



In order to encourage improvements, especially in the working environment, as regards the protection of the health and safety of workers as provided for in the Treaty and successive action programmes concerning health and safety at the workplace, the aim of the Agency shall be to provide the Community bodies, the Member States and those involved in the field with the technical, scientific and economic information of use in the field of health and safety at work.

European Agency for Safety and Health at Work <http://osha.eu.int>



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The State of Occupational Safety and Health (OSH) in the EFTA Countries

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European Agency for Safety and Health at Work



M O N I T O R I N G

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European Agency
for Safety and Health
at Work



The State of
Occupational Safety
and Health (OSH)
in the EFTA Countries



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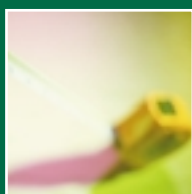
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M O N I T O R I N G



FOREWORD
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FOREWORD

The European Agency's aim, as set out in the founding regulation, is 'to provide the Community bodies, the Member States and those involved in the field with the technical, scientific and economic information of use in the field of safety and health at work, in order to encourage improvements, especially in the working environment, as regards the protection of safety and health of workers as provided for in the Treaty and successive action programmes concerning health and safety at workplace.'

To pursue the goal of making a contribution towards the development of a monitoring system for safety and health at work in the European Union (EU), the European Agency decided to undertake a comprehensive assessment of the state of occupational safety and health at work throughout EU-Member States. The 'State of Occupational Safety and Health in the EU-Pilot Study' Report¹ identifies for physical exposures, postures and movement exposures, handling chemicals, psychosocial working conditions and OSH outcomes for example sectors/ occupations most at risk. The Focal Points and their national networks also provided information on trends and needs for the development of additional preventive actions for these indicators. A summary report presents a condensed overview of both the major findings and of information contained in the main report.

In the countries of the European Free Trade Association (EFTA) Iceland, Liechtenstein, Norway and Switzerland a similar information project was carried out to complete the European picture on the state of occupational safety and health at work. This report shows the findings in the EFTA Countries.

The European Agency for Safety and Health at Work wishes to thank the EFTA Focal Points for their comprehensive work, COWI consultants and all other individuals involved in this information project.

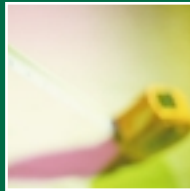
Bilbao, March 2001

European Agency for Safety and Health at Work

¹ Full report in English available under http://agency.osha.eu.int/publications/reports/stateofosh/full_report.pdf; Summary report (64 pages) under http://agency.osha.eu.int/publications/reports/stateofosh/summary_report.pdf (English) or http://agency.osha.eu.int/publications/reports/stateofosh/summary_report_de.pdf (German) or http://agency.osha.eu.int/publications/reports/stateofosh/summary_report_fr.pdf (French)

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INTRODUCTION

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- 1.2 METHODOLOGY
- 1.3 PROCEDURE AND DATA SOURCES
- 1.4 AVAILABILITY OF DATA
- 1.5 OVERVIEW ON THE WORKING POPULATION
IN THE EFTA COUNTRIES

1.1

PURPOSE OF THE PROJECT

The EFTA Countries decided to carry out a similar project as the EU Member States to collect information on the state of occupational safety and health. This report presents the findings and is supplementary to the European Agency report 'The State of Occupational Safety and Health in the European Union-Pilot Study'. It completes the European picture.

1.2

METHODOLOGY

The preparation of the report is based on the national reports received from the four EFTA Countries.

The EFTA Countries used the same manual for their data collection as the EU Member States which included the following indicators:

- Physical exposures: noise, vibration, high temperature, low temperature;
- Posture and movement exposures: lifting/ moving heavy loads, repetitive movements, strenuous working postures;
- Chemical exposures: handling chemicals, carcinogenic substances, neurotoxic substances, reproductive hazards;
- Exposures to biological factors; and
- Psycho-social working conditions: high speed work, workplace dictated by social demand, machine dictated workplace, physical violence, bullying and victimisation, sexual harassment, monotonous work.

For most of the above indicators the following data gathering procedure applied:

1. A question was presented asking for national data. In most cases the question stemmed from the Second European Survey on Working Conditions (2nd ESWC, European Foundation for the Improvement of Living and Working Conditions, Dublin, 1996). In this step existing national quantitative data from e.g. national surveys with larger sample sizes or specific studies were asked to be presented. These data had to be based on a similar question as used in the 2nd ESWC.
2. If additional national data was presented, it was asked to compare the national data with the existing European data by means of two key questions such as 'Are there differences between the national data and the data from the European source?' and 'Does the additional national information highlight sectors or occupations that are not evident from EU-data?'. In addition, other comments should be given. The objective was to see whether the European data reflects the state of occupational safety and health in an appropriate way.

Step 1 and 2 was not carried out by the EFTA Countries because of missing European data (no participation in the European survey on working conditions) as well as national information gaps.

3. The EFTA Countries were then requested to determine which 5 sectors and 5 occupations are at highest risk to the exposure indicator. They should also state in the tables the qualitative considerations, which they have taken into account to do this selection. As a basis for the selections quantitative information and relevant qualitative considerations, such as expert opinions, inspection reports, national priorities, research studies, emission data, etc. could be used.
4. The EFTA Countries were asked for an opinion about the trends on the numbers of workers exposed over the last 3-5 years. Further, they indicated if there were any particular risk categories in sectors, occupations, company size, gender, age or employment status that are expected to deviate from this development.
5. Finally, the EFTA Countries were requested to give an evaluation of the present state regarding the exposure indicator. In case they marked 'Development of additional preventive action is necessary', they should elaborate this action.

Regarding the chemical agents (carcinogens, neurotoxic substances, reproductive hazards and biological agents) questions had to be formulated in a somewhat different way because no existing European data was available. The EFTA Countries chose in a first step a maximum of 5 carcinogens, neurotoxic substances, reproductive hazards and biological agents that were considered to be the most important risks for the working population in their country. Of the (maximum) 5 substances chosen in a second step they were asked to present national data on sectors and number of exposed persons. Further, they should present their opinion on trends regarding the number of exposed workers over the last 3-5 years using the categories '*decreased, remained stable or increased*' and an evaluation of the present state.

In addition to the specific exposure indicators above, a number of questions were formulated with respect to the context of work such as:

- telework (estimation of people doing telework, particular points regarding safety and health);
- particular concerns regarding working conditions of people with fixed termed contracts, temporary employment agency contracts, being on apprenticeship or another training scheme or self-employed;
- use of personal protective equipment;
- provision of information about risks at work; and
- factual training provided by the employer.

These issues influence to a substantial extent the actual risks at work.

Occupational safety and health outcomes such as accidents with more than 3-days absence, fatal accidents, musculoskeletal disorders, stress related health problems were chosen. The same step-wise procedure as followed for the exposure indicators was used for most occupational safety and health outcomes.

To describe the preventive capacity of their occupational safety and health systems, the EFTA Countries were asked to present:

- by means of an organogram, an overview of the way the national system is organised;
- the number of Labour Inspectors occupied with occupational safety and health in the country;
- the percentage of workers that are covered by preventive occupational safety and health services; and
- the numbers of workers that received occupational safety and health training per year.

The data collection was based as much as possible on existing national data.

1.3

PROCEDURE AND DATA SOURCES

The national information was collected by the following institutions:

- *Iceland*: The Administration of Occupational Safety and Health of Iceland ('Vinnueftirlit ríkisins', <http://www.ver.is/>).
- *Liechtenstein*: The Office of National Economy, who in co-operation with the State Physician ('Landesphysikat'), is responsible for the implementation of the legal provisions on the safety and health protection of employees at work (http://www.firstlink.li/regierung/amt_volksw.htm).
- *Norway*: The Directorate of Labour Inspection (http://odin.dep.no/krd/engelsk/dep/om_dep/).
- *Switzerland*: The Swiss Federal Secretariat for Economic Affairs (seco), Directorate for Labour, Section for Working Conditions (<http://www.seco.admin.ch>).

1.3.1 Data sources

In *Iceland* the greater part of the data presented in the report originate from the Administration of Occupational Safety and Health. This institution has carried out a thorough review of occupational safety and health information sources in Iceland and of data available. The work has shown that relatively little occupational safety and health research has been done in Iceland until now and that considerable information gaps exist. They stressed that although a significant amount of statistical data existed much of the information provided is anecdotal and in some important areas there was no information.

The Social Partner were not directly involved in drafting the national report. But they are represented in the Board of the Administration of Occupational Safety and Health: three representative from the organisation of employees and four from the Labour organisation.

In *Liechtenstein* the Office of National Economy consulted experts of different Swiss institutions, amongst others:

- Swiss Accident Insurance Establishment (SUVA)
- Swiss Federal Secretariat for Economic Affairs (seco), Directorate for Labour
- Swiss Labour Inspectorate
- Swiss Welding Association
- Swiss Association for Technical Inspections
- Swiss Electrotechnical Association
- Swiss Gas and Water Industry Association.

