be cleaned by one maid and an increase in the tasks to be carried out in each room. Workers complained about an intensification of work and the extension of their responsibilities to additional tasks (to empty and clean flower vases, to fold toilet paper, to bring and assemble advertising material (brochures and gifts for the guests) to the rooms and other similar assignments).

In Finland, the aim of the intervention study was to investigate supervisors' burnout and stress (which are common, as they usually work alone without colleagues in their work units, and it is their responsibility to support personnel), and to evaluate the effectiveness and suitability of prevention groups in the catering and restaurant business. The groups aimed to alleviate stress and burnout during major changes in the organisations.

The results showed that supervisors' discussion groups are feasible and well suited to prevent stress amongst supervisors in the hotel and restaurant sector. The supervisors felt that they got support from each other. They had an opportunity to see that they were not alone in facing problems in a changing situation. The positive effects of supportive discussion groups were seen in levels of satisfaction with the organisation and the social

effectiveness of work teams. In sum, discussion groups seem to be an effective method for preventing and tackling stress and burnout in the hotel and restaurant sector.

Another initiative in **Finland** consisted of a participatory intervention in kitchen work. It was a laborious one-year undertaking both to study the effectiveness of the participatory intervention and to improve working conditions. Even though this kind of participatory approach was not familiar to the kitchen employees, the interventions were mainly successful and the workers enjoyed the opportunity to make choices concerning themselves and the entire kitchen personnel. As key success factors in this project, the ethnographic study highlighted the inspiring and motivating attitude of the ergonomists and appreciative attitudes of the participating employees.

But sometimes, the most important obstacles to the development of actions are the resistance by some individuals to the change, passivity, and outright refusal to make changes in their work.

Management commitment

But it is also necessary for the organisation's management to be a proactive 'driving force' for the project to be successful. The commitment of the management of the Radenci health resort in Slovenia, to the accomplishment of the goals that had been set, could be a good example for enterprises of the same size and capacity. This commitment is expressed mainly through the provision of adequate resources, auditing and evaluation of the programmes undertaken, and an effort to increase OSH training hours per employee.

The commitment of the Sofitel hotel management in **France** is one important success factor in the initiative to develop an autonomous, permanent preventive approach within the hotel, based on ergonomic analysis of the chambermaid's actual work, and to reduce work stress and pain.

Training adapted to target groups

Employee training very often leads to an improvement in working conditions. For example, as a result of organising training over two years for employees in the school kitchens of a town in **Finland**, the employees feel much better at work, are more at ease with the jobs they have to perform, and have fewer psychological complaints.

To meet this need for training, ISPESL (**Italy**) has created a CD-ROM and a website allowing both the employer and the worker to acquire training concerning both occupational risk prevention and hygiene rules in the restaurant and hotel industry.

In order to provide a safer, drug-free workplace for their employees, 33 clubs in Stockholm (**Sweden**) worked together on a drug prevention programme with the purpose of developing and evaluating methods to reduce drug use in licensed premises. Written policy documents have been developed and implemented in high-risk premises. The staff received written drug policy information and targeted training: one-day policy training for owners of nightclubs, one-day training for serving staff, two-hour policy training for managing staff, and a two-day drug-training programme for doormen. Drug use has decreased in the participating clubs and this has had a positive impact on the health and safety of club workers.

A combination of the various means of action

By using several means of action, the success of the project can also be ensured. The **German** approach to reduce the high number of skin diseases due to wet work in canteen kitchens used several means, such as a survey of the employees and workplace

visits, development of a practical prevention strategy, a test of the prevention strategy in other hospitals and in similar workplaces and the dissemination of the strategy. This combined approach led to the success of this project as the tools and leaflets have been carefully adapted to the needs of the workers and employers in this sector.

Keys to the success of risk prevention actions include:

- good risk assessment,
- worker involvement,
- management commitment,
- successful partnership for large-scale actions on the regional, national or sector level,
- training adapted to target groups,
- a combination of the various means of action.