Concerning physical, posture and movements, chemicals and biological exposures and psycho-social working conditions no interrogations of companies' employees existed. Therefore, the tables for the questions (ESWC) and the comparison of EU-data and national data could not be established as no data were available.

The evaluation of risk categories, trends and present state regarding the physical exposures, posture and movements exposures, chemicals exposures, exposures to biological factors and the psycho-social working conditions are based on the over 30 years of experience of the responsible officer and on the statistics of undertakings of 1995. Companies of industry, craft and trade are evaluated regularly as regards safety and health protection. The national report was discussed with the Social Partners.

In *Norway* the Directorate of Labour Inspection who has co-ordinated the Norwegian response established a reference group. The following institutions were participants of the Norwegian reference group:

- Norwegian Confederation of Trade Unions (LO)
- SINTEF Institute of Social Research in Industry (SINTEF-IFIM)
- Statistics Norway (SSB)
- The Confederation of Norwegian Business and Industry (NHO)
- The Directorate of Labour Inspection (DAT)
- The Institute for Applied Social Science (FAFO)
- The National Institute of Occupational Health (STAMI)
- The National Insurance Authority (RTV)
- The University Hospital of Trondheim (RiT)
- The Work Research Institute (WRI).

The Directorate of Labour Inspection has drawn extensively on the opinions of its experts. The Labour Inspection's databases have been utilised actively in the Norwegian response. These databases are the occupational injury database and the work-related disease database.

As for the other EFTA Countries Norway has not participated in the survey of the European Foundation for the Improvement of Living and Working Conditions. However, in Norway a national survey has been carried out with some comparable questions, whereof several are modelled on the European Foundation's survey. This 'Survey of Level of Living' is carried out by Statistics Norway. This survey alternates questions every few years, and the Directorate of Labour Inspection used survey results from both 1996 and 1997 as data source.

In *Switzerland* there is very reliable and detailed information collated by the insurance companies on occupational accidents and occupational diseases, however, little data is available for other occupational health risks. Where information has been available, they have been included in the national report but for many of the risks, only the consensus of a small group of experts could be included. Switzerland has no generally established method for obtaining an objective overview of occupational risks, again with the exception of those risks which fall under the accident insurance law, and therefore the priorities for prevention and for research are generally not decided according to objective methods.

The national report includes data gathered from the Accident Statistics provided by the Swiss Accident Insurance Establishment (SUVA). SUVA was consulted at the commencement of this project, as it publishes annual statistics summarising the insurance claims made to all of the Swiss workers compensation insurers and is actively involved in prevention of occupational disorders. The data on work-related accidents (more than 3-days absence and fatal accidents) and occupational diseases including the breakdown into sectors was supplied courtesy of Dr. Peter Rüdin, assistant to the SUVA management.

Under the 'Accident Insurance Law' an illness may be accepted as an occupational disease only if it is exclusively or very predominantly caused by the work. Very predominantly is defined by SUVA as more than 75% caused by work. Diseases possibly or partially caused by work conditions or activities are excluded from compensation, and are therefore not included in the data. The accident data does not include commuting accidents or road traffic accidents during work hours.

No further data, appropriate to this project, could be provided by the SUVA as it does not collect data on the frequency of work-place hazards.

The Swiss report furthermore included data from the Swiss National Health Survey, 1997 (SNH Survey). This study was conducted over the whole of Switzerland on a randomly chosen sample of 19 000 private households with telephone connections. Telephone interviews were conducted for persons between the ages of 15 and 74 years by an institute for marketing and social research on behalf of the Swiss Federal Bureau of Statistics. It was conducted in four waves during all four seasons of the year between January and December of 1997. In total 13 000 persons were interviewed (7 200 women and 5 800 men). The participation quota was 69%. The analysis of the data was not complete when carrying out the national report, however from the preliminary analysis only the classification variables sex and age are appropriate to this study. Although the participants were asked whether they were currently employed no separate analysis incorporating only employed persons has yet been attempted. No sub-classification according to sector, occupation, company size or employment type is possible, as this information was not considered in the study. Some questions regarding nuisances at work were included and, where appropriate, these have been incorporated.

The last study included by the Switzerland was the Federal Department of Economics and Labour Survey 1998 on the Costs of Stress (BWA Study). This study was conducted for the Swiss Federal Secretariat for Economic Affairs (seco) Section Work Conditions in order to estimate the costs of work-related stress and to elucidate where these costs are falling. The first part of the study involved the telephone interviews of 906 currently employed persons (at least 20 hours per week) randomly chosen from the list of private households with telephone connections in all but one of the Swiss cantons (the Italian speaking Tessin was excluded for practical reasons). The acceptance quota was a 62%: 637 male and 269 females participated. Although the analysis of the study was not finalised, when the national report was carried out, some results were available. The preliminary analysis sought to identify where statistically significant differences between sub-groups (age, sex, etc) could be found. A detailed analysis is still under way but where significant differences were found these have been reported. The analyses for occupation were not available, when preparing the national report.

Also the Swiss Focal Point based their data on expert opinions. The expert opinions cited in the report generally represent a consensus decision made by the following persons:

For physical and chemical hazards

- Dr. Markus Hangartner, Institute of Hygiene and Applied Physiology, ETH, Zürich
- Dr. Philippe Hotz, Institute of Social and Preventive Medicine, Univ. of Zürich
- Dr. Ruedi Knutti, seco-Directorate of Labour. Section Work and Health, Zürich
- Dr. Jean-Pierre Matthieu, Federal Labour Inspectorate, Aarau
- Prof. Christian Schlatter, Institute for Toxicology, ETH/University of Zürich

For ergonomic and organisational hazards

- Mr. Louis Arani, Federal Labour Inspectorate, Zürich
- Dr. Elisabeth Conne-Perréard, Cantonal Office of Industry and Labour, Geneva
- Ms. Margaret Graf, seco- Directorate of Labour. Section Work and Health, Zürich
- Dr. Andreas Hartmann, Human Resources Management Systems AG, Winterthur
- Dr. Alain Kiener, seco- Directorate of Labour. Section Work and Health, Bern
- Dr. Martin Rimann, Institute of Work Psychology, ETH, Zürich

The Swiss Focal Point stressed that the expert decisions must be interpreted with some caution as only a few of the experts have broad experience over a large range of occupations, geopolitical areas and hazard types. It is possible that in some cases the expert view is based on scientific studies, which were not conducted in Switzerland and may not be applicable. When evaluating hazards the sectors were evaluated according to a subjective evaluation of the total hazard potential (defined: number of exposed persons x exposure x probability that damage will occur). Sectors with a high risk (exposure x probability of damage) are therefore given less weighting if relatively few persons are exposed. Regarding company size, gender and age group, unless otherwise stated, the categories were mentioned if more persons in a particular group were at risk. That is, the higher risk does not generally imply any special sensitivity of the members of the group.

The Swiss Focal Point additionally invited the following institutions to comment on the draft report and, where appropriate, the comments were included in the final national report:

- Prof. Krueger, Institute of Hygiene and Work Physiology, Zürich
- Prof. Guillemin, Institute of Occupational Health Sciences, Lausanne
- Swiss Foundation for the Promotion of Health, Lausanne
- Swiss National Accident Insurance Establishment (SUVA), Luzern

The following employer and employee unions and associations were invited to comment on the national report:

- Christian National Workers' Union (Christlichnationaler Gewerkschaftsbund)

- Federation of Swiss Employee Societies (Vereinigung schweizerischer Angestelltenverbände)
- Swiss Employers Union (Schweizerischer Arbeitgeberverband)
- Swiss Workers Union (Schweizerischer Gewerkschaftsbund)

All of the Social Partners expressed support for the project but no additional data on occupational hazards was available from them. None of the Social Partners expressed any dissent over the evaluations of the hazards contained in the report.

1.4

AVAILABILITY OF DATA

The table below indicates where the national reports contained national data and where there was a short fall for the risk categories.

Exposures/OSH outcomes	Sectors	Occupations
Noise	●	●
Vibration	●	●
High temperature	●	●
Low temperature	●	●
Lifting/moving heavy loads	●	●
Repetitive movements	●	●
Strenuous working postures	●	●
Handling chemicals	●	■
High speed work	●	●
Workpace dictated by social demand	●	●
Machine dictated workplace	●	●
Physical violence	●	●
Bullying and victimisation	●	●
Sexual harassment	●	●
Monotonous work	●	●
Use of personal protective equipment	■	●
Accidents with more than three days absence	●	■
Fatal accidents	●	□
Occupational diseases	■	■
Musculoskeletal disorders	■	■
Stress	□	□
Occupational sickness absence	□	□

- All EFTA Focal Points provided data
- 3 EFTA Focal Points provided data
- Less than 3 EFTA Focal Points provided data

Exposures/OSH outcomes	Company size	Gender	Age	Employment status
Noise	■	●	■	■
Vibration	■	●	■	□
High temperature	■	●	●	■
Low temperature	●	■	■	■
Lifting/moving heavy loads	■	■	□	□
Repetitive movements	■	●	□	□
Strenuous working postures	□	□	□	□
Handling chemicals	●	●	■	■
High speed work	●	□	●	●
Workpace dictated by social demand	●	●	□	●
Machine dictated workplace	●	●	●	●
Physical violence	●	□	□	●
Bullying and victimisation	□	□	□	□
Sexual harassment	□	●	■	●
Monotonous work	□	●	□	●
Accidents with more than three days absence	■	●	●	□
Fatal accidents	●	●	□	□
Occupational diseases	□	●	□	□
Musculoskeletal disorders	□	●	□	●
Stress	□	□	□	□
Occupational sickness absence	□	●	□	●

● All EFTA Focal Points provided data

■ 3 EFTA Focal Points provided data

□ Less than 3 EFTA Focal Points provided data

1.5

OVERVIEW ON THE WORKING POPULATION IN THE EFTA COUNTRIES

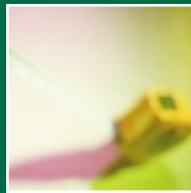
Sector code	Sector description	Total number employed (x1000)				
		EU	Liechtenstein	Switzerland	Iceland	Norway
A - B	Agriculture, hunting, forestry and fishing	7.099 (4.7) ¹	0.3 (1.8)	39 (4.6)	20 (14.1)	104 (4.7)
C - D	Mining, quarrying and manufacturing	21.146 (21.1)	5 (28.0)	640 (20.0)	17 (11.9)	356 (16.2)
E	Electricity, gas and water supply	1.252 (0.8)	0.2 (1.0)	163 (5.1)	1 (0.8)	21 (1.0)
F	Construction	11.719 (7.7)	1 (8.7)	250 (7.8)	10 (7.1)	136 (6.2)
G	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	22.624 (14.8)	2 (11.1)	384 (12.0)	20 (14.2)	333 (15.2)
H	Hotels and restaurants	5.964 (3.9)	0.7 (4.1)	141 (4.4)	4 (2.9)	66 (3.0)
I	Transport, storage and communications	9.061 (5.9)	0.5 (3.2)	187 (5.8)	10 (6.9)	164 (7.5)
J	Financial intermediation	5.197 (3.4)	1 (8.0)		4 (3.0)	
K	Real estate, renting and business activities	12.006 (7.9)	2 (13.7)	249 (7.8)	9 (6.3)	215 (9.8)
L	Public administration and defence; compulsory social security	11.549 (7.6)	1 (6.9)	386 (12.1)	6 (4.2)	150 (6.8)
M - Q	Other services	33.413 (21.9)	2 (13.7)	761 (23.8)		644 (29.4)
	Unknown	466 (0.3)	0.1 (0.6)	—	41 (28.5)	3 (0.1)
	TOTALS	152.494	16	3.200	142	2.192

Looking on the percentage of employed within the different sectors in EU and each of the EFTA Countries, the major differences are found within these sectors:

- A-B: Iceland differs from the general picture employing a relatively large portion of the Icelandic working population (14%) within these sectors. Fishing and the fish industry solely counts for 10%.
- E: Switzerland differs from the general picture employing approximately five times more within this sector than the other countries. However, also in Switzerland the sector is relatively small employing 5% of the Swiss working population.
- J-K: Liechtenstein differs from the general picture employing approximately twice as many within these sectors than the other countries. The financial sectors are relatively large in Liechtenstein employing 22% of the working population.
- L: Public administration is a relatively large sector in Switzerland (12%) and a relatively small sector in Iceland (4%).

¹ In brackets: percentage of employed.

2.



MAJOR FINDINGS

- 2.1 SUMMARY FINDINGS FOR EACH EXPOSURE INDICATOR AND OSH OUTCOME
- 2.2 THE NEED FOR THE DEVELOPMENT OF ADDITIONAL PREVENTIVE ACTIONS
- 2.3 RISK CATEGORY - SECTOR

MAJOR FINDINGS

This section summarises the major findings on the State of Occupational Safety and Health in the EFTA Countries. Subsequent chapters provide further details of the specific questions presented to the EFTA Focal Points together with their responses. No summarised descriptions are given with regard to the issues telework, employment status, information about risks at work, training and preventive capacity of the OSH system in the EFTA Countries. Details regarding these issues are presented in the individual chapters of the report.

2.1

SUMMARY FINDINGS FOR EACH EXPOSURE INDICATOR AND OSH OUTCOME

For each exposure indicator and OSH outcome assessed, summary details are presented in this section, which are based on the findings of the information collated from all of the national reports. The information summarised includes:

- description of potential health effects caused by the exposure indicator;
- an EFTA picture;
- sector categories most at risk as reported in the national reports and the number of EFTA Focal Point responses;
- occupation categories most at risk as reported in the national reports and number of EFTA Focal Point responses;
- information on the other risk categories company size, gender, age, employment status;
- trends;
- EFTA Focal Points identifying the need for additional preventive actions; and
- description of indicated action.

The purpose of the summary pages is to present an overview of the exposure indicators/OSH outcomes with reference to common issues raised from all four national reports.

Exposure indicator: noise

Potential health effects	Noise induced hearing loss, tinnitus (permanent ringing can be heard in the ears), threshold shift (initially temporary but becoming permanent with prolonged exposure), loss of high frequency sounds resulting in communication problems, loss of interaction at social functions. Noise exposure can also have secondary effects such as stress and interference with communication in the workplace causing accidents.
Picture in the EFTA Countries	Norway: 13% exposed to noise (3% almost all the time) [Survey of Level of Living, 1997] Switzerland: 6.1% regularly exposed to noise [SNH Survey, 1997] Iceland and Liechtenstein: no national data.
Sector categories most at risk from the national reports using NACE code² Figures in brackets represent the number of responses	45 Construction (4); 15 Manufacture of food products and beverages (4); 20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials (3); 27 Manufacture of basic metals (2).
Occupation categories most at risk from the national reports using ISCO code³ Figures in brackets represent the number of responses	72 Metal, machinery and related trades workers (4); 93 Labourers in mining, construction, manufacturing and transport (4); 71 Extraction and building trades workers (3); 01 Armed forces (2); 82 Machine operators and assemblers (2).
Other risk categories	<u>Company size</u> : Two EFTA Countries reported small and medium companies most at risk, whereas one country indicated only small companies. <u>Gender</u> : All four EFTA Countries indicated that men are most at risk to exposure to noise. <u>Age</u> : Three EFTA Countries indicated the age group 25-54 as most at risk to exposure to noise. <u>Employment status</u> : Two EFTA Countries stated permanent employment. One reported full-time employment.
Trends	Three EFTA Countries indicated a decreased number of workers exposed to noise, whereas one country reported a stable trend
EFTA Countries identifying the need for additional preventive action	Iceland, Liechtenstein, Norway and Switzerland.
Description of indicated action⁴	• Employers and employees need to be informed on the hazard of noise exposure; also on their responsibility in reducing the noise level at the workplace. • Examination of workplaces in respect of harmful noise. Giving orders for hearing tests and technical noise protection measures. Motivation of employees to wear hearing protection equipment. • Better enforcement and greater need for efforts to influence the attitudes of employers and employees. • The nuisance value of noise at the workplace and its role in stress-related disorders needs to be more addressed than it has been. Preventive measures in small enterprises need to be improved.

² The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

³ The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

⁴ The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

Exposure indicator: vibration

Potential health effects	Sympathetic vibration of organs at low frequencies leads to nausea. Whole body vibration leading to low back pain and spinal damage. Hand-arm vibration syndrome affecting blood circulation, nerves muscles and bones in the hands and arms leading to loss of sensation and grip and severe pain in the hands. This includes such conditions as vibration white finger. Psychological effects include loss of concentration, which can cause secondary accidents.
Picture in the EFTA Countries	Norway: 10% exposed to vibration (2% almost all the time) [Survey of Level of Living, 1997] Iceland, Liechtenstein and Switzerland: no national data.
Sector categories most at risk from the national reports using NACE code⁵ Figures in brackets represent the number of responses	45 Construction (4); 01 Agriculture, hunting and related service activities (3); 02 Forestry, logging and related service activities (3); 60 Land transport; transport via pipelines (3); 50 Sale, maintenance and repair of motor vehicle and motorcycles; retail sale of automotive fuel (2).
Occupation categories most at risk from the national reports using ISCO code⁶ Figures in brackets represent the number of responses	83 Drivers and mobile plant operators (4); 93 Labourers in mining, construction, manufacturing and transport (3); 82 Machine operators and assemblers (3); 61 Skilled agricultural and fishery workers (2); 81 Stationary-plant and related operators (2).
Other risk categories	<u>Company size</u> : Two EFTA Countries reported small companies most at risk, whereas one country indicated small and medium companies. <u>Gender</u> : All four EFTA Countries indicated that men are most at risk to exposure to vibration. <u>Age</u> : Three EFTA Countries indicated the age group 25-54 as most at risk to exposure to vibration. <u>Employment status</u> : One EFTA Country stated permanent employment, another one full-time employment.
Trends	Two EFTA Countries indicated a decreased number of workers exposed to vibration, and two countries reported a stable trend.
EFTA Countries identifying the need for additional preventive action	Iceland indicated that preventive actions taken were sufficient. Liechtenstein, Norway and Switzerland indicated a need for additional preventive action.
Description of indicated action ⁷	• Registration of vibrations at workplaces. Giving orders for technical and organisational measures at workplaces. • There is a need for norms and information. • Additional data is required to assess reliably the seriousness of the problem.