5.5.2 Assessing the actions

Country	Name of the project	Assessment of impact
Germany	Wet work	<p>In 2001 three regional OSH authorities in the west of Germany (North Rhine-Westfalia) began a common project to reduce the high number of skin diseases due to wet work in canteen kitchens. The institutions and all interested parties and enterprises have now been provided with practical leaflets, which can be used in all types of kitchens.</p> <p>The project produced an information package for better skin protection in wet work in kitchens. This package is also available via the Internet. The project was not evaluated by external evaluators; the authors themselves claim a success, because the information package was prepared and successfully tested.</p>
Estonia	Safety in two clubs	<p>The administrators of a nightclub and a lounge bar made changes to the workplaces to reduce the hazards and risks associated with the noise, vibration, use of equipment and temperature changes related to night-time working environments of a social nature. The changes were extensive, covering the amplification level of music, the bar areas, the kitchen areas, the entrances and the floors. The evaluation included assessing a risk analysis of the work environment and feedback from the staff. Overall, the intervention has reached its objectives. However, some issues remain to ensure that the staff follows-through on agreed changes.</p>
Greece	Risk assessment in the hotel sector in Athens	<p>The Hellenic Institute for Occupational Health and Safety, in collaboration with five 5- and 6-star hotels, carried out a risk assessment study in Athens. The purpose of the study was to investigate working conditions, and develop a model risk assessment for the sector.</p> <p>A number of conclusions were drawn concerning the state of health and safety in the hotel business. In a number of areas, such as hot and cold plate kitchens and laundries, where unfavorable working conditions may prevail, recommendations were made for improving the work environment. The observations and conclusions derived from the study could be used to conduct seminars and instruct many more employee groups in the hotel business.</p>

Country	Name of the project	Assessment of impact
Spain	Substitution of beds	This study involved the substitution of traditional rigid beds for new units that include a hoisting mechanism to reduce physical effort in the tasks performed by maids in hotel rooms. Workers and their representatives expressed a high level of satisfaction with this solution. A significant reduction of absenteeism among maids was observed within the following two years. The reduction of effort in the arrangement of beds and the cleaning of rooms was highly valued.
France	Partnership in the Horeca sector on different risks and ergonomic problems	<p>The Aquitaine regional health insurance fund (CRAM) proposed in 2004 to support the project for collective action initiated by the local OSH service, in partnership with the departmental hotel industry trade associations, and to assist enterprises in the hotel and restaurant industry in occupational risk prevention. The overall initiative included the production of a film and a practical guide to ergonomics in the hotel and restaurant industry and the funding of innovative projects in this sector. This project was a success and it is continuing with the preparation of a practical guide on the ergonomics of design and use of work premises and equipment. The guide is being printed with a print run of 5 000 copies.</p> <p>Success factors for this project include mobilisation of the OSH services and a precisely defined partnership with a very clear breakdown of tasks among the various institutions that took part in it.</p>
France	Risk prevention for hotel housekeepers	The Île-de-France regional health insurance fund (CRAM) decided to undertake a review of the working conditions of chambermaids, the initial aim of this initiative being to create and disseminate a supporting document to raise awareness among the players in the hotel sector. An initiative was carried out in particular with Sofitel Hotel, at the request of the management. The training objectives for this hotel were to develop an autonomous, permanent preventive approach within the hotel, based on ergonomic analysis of the chambermaid's actual work, and to reduce work stress and pain. An evaluation of this project was made through the questionnaire 'one year later'. The questions prepared made it possible to gain the impressions of a representative sample of chambermaids (10 in all) of different ages, lengths of service in the establishment and morphology (size).
Italy	Guidelines for operators and a pamphlet for workers	This project aims at developing a protocol on the main work-related risks in hotels, focusing also on hygiene and sanitary requirements in accommodation facilities and the restaurant industry. This protocol has been presented and approved in meetings held with the associations of hotel keepers, local trade union associations, and workers' safety representatives. Guidelines have been produced and distributed to hotel operators. Furthermore, a convention was organised in 2004 at Chianciano Terme to publicise the project and to present 'Safety and health in the hotel sector — A few helpful hints', an information pamphlet for personnel, containing brief messages and vignettes, illustrating the correct forms of behaviour to be adopted. The data, produced over seven years of surveillance in the hotel sector, is currently being finalised.

Country	Name of the project	Assessment of impact
Italy	Safety enhancement in swimming pool chlorination systems	This project involved analysis of the causes of accidents, and investigation of the main techniques for the treatment of thermal swimming pool water, integrated control of the interactions between the various system plants that incur water quality control (chemical, hydraulic, electrical and electronic), definition of enhancement procedures, identification of methods of communication and the dissemination of information. Following circulation of the guidelines, no further accidents have been recorded. Moreover, the quality of services offered to tourists, as well as working conditions, seem to have improved as a direct result of system plant operators' enhanced professionalism and awareness. Objectives have been met regarding the immediate improvement of structures. The objective to raise the awareness of industrial designers, constructors and maintenance staff has still only been partially achieved, however.
Italy	Distance learning for the hotel sector, a training project for personnel in the hotel industry	The aim of the project is to provide enterprises in the hotel industry with an organisational and methodological training instrument that meets the requirements and needs of employers and their employees hired on atypical or standard employment contracts. The evaluation will become available following a period of observation of one year. ISPESL will distribute the CD-Rom for free to encourage maximum distribution locally and nationally.
Netherlands	Werkdruk	The aim of the agreement between the social partners and related organisations was to reduce stress in the Horeca sector in the Netherlands from 2000 (possibly extended to the follow-up agreement for the catering sector in 2005). The main means employed were an information campaign, a website, very practical, well-structured and well-designed guidance tools and documents, and risk assessment tools for workload in the Horeca sector. The evaluation included a quantitative survey on the measures introduced in the companies involved. The result is that 4.5 % fewer employees suffer from overload. This is a reduction of 13.2 % from the baseline, i.e. the target was reached. Additionally sick-related absence was reduced from 3.8 % in 2000 to 2.6 % in 2003. The number of people taking early retirement decreased from 0.65 % in 1998/99 to 0.10 % in 2003 (KPMG BEA 2004, ii). According to TNO, the Dutch hotel and catering industry has saved EUR 7.2 million as a result of the reduction of workload and its effect on sick-related absence.
Netherlands	Contract catering	Reduction of workload and absence rates in contract catering is the aim of an ongoing state-supported OSH agreement (arboconvenant) between the social partners and the government from 2004 to 2007. The government and the employers contribute 50 % each to the budget. The target is to reduce workload and the rate of absenteeism by a significant degree. The project has a strong focus on dissemination, risk assessment and training of line managers. The project is still running; a full evaluation is planned for 2007.
Slovenia	Terme Radenci	The targets for this three-year project are: (i) to reduce the frequency of injuries by 10 %, (ii) to reduce absenteeism by 0.5 %, (iii) to comply with the law, and (iv) to eliminate the risk of fire. In 2005, 22 different programmes were introduced: 17 were successful, 4 were transferred to 2006 and 1 was unsuccessful because of equipment failure. In 2006 there were 10 programmes.