⁵ The most frequently identified sectors which the EFTA Focal Points considered to be most at risk.

⁶ The most frequently identified occupations which the EFTA Focal Points considered to be most at risk.

⁷ The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

Exposure indicator: high temperature

Potential health effects	Body reactions to overheating are increased pulse rate, muscle cramps due to insufficient salt followed by exhaustion, dehydration and loss of mental awareness; fainting and dizziness and most seriously heat stroke.
Picture in the EFTA Countries	Norway: 8% exposed to high temperature (2% almost all the time) [Survey of Level of Living, 1997] Iceland, Liechtenstein and Switzerland: no national data.
Sector categories most at risk from the national reports using NACE code⁸ Figures in brackets represent the number of responses	27 Manufacture of basic metals (3); 55 Hotels and restaurants (3); 28 Manufacture of fabricated metal products, except machinery and equipment (2); 60 Land transport; transport via pipelines (2).
Occupation categories most at risk from the national reports using ISCO code⁹ Figures in brackets represent the number of responses	72 Metal, machinery and related trades workers (3); 74 Other craft and related trades workers (3); 83 Drivers and mobile plant operators (3); 91 Sales and services elementary occupations (2).
Other risk categories	<u>Company size</u> : One EFTA Country reported medium sized companies most at risk, one country reported small and medium sized companies and one country indicated small companies. <u>Gender</u> : Three EFTA Countries indicated that men are most at risk to exposure to high temperature and one country indicated that women were most at risk. <u>Age</u> : Two EFTA Countries indicated the age group 25-54 as most at risk to exposure to high temperature, and one country indicated the age group >55 years. <u>Employment status</u> : Two EFTA Countries described permanent employment as a status at risk whereas one reported full-time employment.
Trends	One EFTA Country indicated a decreased number of workers exposed to high temperature and three countries reported a stable trend
EFTA Countries identifying the need for additional preventive action	Iceland, Norway and Switzerland indicated that preventive actions taken were sufficient. Liechtenstein indicated a need for additional preventive action.
Description of indicated action¹⁰	Improvement of climatic conditions in working rooms by installation of room ventilation.

⁸ The most frequently identified sectors which the EFTA Focal Points considered to be most at risk.

⁹ The most frequently identified occupations which the EFTA Focal Points considered to be most at risk.

¹⁰ The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

Exposure indicator: low temperature

Potential health effects	Exposure to extreme cold can lead to frostbite and hypothermia. Frostbite causes pins and needles followed by complete numbness in the affected areas. If blood vessels are affected, gangrene can occur. Hypothermia causes drowsiness, lowers breathing and heart rates and can lead to unconsciousness.
Picture in the EFTA Countries	Norway: 38% exposed to low temperatures (2% almost all the time) [Survey of Level of Living, 1997] Iceland, Liechtenstein and Switzerland: no national data.
Sector categories most at risk from the national reports using NACE code¹¹ Figures in brackets represent the number of responses	45 Construction (3); 02 Forestry, logging and related service activities (3); 05 Manufacture of fabricated metal products, except machinery and equipment (2); 15 Manufacture of food products and beverages (2).
Occupation categories most at risk from the national reports using ISCO code¹² Figures in brackets represent the number of responses	93 Labourers in mining, construction, manufacturing and transport (3); 61 Skilled agricultural and fishery workers (2); 71 Extraction and building trades workers (2); 74 Other craft and related trades workers (2); 82 Machine operators and assemblers (2); 92 Agricultural, fishery and related labourers (2).
Other risk categories	<u>Company size</u> : Three EFTA Countries reported small companies most at risk and one country reported small and medium sized companies. <u>Gender</u> : Three EFTA Countries indicated that men are most at risk to exposure to low temperature and one country indicated that women were most at risk. <u>Age</u> : One EFTA Country indicated the age group 25-54 as most at risk to exposure to low temperature and two countries indicated the age group >55 years. <u>Employment status</u> : Two EFTA Countries reported permanent employment. One stated full-time employment.
Trends	Two EFTA Countries indicated a decreased number of workers exposed to low temperature, one country indicated a stable trend and another one an increased trend
EFTA Countries identifying the need for additional preventive action	Iceland, Norway and Switzerland indicated that preventive actions taken were sufficient. Liechtenstein indicated a need for additional preventive action.
Description of indicated action ¹³	No actions established yet.

¹¹ The most frequently identified sectors which the EFTA Focal Points considered to be most at risk.

¹² The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

¹³ The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

Exposure indicator: lifting/moving heavy loads

Potential health effects	Lifting/moving heavy loads can result in musculoskeletal disorders, in particular damage to the muscles and ligaments of the back, arms and hands.
Picture in the EFTA Countries	Iceland: 75% of supermarket workers exposed to lifting/moving heavy loads (44% almost all the time) [questionnaire survey] Norway: 70% exposed to lifting/moving heavy loads (7% at least 20 times per day) [Survey of Level of Living, 1997] Liechtenstein and Switzerland: no national data.
Sector categories most at risk from the national reports using NACE code¹⁴ Figures in brackets represent the number of responses	45 Construction (4); 01 Agriculture, hunting and related service activities (4); 60 Land transport; transport via pipelines (4); 85 Health and social work (2); 52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods (2).
Occupation categories most at risk from the national reports using ISCO code¹⁵ Figures in brackets represent the number of responses	71 Extraction and building trades workers (4); 92 Agricultural, fishery and related labourers (3); 93 Labourers in mining, construction, manufacturing and transport (3); 32 Life science and health associate professionals (2); 61 Skilled agricultural and fishery workers (2); 91 Sales and services elementary occupations (2).
Other risk categories	<u>Company size</u> : Two EFTA Countries reported small and medium sized companies most at risk and one country reported small companies. <u>Gender</u> : Two EFTA Countries indicated that men are most at risk to exposure to lifting/moving heavy loads and one country indicated that women were most at risk. <u>Age</u> : One EFTA Country indicated that elder workers seemed to be most at risk to exposure to lifting/moving heavy loads. <u>Employment status</u> : One EFTA Country reported full-time employment and another stated permanent employment.
Trends	All four EFTA Countries indicated a stable trend in the exposure to lifting/moving heavy loads at work.
EFTA Countries identifying the need for additional preventive action	Iceland indicated that preventive actions taken were sufficient. Liechtenstein, Norway and Switzerland indicated a need for additional preventive action.
Description of indicated action ¹⁶	• Changes in working method. Use of aids and jacks. • More technical aids, more training, increased staffing and better organisation of the work. • Attention is currently being focussed on the manual handling tasks of checkout cashiers.

¹⁴ The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

¹⁵ The most frequently identified occupations which the EFTA Focal Points considered to be most at risk.

¹⁶ The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

Exposure indicator: repetitive movements

Potential health effects	Repetitive arm movements can lead to work-related upper limb disorders such as tenosynovitis and carpal tunnel syndrome. Tenosynovitis is an inflammation of the thin synovial lining of a tendon sheath usually caused by a mechanical irritation. Carpal tunnel syndrome is a numbness and tingling in the area of distribution of the median nerve in the hand.
Picture in the EFTA Countries	Iceland: 68% of supermarket workers exposed to repetitive work (50% often or all the time) [questionnaire survey] Norway: 37% exposed to repetitive work (12% almost all the time) [Survey of Level of Living, 1997] Liechtenstein and Switzerland: no national data.
Sector categories most at risk from the national reports using NACE code¹⁷ Figures in brackets represent the number of responses	15 Manufacture of food products and beverages (4); 52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods (3); 72 Computer and related activities (3); 17 Manufacture of textiles (2); 18 Manufacture of wearing apparel; dressing and dyeing of fur (2).
Occupation categories most at risk from the national reports using ISCO code¹⁸ Figures in brackets represent the number of responses	41 Office clerks (4); 91 Sales and services elementary occupations (3); 82 Machine operators and assemblers (2); 93 Labourers in mining, construction, manufacturing and transport (2).
Other risk categories	<u>Company size</u> : One EFTA Country reported small and medium sized companies most at risk and two countries reported medium and large companies. <u>Gender</u> : All four EFTA Countries indicated that women are most at risk to exposure to repetitive movements. <u>Age</u> : One EFTA Country indicated the age category <25 years to be most at risk to exposure to repetitive movements. <u>Employment status</u> : One EFTA Country reported full-time employment. Another country indicated apprentices, seasonal workers and labour market measures.
Trends	One EFTA Country indicated a stable trend and three countries indicated an increased trend in the exposure to repetitive movements at work.
EFTA Countries identifying the need for additional preventive action	All four EFTA Countries indicated a need for additional preventive action.
Description of indicated action¹⁹	- Measures to diminish repetitive work need to be done in very many fields; increase awareness and responsibility among employers, designers, technicians and labour market unions. Knowledge must be spread to employers and health care workers. Cost benefit analysis needs to be done to see the economical consequences of actions. - Automation of production. - Increased staffing, better organisation of the work and differentiated tasks. - Companies need to be encouraged to allocate repetitive tasks more equitably such that long periods of repetitive movements are not required of individual workers.