Country	Name of the project	Assessment of impact
Slovenia		<p>The number of serious injuries has been decreasing since 2003, and so there are fewer workdays lost per injury. Rates of sickness have been declining between 2002 and 2005, except for 2004. Terme Radenci is below the Slovenian average and also below the Radenci region average. The Disablement index, which measures the number of lost workdays, is also decreasing, but in this case the company is slightly above the Slovenian average.</p>
Finland	<p>Participatory ergonomic intervention in the workplace: randomised controlled trial and ethnographic study</p>	<p>A participatory intervention project in communal kitchen work started in 2002. The field phase with 119 kitchens in Vantaa, Turku, Espoo and Tampere was finalised at the end of 2004 and follow-up continued until the end of the 2005. The study aimed to investigate the effectiveness of participatory ergonomic interventions in the prevention of work strain and promoting musculoskeletal health and general well-being among kitchen workers. Another important goal of the study was to scrutinise how workplace culture has an effect on interventions. The response rate to questionnaires was over 90 % . Over 400 changes were completed, most of them being targeted at work organisation, methods and habits, machines, equipment and tools, and layout and furniture. The participatory intervention model proved to be feasible. According to the questionnaire on the success of the intervention, the participants were generally satisfied with information transfer, practical arrangements and learning during the intervention. The changes in the kitchens were rated to be of satisfactory or very satisfactory quality by over 60 % of the respondents. The respondents were most satisfied with the professional skills of the ergonomists and workshop arrangements, and least satisfied with the collaboration between the kitchens and the support from the city administration.</p>
Finland	<p>Facilitating well-being in work in restaurants</p>	<p>As many as 123 kitchen workers participated in a multi-level intervention aimed at improving their work, work process knowledge, well-being and work ability. Both quantitative and qualitative workload decreased, and job control increased. Work process knowledge improved and mental well-being increased during the intervention. The results of the interventions seem to be promising on all levels.</p> <p>The outcomes at the level of learning were evaluated by measuring the conceptual mastery of work — a method to study work process knowledge. The method aims to measure knowledge of the permanent or potential characteristics of the target system stored in the long-term memory. Questionnaires were used to get an indication of the participants' work characteristics and well-being. The results showed that significant changes were realised after the intervention. The participants were more satisfied with their job, they had more mental resources, and they suffered from fewer psychological symptoms.</p>

Country	Name of the project	Assessment of impact
Finland	Good practice in preventing stress and burnout in the hotel and restaurant sector	The aim of the intervention study was to study supervisors' burnout and stress, and to evaluate the feasibility of prevention groups in the catering and restaurant business. The intervention measures were expected to improve the managers' ability to cope with stress, and to increase group cohesion. The results showed that the supervisors' discussion groups are feasible and well suited to preventing supervisors' stress in the hotel and restaurant sector. The supervisors felt that they got support from each other. They had an opportunity to see that they were not alone in having problems in a changing situation. The positive effects of supportive discussion groups were seen in levels of satisfaction with the organisation and the social effectiveness of work teams. Overall, the discussion groups seem to be an effective method for preventing and tackling stress and burnout in the hotel and restaurant sector.
Sweden	Kroger mot Knark — Clubs against drugs	There are 33 clubs working jointly to provide a drug-free, safer workplace for employees. The restaurants have developed a policy that outlines how to handle drug-users (both guests and co-workers) and how to intervene in such a situation etc. The project also provides guidance and training e.g. on the issue of how a doorman can recognise drug-users and how to work with them and how to design a safe club. Drug use has decreased in the participating clubs and this has had a positive impact on the health and safety of club workers. Various subprojects are evaluated continuously; evaluation is being carried out in co-operation with the Department of Public Health Sciences at the Karolinska Institute.
UK	Fast-food restaurant owners ponder options	A local authority environmental health officer (EHO) visited a fast-food restaurant to investigate a slip which broke the arm of a female employee. The nature of the business meant that the floor in the busy servery area was bound to become wet at some stage. When the EHO spoke to members of staff they stated that the incident "had been waiting to happen". The owners decided that the best option was, as the EHO had originally suggested, to tackle the problem in the work environment. The relatively small cost of reflooring (extended by the company to areas beyond the high-risk servery) led to the conclusion that it would probably have been cheaper in staff and administration time to have pursued this option at a much earlier stage. A subsequent review showed that the slip accident rate had reduced by 70 % since the replacement of the floor covering and that staff on site were much happier with the conditions.
UK	University kitchen case study	Workers in the kitchens perform many tasks which pose a risk of musculoskeletal discomfort to the employees. Aches and pains experienced by employees were not reported due to employees not being aware that their discomfort may have been related to work. Employees often thought that their discomfort was related to their age, making comments such as 'when you get to my stage in life you have to expect the odd twinge or ache'. The intervention seems to have been successful.