¹⁷ The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

¹⁸ The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

¹⁹ The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

Exposure indicator: strenuous working postures

Potential health effects	Strenuous working postures can potentially result in many health disorders affecting the bones, muscles and ligaments particularly vulnerable is the back. Also, there is the potential for increased stress levels during work activities involving strenuous postures.
Picture in the EFTA Countries	Iceland: 60% of supermarket workers exposed to strenuous working postures (28% often or all the time) [questionnaire survey] Liechtenstein, Norway and Switzerland: no national data.
Sector categories most at risk from the national reports using NACE code²⁰ Figures in brackets represent the number of responses	45 Construction (4); 52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods (3); 01 Agriculture, hunting and related service activities (2); 15 Manufacture of food products and beverages (2); 28 Manufacture of fabricated metal products, except machinery and equipment (2); 60 Land transport; transport via pipelines (2); 72 Computer and related activities (2).
Occupation categories most at risk from the national reports using ISCO code²¹ Figures in brackets represent the number of responses	91 Sales and services elementary occupations (3); 41 Office clerks (2); 61 Skilled agricultural and fishery workers (2); 71 Extraction and building trades workers (2); 72 Metal, machinery and related trades workers (2).
Other risk categories	<u>Company size</u> : One EFTA Country reported small and medium sized companies most at risk and one country reported medium sized companies. <u>Gender</u> : Three EFTA Countries indicated that men are most at risk to exposure to strenuous working postures. <u>Age</u> : One EFTA Country indicated all age categories to be most at risk. <u>Employment status</u> : One EFTA Country indicated permanent employment.
Trends	One EFTA Country indicated a decreased trend, two EFTA Countries a stable trend and one country indicated an increased trend in the exposure to strenuous working postures at work.
EFTA Countries identifying the need for additional preventive action	All four EFTA Countries indicated a need for additional preventive action.
Description of indicated action ²²	- Measures to diminish repetitive work need to be done in very many fields; increase awareness and responsibility among employers, designers, technicians and labour market unions. Knowledge must be spread to employers and health care workers. Cost benefit analysis needs to be done to see the economical consequences of actions. - Change in working procedures and work organisation. Installation of ergonomically perfect workplaces. Training of the employees. - Preventive measures are insufficient. Technical aids at the workplaces need improvement. Variation and organisation of the workplace are necessary. - Companies need to be encouraged to distribute tasks more equitably such that long periods without adequate changes of posture are not required of individual workers.

²⁰ The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

²¹ The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

²² The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

Exposure indicator: handling chemicals

Potential health effects	Chemical burns and skin damage caused by contact with corrosive substances. Extended exposure to certain substances can cause damage to lungs, liver or other organs. Sensitisation can occur causing an allergic response (e.g. asthma or dermatitis) even at very low exposure levels.
Picture in the EFTA Countries	No national data.
Sector categories most at risk from the national reports using NACE code²³ Figures in brackets represent the number of responses	24 Manufacture of chemicals and chemical products (4); 45 Construction (3); 25 Manufacture of rubber and plastic products (2); 28 Manufacture of fabricated metal products, except machinery and equipment (2); 50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel (2).
Occupation categories most at risk from the national reports using ISCO code²⁴ Figures in brackets represent the number of responses	93 Labourers in mining, construction, manufacturing and transport (3); 82 Machine operators and assemblers (2).
Other risk categories	<u>Company size</u>: Two EFTA Countries reported small and medium sized companies most at risk and two countries reported small companies. <u>Gender</u>: All four EFTA Countries indicated that men are most at risk to exposure to handling chemicals at work. <u>Age</u>: Three EFTA Countries indicated the age category 25-54 years to be most at risk to exposure to handling chemicals. <u>Employment status</u>: One EFTA Country reported permanent employment and another one full-time employment. Seasonal workers and short-term contract workers were indicated by another EFTA Country as two groups with high risk.
Trends	All four EFTA Countries indicated a stable trend in the exposure to handling chemicals at work.
EFTA Countries identifying the need for additional preventive action	All four EFTA Countries indicated a need for additional preventive action.
Description of indicated action²⁵	• Training of the employees. • Every year new chemicals are introduced in to the working environment. To keep up with the development, about 10 new occupational exposure limits are recommended by the authorities every other year. The Labour authorities have campaigns that run over a period of time for different industries. Currently there is a building and construction campaign running. The Labour authorities also have small campaigns or actions for certain substances; currently the focused substance group is isocyanates. • Awareness of the risks needs to be increased in specific sectors.

²³ The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

²⁴ The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

²⁵ The descriptions of further actions can be found in the individual chapters dealing with the exposure or OSH outcome.

Exposure indicator: high speed work

Potential health effects	High speed work can lead to stress related illnesses and ultimately burnout of the individual. It can also induce a high margin for human error leading to workplace accidents.
Picture in the EFTA Countries	Switzerland: 81% exposed to high speed work (40% often or frequently). Iceland, Liechtenstein and Norway: no national data.
Sector categories most at risk from the national reports using NACE code²⁶ Figures in brackets represent the number of responses	15 Manufacture of food products and beverages (4); 64 Post and telecommunications (4); 17 Manufacture of textiles (2); 28 Manufacture of fabricated metal products, except machinery and equipment (2); 29 Manufacture of machinery and equipment NEC (2); 65 Financial intermediation, except insurance and pension funding (2).
Occupation categories most at risk from the national reports using ISCO code²⁷ Figures in brackets represent the number of responses	41 Office clerks (3); 93 Labourers in mining, construction, manufacturing and transport (3); 24 Other professionals (2); 42 Customer services clerks (2).
Other risk categories	<u>Company size</u> : One EFTA Country reported small companies most at risk to exposure to high speed work, one country reported medium and large companies, one country stated all sizes and one large companies. <u>Gender</u> : One EFTA Country indicated that women are most at risk to exposure to high speed work and one country indicated that both genders are most at risk. <u>Age</u> : Two EFTA Countries indicated the age category >55 years to be most at risk to exposure to high speed work, one country indicated 'all ages'. <u>Employment status</u> : Two EFTA Countries indicated permanent employment. One country reported full-time employment.
Trends	Two EFTA Countries indicated a decreased trend and two EFTA Countries indicated a stable trend in the exposure to high speed work at work.
EFTA Countries identifying the need for additional preventive action	All four EFTA Countries indicated a need for additional preventive action.
Description of indicated action ²⁸	• Knowledge must be spread to employers and health care workers about the connection between high speed at work and the risk of increasing stress. Internal preventing activities in the companies need to be expanded and be more structured. • Modification of the organisation of the work. Reduction of piecework. • Some workplaces operate with deadlines which increase the speed of work. Must be seen in connection with rationalisation and increased demands of efficiency. Organisation and adjustment of the work. Add other tasks that break the speed. • Companies need to be encouraged to redistribute tasks that long periods of high speed work are not required of individual workers for long periods. Investigation of other solutions should also be encouraged.

²⁶ The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

²⁷ The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

²⁸ The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

Exposure indicator: workplace dictated by social demand

Potential health effects	Workpace dictated by social demand can lead to stress related illnesses.
Picture in the EFTA Countries	Norway: 64% exposed to workpace dictated by social demand (Survey of Level of Living). Iceland, Liechtenstein and Norway: no national data.
Sector categories most at risk from the national reports using NACE code²⁹ Figures in brackets represent the number of responses	52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods (3); 75 Public administration and defence; compulsory social security (3); 85 Health and social work (3); 55 Hotels and restaurants (2).
Occupation categories most at risk from the national reports using ISCO code³⁰ Figures in brackets represent the number of responses	23 Teaching professionals (3); 42 Customer services clerks (3); 32 Life science and health associate professionals (2); 91 Sales and services elementary occupations (2).
Other risk categories	<u>Company size</u> : Three EFTA Countries reported that small companies were most at risk to workpace dictated by social demand. <u>Gender</u> : All four EFTA Countries indicated that women are most at risk to exposure to workpace dictated by social demand. <u>Age</u> : One EFTA Country indicated 'all ages' and one indicated the age category >55 years to be most at risk to workpace dictated by social demand. <u>Employment status</u> : One EFTA Country stated permanent employment and one reported full-time and part-time employment. Another EFTA Country indicated permanent employment and substitutes/locums. One country reported also part-time employment.
Trends	All four EFTA Countries indicated an increased trend in the exposure to workpace dictated by social demand.
EFTA Countries identifying the need for additional preventive action	All four EFTA Countries indicated a need for additional preventive action.
Description of indicated action³¹	• More measures have to be done on these fields. More information / knowledge has to be spread about how this can increase stress and decrease the well-being of the workers. • Reduction of stress by changing the organisation of work. • This is accepted as a problem area and has been taken care of locally. • There is a general lack of awareness in the community about the causes of work-related stress. Attention is currently being directed at the working conditions of cashiers.

²⁹ The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

³⁰ The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

³¹ The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

Exposure indicator: machine dictated workspace

Potential health effects	Machine dictated workspace could lead to stress related illnesses, possible boredom and injuries associated with lack of concentration.
Picture in the EFTA Countries	Norway: 18% exposed to machine dictated workspace (Survey of Level of Living). Switzerland: 74% exposed to machine dictated workspace (47% very often or frequently). Iceland and Liechtenstein: no national data.
Sector categories most at risk from the national reports using NACE code³² Figures in brackets represent the number of responses	15 Manufacture of food products and beverages (4); 17 Manufacture of textiles (3); 21 Manufacture of paper and paper products (2); 29 Manufacture of machinery and equipment NEC (2).
Occupation categories most at risk from the national reports using ISCO code³³ Figures in brackets represent the number of responses	82 Machine operators and assemblers (3).
Other risk categories	<u>Company size</u> : One EFTA Country indicated that small companies were most at risk to exposure to machine directed workspace, one country indicated medium sized companies and one large companies. <u>Gender</u> : Two EFTA Countries indicated that both genders are most at risk to exposure to machine dictated workspace and one country indicated that women are most at risk. <u>Age</u> : One EFTA Country indicated 'all ages', one the age category <25 years and another one the age category >55 to be most at risk to machine dictated workspace. <u>Employment status</u> : One EFTA Country stated permanent employment. Another reported trainees and one country indicated part-time and temporary employees.
Trends	One EFTA Country indicated a decreased trend in the exposure to machine dictated workspace, one country reported a stable trend and two countries indicated an increased trend.
EFTA Countries identifying the need for additional preventive action	Three EFTA Countries indicated a need for additional preventive action, whereas one country found the existing actions sufficient.
Description of indicated action ³⁴	• Knowledge has to be spread to employers about how machine dictated workspace can increase stress and decrease the well-being of the workers. • Cost benefit analyses need to be done to see the economic consequences of actions. • Changes of the organisation of work and reduction of piecework. • Ergonomic standards being developed in relation to the Machine Directive.

³² The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

³³ The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

³⁴ The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

Exposure indicator: physical violence

Potential health effects	Physical violence can lead to a wide range of physical injuries from the superficial to the life threatening. Anxiety resulting from either a threat of violence or as a direct result of actual violence can lead to stress related illnesses.
Picture in the EFTA Countries	Norway: 5.8% exposed to physical violence at work (0.7% one or more times per week and 4.8% one or more times per month [Survey of Level of Living]. Iceland, Liechtenstein and Switzerland: no national data.
Sector categories most at risk from the national reports using NACE code³⁵ Figures in brackets represent the number of responses	75 Public administration and defence; compulsory social security (4); 85 Health and social work (4); 80 Education (2).
Occupation categories most at risk from the national reports using ISCO code³⁶ Figures in brackets represent the number of responses	51 Personal and protective services workers (4); 22 Life science and health professionals (2); 23 Teaching professionals (2); 32 Life science and health associate professionals (2); 33 Teaching associate professionals (2); 42 Customer services clerks (2).
Other risk categories	<u>Company size</u> : Two EFTA Countries indicated that small companies were most at risk to exposure to physical violence and one country indicated medium sized to large companies. <u>Gender</u> : Two EFTA Countries stated that both genders are most at risk to exposure to physical violence and one country indicated that women are most at risk. <u>Age</u> : One EFTA Country indicated the age category 25-54 years and another one the age category <25 years to be most at risk to physical violence. <u>Employment status</u> : One EFTA Country reported permanent employment and another one full-time employment. One country mentioned substitutes/ locums and seasonal workers.
Trends	One EFTA Country indicated a stable trend in the exposure to physical violence and two countries indicated an increased trend.
EFTA Countries identifying the need for additional preventive action	All four EFTA Countries indicated a need for additional preventive action.
Description of indicated action ³⁷	• A regulation on the field has to be developed. • Preventive measures are not yet established. • Security measures (alarms, surveillance cameras, increased staffing). Training. • Little attention has been focussed on this until recently. Preventive measures have not yet been developed.

³⁵ The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

³⁶ The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

³⁷ The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

Exposure indicator: bullying and victimisation

Potential health effects	Bullying and victimisation often leads to stress related illnesses.
Picture in the EFTA Countries	Norway: 1.9% exposed to bullying and victimisation at work (0.4% one or more times per week and 1.3% one or more times per month) [Survey of Level of Living]. Switzerland: 8% was reported to be exposed to bullying and victimisation at work. Iceland and Liechtenstein: no national data.
Sector categories most at risk from the national reports using NACE code³⁸ Figures in brackets represent the number of responses	85 Health and social work (4); 55 Hotels and restaurants (3); 75 Public administration and defence; compulsory social security (3); 65 Financial intermediation, except insurance and pension funding (2); 80 Education (2).
Occupation categories most at risk from the national reports using ISCO code³⁹ Figures in brackets represent the number of responses	23 Teaching professionals (3); 41 Office clerks (3); 42 Customer services clerks (3); 22 Life science and health professionals (2); 32 Life science and health associate professionals (2); 51 Personal and protective services workers (2).
Other risk categories	<u>Company size</u> : One EFTA Country indicated that small companies were most at risk to exposure to bullying and victimisation and one reported medium sized to large companies. <u>Gender</u> : One EFTA Country stated that both genders are most at risk to exposure to bullying and victimisation. <u>Age</u> : One EFTA Country indicated all ages and one country reported the age category <25 years to be most at risk to exposure to bullying and victimisation. <u>Employment status</u> : One EFTA Country mentioned substitutes/locums.
Trends	Three EFTA Countries indicated an increased trend in the exposure to bullying and victimisation.
EFTA Countries identifying the need for additional preventive action	Three EFTA Countries indicated a need for additional preventive action.
Description of indicated action⁴⁰	• Regulation on this field has to be developed. Knowledge has to be spread to the employers, employees and health care workers. • Not known. • Companies are required to develop routines for dealing with bullying and victimisation in the workplace. • Little attention has been focussed on this issue until recently. Studies are under way to better evaluate the incidence and distribution. Preventive measures have not been fully developed.

³⁸ The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

³⁹ The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

⁴⁰ The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

Exposure indicator: sexual harassment

Potential health effects	Sexual harassment can be another factor leading to stress related illnesses.
Picture in the EFTA Countries	Norway: 2% exposed to sexual harassment at work [Survey of Level of Living]. Iceland, Liechtenstein and Switzerland: no national data.
Sector categories most at risk from the national reports using NACE code⁴¹ Figures in brackets represent the number of responses	55 Hotels and restaurants (4); 75 Public administration and defence; compulsory social security (3); 73 Research and development (2); 74 Other business activities (2); 85 Health and social work (2); 92 Recreational, cultural and sporting activities (2); 93 Other service activities (2).
Occupation categories most at risk from the national reports using ISCO code⁴² Figures in brackets represent the number of responses	41 Office clerks (3); 01 Armed forces (2); 02 Professionals (2); 23 Teaching professionals (2); 32 Life science and health associate professionals (2); 34 Other associate professionals (2); 61 Skilled agricultural and fishery workers (2). 91 Sales and services elementary occupations (2).
Other risk categories	<u>Company size</u> : One EFTA Country indicated that small companies were most at risk to exposure to sexual harassment and one country indicated small and medium sized enterprises. <u>Gender</u> : All four EFTA Countries indicated that women are most at risk to exposure to sexual harassment. <u>Age</u> : Two EFTA Countries indicated age category <25 years to be most at risk to exposure to sexual harassment and one country stated the age category 25-54 years. <u>Employment status</u> : One EFTA Country stated temporary employment agency contract and apprenticeship or other training schemes. Two countries reported part-time or temporary employees. One EFTA Country stated substitutes/ locums.
Trends	Two EFTA Countries indicated a stable trend in the exposure to sexual harassment.
EFTA Countries identifying the need for additional preventive action	Three EFTA Countries indicated a need for additional preventive action and one country indicated that the preventive actions taken are sufficient.
Description of indicated action ⁴³	• A regulation on this field has to be developed. Knowledge has to be spread to employees. • Putting through the legal regulations. • Companies are required to develop routines for dealing with sexual harassment in the workplace. • Little attention has been focussed on this issue until recently and therefore preventive measures have not been fully developed.