5.5.3. Matrix of the cases

Country	Name of the study	Sector					Method				Evaluation			Target group			Initiators			Level of action			Scope							
		Hotel	Restaurant	Clubs and bars	Catering	Canteen	Hotel and restaurant	Interviews	Analysis and assessment	Intervention study	Partnership	Randomised controlled study	Questionnaire evaluation	Feedback from different actors	Workers	Managers	Clients	Enterprise	Prevention services	All actors in the sector	Local	National	Enterprise	Well-being and better working conditions	Prevent stress	Training	Prevent accident	Ergonomic	Healthier workplace	Better risk assessment
Germany	Wet work						X				N/A			X				X		X										X
Estonia	Safety in two clubs			X				X																						X
Greece	Risk assessment in hotel sector in Athens												X	X														X		
Spain	Substitution of beds													X												X				
France	Partnership in the Horeca sector									X																	X			
France	Risk prevention for hotel housekeepers																													X

Country	Name of the study	Sector						Method			Evaluation			Target group			Initiators			Level of action			Scope								
		Hotel	Restaurant	Clubs and bars	Catering	Canteen	Hotel and restaurant	Interviews	Analysis and assessment	Intervention study	Partnership	Randomised controlled study	Questionnaire evaluation	Feedback from different actors	Workers	Managers	Clients	Enterprise	Prevention services	All actors in the sector	Local	National	Enterprise	Well-being and better working conditions	Prevent stress	Training	Prevent accident	Ergonomic	Healthier workplace	Better risk assessment	Target a specific risk
Italy	Guidelines for operators	X						X				N/A	N/A	N/A	X				X	X						X					
Italy	Safety enhancement in swimming pool chlorination systems	X						X					X			X				X						X					
Italy	Training project for personnel in the hotel industry	X						X				N/A	N/A	N/A	X										X						
Netherlands	Werkdruk																							X							X

Country	Name of the study	Sector					Method			Evaluation			Target group			Initiators			Level of action			Scope													
		Hotel	Restaurant	Clubs and bars	Catering	Canteen	Hotel and restaurant	Interviews	Analysis and assessment	Intervention study	Partnership	Randomised controlled study	Questionnaire evaluation	Feedback from different actors	Workers	Managers	Clients	Enterprise	Prevention services	All actors in the sector	Local	National	Enterprise	Well-being and better working conditions	Prevent stress	Training	Prevent accident	Ergonomic	Healthier workplace	Better risk assessment	Target a specific risk				
Netherlands	Contract catering				X					X	N/A	N/A	N/A			X			X				X	X					X						
Slovenia	Terme Radenci	X							X																				X						
Finland	Participatory ergonomic intervention in workplace		X						X		X								X						X										
Finland	Facilitating well-being at work in restaurants											X							X				X	X											
Finland	Good practice to prevent stress and burnout in the hotel and restaurant sector												X																						

Country	Name of the study	Sector						Method				Evaluation			Target group			Initiators			Level of action			Scope							
		Hotel	Restaurant	Clubs and bars	Catering	Canteen	Hotel and restaurant	Interviews	Analysis and assessment	Intervention study	Partnership	Randomised controlled study	Questionnaire evaluation	Feedback from different actors	Workers	Managers	Clients	Enterprise	Prevention services	All actors in the sector	Local	National	Enterprise	Well-being and better working conditions	Prevent stress	Training	Prevent accident	Ergonomic	Healthier workplace	Better risk assessment	Target a specific risk
Sweden	Clubs against drugs			X								X	X	X	X	X	X			X			X	X							X
United Kingdom	Fast-food restaurant owners ponder options		X																												X
United Kingdom	University kitchen case study																														X