⁴¹ The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

⁴² The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

⁴³ The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

Exposure indicator: monotonous work

Potential health effects	Monotonous work can be a major contributor to stress related illnesses. It can also lead to attention lapses resulting in accidents. It can also promote an individual to take risks in order to relieve the boredom.
Picture in the EFTA Countries	Norway: >51% exposed to monotonous work (36% more than half the time) [Survey of Level of Living]. Iceland, Liechtenstein and Switzerland: no national data.
Sector categories most at risk from the national reports using NACE code⁴⁴ Figures in brackets represent the number of responses	15 Manufacture of food products and beverages (3); 72 Computer and related activities (3); 17 Manufacture of textiles (2); 40 Electricity, gas, steam and hot water supply (2); 52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods (2).
Occupation categories most at risk from the national reports using ISCO code⁴⁵ Figures in brackets represent the number of responses	41 Office clerks (3); 82 Machine operators and assemblers (3); 73 Precision, handicraft, craft printing and related trades workers (2); 81 Stationary-plant and related operators (2); 91 Sales and services elementary occupations (2).
Other risk categories	<u>Company size</u> : One EFTA Country indicated that small companies were most at risk to exposure to monotonous work and one country indicated small and medium sized companies. <u>Gender</u> : Two EFTA Countries stated that women are most at risk to exposure to monotonous work and two countries indicated that both genders are at risk. <u>Age</u> : One EFTA Country mentioned 'all ages' to be most at risk to exposure to monotonous work and one country indicated the age category < 25 years. <u>Employment status</u> : Two EFTA Countries reported permanent employment. One country regarded permanent full-time employees as a risk group.
Trends	One EFTA Country indicated a decreased trend, one country a stable trend and two countries indicated an increased trend in the exposure to monotonous work.
EFTA Countries identifying the need for additional preventive action	All four EFTA Countries indicated a need for additional preventive action.
Description of indicated action ⁴⁶	• Internal preventive activities in the companies need to expand and be more structured. • Increased information and motivation of the employees. • Need to implement greater variety of tasks and better organisation of the work. • The public awareness of the health and safety problems in connection with this factor needs to be increased.

⁴⁴ The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

⁴⁵ The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

⁴⁶ The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

Exposure indicator: personal protective equipment (PPE)

Potential health effects	Incorrect assessment of PPE requirements and of its use can be a contributory factor in the whole range of occupational accidents and illnesses. This will be dependent upon the purposes for initiating the need for PPE in the first instance, e.g. PPE issued for hearing protection can lead noise induced hearing loss if not correctly selected or correctly worn.
Picture in the EFTA Countries	Iceland, Liechtenstein, Norway and Switzerland: no national data.
Sector categories most at risk from the national reports using NACE code⁴⁷ Figures in brackets represent the number of responses	45 Construction (3); 02 Forestry, logging and related service activities (2); 15 Manufacture of food products and beverages (2); 27 Manufacture of basic metals (2). One EFTA Country did not have information.
Occupation categories most at risk from the national reports using ISCO code⁴⁸ Figures in brackets represent the number of responses	71 Extraction and building trades workers (3); 72 Metal, machinery and related trades workers (3); 61 Skilled agricultural and fishery workers (2); 82 Machine operators and assemblers (2). Switzerland indicated most manufacturing activities.
Other risk categories	Other risk categories were not included in the manual in the case of PPE.
Trends	Two EFTA Countries indicated a stable trend and two countries indicated an increased trend in the use of personal protective equipment.
EFTA Countries identifying the need for additional preventive action	Three EFTA Countries indicated a need for additional preventive action and one country answered in the category 'other'.
Description of indicated action⁴⁹	• Other research needed in this area. • Running campaigns to motivate employees for increased wearing of personal protective equipment. Putting through the legal regulations. • There are ongoing campaigns to increase awareness of risks and compliance with rules on industry level.

⁴⁷ The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

⁴⁸ The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

⁴⁹ The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

OSH outcome: accidents with more than three days absence

Picture in the EFTA Countries	No data is available to provide An EFTA picture.
Sector categories most at risk from the national reports using NACE code⁵⁰ Figures in brackets represent the number of responses	45 Construction (3); 02 Forestry, Logging and related service activities (2); 27 Manufacture of basic metals (2); 28 Manufacture of fabricated metal products, except machinery and equipment (2).
Occupation categories most at risk from the national reports using ISCO code⁵¹ Figures in brackets represent the number of responses	61 Skilled agricultural and fishery workers (3); 71 Extraction and building trades workers (2); 72 Metal, machinery and related trades workers (2).
Other risk categories	<u>Company size</u>: Two EFTA Countries indicated that small companies were most at risk and one country indicated small and medium sized companies. <u>Gender</u>: All four EFTA Countries indicated that men are most at risk to accidents with more than three days absence. <u>Age</u>: One EFTA Country indicated the age category 21-30 years, one the age category 25-54 years and another one the age category 20-35 years to be most at risk to accidents with more than three days absence. <u>Employment status</u>: One country indicated that employees were most at risk during the probation period.
Trends	Two EFTA Countries indicated a decreased trend, one country a stable trend and one country an increased trend in the number of accidents.
EFTA Countries identifying the need for additional preventive action	Two EFTA Countries indicated that preventive actions taken or planned were sufficient and two countries indicated a need for additional preventive action.
Description of indicated action ⁵²	A system to analyse accidents and 'close calls' may help in preventing accidents.

⁵⁰ The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

⁵¹ The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

⁵² The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

List of causes of accidents⁵³ resulting in more than three days absence from work

Causes of accidents	Number of responses
• Struck or buried by objects	2
• Tripping/falling	2
• Stabs and cuts	2
• Caught in machine	1
• Splinter from machine/tools	1
• Slips and drops of objects	1
• Knocks and hits against objects	1

⁵³ Based on information given in two national reports. For one of the two EFTA Focal Points the list represents causes for all accidents including those with less than 3 days absence.

OSH outcome: fatal accidents

Picture in the EFTA Countries	Only Iceland and Norway have statistics showing occupational deaths, and it is therefore not possible to provide a full picture of the situation in the EFTA Countries. Norway had a total of 64 fatal accidents in 1998 (0.22/10 mio. working hours) and Iceland had a total of 4 fatal accidents in 1997. <u>Sectors</u> : Most accidents occurred in the construction sector.
Sector categories most at risk from the national reports using NACE code⁵⁴ Figures in brackets represent the number of responses	45 Construction (4); 01 Agriculture, hunting and related service activities (3); 60 Land transport; transport via pipelines (2).
Occupation categories most at risk from the national reports using ISCO code⁵⁵ Figures in brackets represent the number of responses	Iceland reported: 92 Agricultural, fishery and related labourers.
Other risk categories	<u>Company size</u> : Two EFTA Countries indicated that small companies were most at risk and one country indicated small and medium sized companies. <u>Gender</u> : Three EFTA Countries indicated that men are most at risk to fatal accidents. One country indicated 'not relevant' due to a limited number of fatal accidents. <u>Age</u> : One EFTA Country indicated the age category 21-30 years and one country reported the age category 51-65 years to be most at risk to fatal accidents. One country had no information and one indicated 'not relevant' due to a limited number of fatal accidents. <u>Employment status</u> : No data was available in the EFTA Countries.
Trends	Two EFTA Countries indicated a decreased trend and two a stable trend in the number of fatal accidents.
EFTA Countries identifying the need for additional preventive action	One EFTA Country indicated that preventive actions taken or planned were sufficient and three countries stated a need for additional preventive action.
Description of indicated action⁵⁶	- The Labour Inspection has recently had campaigns in agriculture, forestry and land transport, where a large portion of the occupational deaths occur. Construction is also over-represented. A campaign in construction started in 2000 (Norway). - A future reduction in the increase of fatal accidents will depend on the implementation of appropriate training and introduction courses, organisational management improvements and increased understanding of how errors are made and accidents occur. The traditional emphasis on personal protective equipment and machine safety is felt to be approaching the limit of its effectiveness.

Remark: One EFTA Country reported causes of fatal accidents, such as falling (construction), collision (transportation) and tipping (agriculture and forestry).

⁵⁴ The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

⁵⁵ The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

⁵⁶ The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

OSH outcome: musculoskeletal disorders

Potential health effects	Musculoskeletal disorders can result in injury to the muscular and skeletal systems of the body. Significant work induced musculoskeletal disorders commonly affect the lower back and the hands (tenosynovitis).
Picture in the EFTA Countries	Switzerland reported general data for musculoskeletal disorders, which were not necessarily work-induced. Iceland, Liechtenstein and Norway: no national data.
Sector categories most at risk from the national reports using NACE code⁵⁷ Figures in brackets represent the number of responses	45 Construction (2); 01 Agriculture, hunting and related service activities (2); 15 Manufacture of food products and beverages (2); 85 Health and social work (2). Iceland did not provide data.
Occupation categories most at risk from the national reports using ISCO code⁵⁸ Figures in brackets represent the number of responses	71 Extraction and building trades workers (3); 83 Drivers and mobile plant operators (2); 93 Labourers in mining, construction, manufacturing and transport (2). Iceland did not provide data.
Other risk categories	<u>Company size</u> : One EFTA Country indicated small and medium sized companies. <u>Gender</u> : Two EFTA Countries indicated that women are most at risk to musculoskeletal disorders. One country indicated that men are most at risk. <u>Age</u> : One EFTA Country indicated 'older workers' and one country indicated the age category 25-54 years to be most at risk to musculoskeletal disorders. <u>Employment status</u> : One country indicated 'full-time' employees and two countries stated 'temporary' employees as being most at risk.
Trends	Three EFTA Countries indicated an increased trend regarding musculoskeletal disorders.
EFTA Countries identifying the need for additional preventive action	Three EFTA Countries indicated a need for additional preventive action.
Description of indicated action⁵⁹	- Running campaigns. Information and instruction of the employees. - Establish a better registration system for occupational diseases to discover the true extent of the disorder. Strengthen research to establish which workplaces exposures cause occupational disorders. - More global preventive measures. Manual handling regulations are not expected to significantly affect the incidence of this problem, except in specific sectors where appropriate enforcement is also required. An emphasis on organisational improvement is expected to be much more effective. The high incidence of musculoskeletal disorders in the whole working population means that this subject requires more detailed investigation and co-ordinated prevention programmes.

⁵⁷ The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

⁵⁸ The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

⁵⁹ The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

OSH outcome: stress

Potential health effects	Excessive stress causes fatigue, anxiety, sweating panic attacks and tremors. It can lead to difficulty in relaxing, loss of concentration, impaired appetite and disrupted sleep patterns. Some people become depressed or aggressive and stress increases susceptibility to ulcers, mental ill health, heart disease and some skin disorders.
Picture in the EFTA Countries	Iceland, Liechtenstein, Norway and Switzerland have no national data.
Sector categories most at risk from the national reports using NACE code⁶⁰ Figures in brackets represent the number of responses	Only one EFTA Country provided data.
Occupation categories most at risk from the national reports using ISCO code⁶¹ Figures in brackets represent the number of responses	Only one EFTA Country provided data.
Other risk categories	<u>Company size</u> : No data was available in the EFTA Countries. <u>Gender</u> : One EFTA Country indicated that women are most at risk to stress. <u>Age</u> : One EFTA Country indicated the age category 25-54 years to be most at risk to stress. <u>Employment status</u> : Two countries indicated 'full-time' employees as being most at risk.
Trends	Two EFTA Countries indicated an increased trend in the number of workers suffering from stress.
EFTA Countries identifying the need for additional preventive action	Three EFTA Countries indicated a need for additional preventive action and one country had no data.
Description of indicated action ⁶²	• Multifactorial exposures make it difficult to handle stress prevention. However, where clear stressors exist, like violence, much more preventive action could go into making the workplace safer. In order to untangle stressors and their impact on health, much more research is needed. A better knowledge to guide future preventive action is needed. • The public awareness of the health and safety problems in connection with this factor needs to be increased.

⁶⁰ The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

⁶¹ The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

⁶² The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

OSH outcome: occupational sickness absence

Picture in the EFTA Countries	No data is available to provide an EFTA picture.
Sector categories most at risk from the national reports using NACE code⁶³ Figures in brackets represent the number of responses	No data available in the EFTA Countries.
Occupation categories most at risk from the national reports using ISCO code⁶⁴ Figures in brackets represent the number of responses	Only one EFTA Country provided data.
Other risk categories	<u>Company size</u>: One EFTA Country indicated that small and medium sized companies were most at risk. <u>Gender</u>: Two EFTA Countries stated that women are most at risk. <u>Age</u>: One EFTA Country indicated the age category <25 years. <u>Employment status</u>: One country reported 'full-time' employees and another one indicated 'permanent' employees.
Trends	Two EFTA Countries indicated an increased trend regarding occupational sickness absence.
EFTA Countries identifying the need for additional preventive action	Three EFTA Countries indicated a need for additional preventive action.
Description of indicated action⁶⁵	• Registration of data concerning professional diseases (co-operation with doctors). • There is a high activity in various projects to prevent absenteeism. However, there is no clear picture yet concerning which interventions will be successful on a sustainable basis. Norway has established in 1999 a secretariat to spread information of the most promising intervention. • Emphasis in the future will be directed towards establishing better monitoring methods for sickness absences.

⁶³ The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

⁶⁴ The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

⁶⁵ The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

OSH outcome: occupational diseases

Picture in the EFTA Countries	No data is available to provide an EFTA Picture.
Sector categories most at risk from the national reports using NACE code⁶⁶ Figures in brackets represent the number of responses	45 Construction (3); 15 Manufacture of food products and beverages (2); 28 Manufacture of fabricated metal products, except machinery and equipment (2); 29 Manufacture of machinery and equipment NEC (1).
Occupation categories most at risk from the national reports using ISCO code⁶⁷ Figures in brackets represent the number of responses	82 Machine operators and assemblers (3); 93 Labourers in mining, construction, manufacturing and transport (3).
Other risk categories	<u>Company size</u>: One EFTA Country indicated that small and medium sized companies were most at risk and one small companies. <u>Gender</u>: Two EFTA Countries indicated that men are most at risk to occupational diseases. One country stated that results vary with sector type. <u>Age</u>: One EFTA Country indicated the age category 21-35 years. <u>Employment status</u>: One EFTA Country stated 'full-time' employees and one 'non-permanent' employees as most at risk.
Trends	Two EFTA Countries indicated a decreased trend and one an increased trend in the number of workers with occupational diseases.
EFTA Countries identifying the need for additional preventive action	Three EFTA Countries indicated a need for additional preventive action.
Description of indicated action⁶⁸	- Increased running of workplace examinations. Giving orders for preventive medical examinations and for technical and organisational measures. - Establish a better registration system for occupational diseases to discover the true extent of the disorder. Curb the spread of highly reactive chemicals (e.g. isocyanates, epoxy, etc.). Strengthen research to establish which workplace exposures cause occupational disorders. - The expert group was unanimously of the opinion that the legally (Accident Insurance Law) recognised occupational diseases represented only a small portion of work-related ill health and disease. Even where the connections between work and disease are quite clear there is a large number of unrecognised and therefore hidden cases. The reason for this is not so much the level of acceptance by the insurance companies but rather the lack of recognition of work-relatedness by both the treating physician and the affected employee. Particular examples of sectors where under-reporting is common are, for example, nasal cancer in carpenters and mesothelioma from asbestos work. - The sectors where under-reporting is most likely to occur are: 45 Construction (particularly interior finishing – solvent containing paints, tile glues, etc); 36 Carpenters (wood dust); 15 Bakers (flour dust); 50 Motor vehicle repairs (spray painting).

⁶⁶ The most frequently identified sectors which the EFTA Focal Points considered being most at risk.

⁶⁷ The most frequently identified occupations which the EFTA Focal Points considered being most at risk.

⁶⁸ The descriptions of further actions can be found in the individual chapters dealing with the exposure indicator or OSH outcome.

2.2 THE NEED FOR THE DEVELOPMENT OF ADDITIONAL PREVENTIVE ACTIONS

For each exposure category and OSH outcome detailed in the manual the EFTA Focal Points were asked to evaluate its present state in relation to health and safety effects and the adequacy of the current actions. The table below ranks the exposure categories and OSH outcomes by the number of EFTA Focal Points reporting additional preventive actions are required. In brackets the number of indications from the Focal Points in the Member States are presented.

Exposure indicator/OSH outcome		Number of EFTA Focal Points (Focal Points) reporting the development of additional preventive action is necessary
Repetitive movements	4 (7)	Iceland, Liechtenstein, Norway, Switzerland
Noise	4 (7)	Iceland, Liechtenstein, Norway, Switzerland
Physical violence	4 (7)	Iceland, Liechtenstein, Norway, Switzerland
Strenuous working postures	4 (6)	Iceland, Liechtenstein, Norway, Switzerland
High speed work	4 (6)	Iceland, Liechtenstein, Norway, Switzerland
Monotonous work	4 (6)	Iceland, Liechtenstein, Norway, Switzerland
Workpace dictated by social demand	4 (3)	Iceland, Liechtenstein, Norway, Switzerland
Sexual harassment	4 (2)	Iceland, Liechtenstein, Norway, Switzerland
Stress	3 (10)	Liechtenstein, Norway, Switzerland
Vibration	3 (9)	Liechtenstein, Norway, Switzerland
Lifting/moving heavy loads	3 (9)	Liechtenstein, Norway, Switzerland
Handling chemicals	3 (8)	Liechtenstein, Norway, Switzerland
Musculoskeletal disorders	3 (8)	Liechtenstein, Norway, Switzerland
Bullying and victimisation	3 (7)	Iceland, Norway, Switzerland
Occupational diseases	3 (7)	Liechtenstein, Norway, Switzerland
Occupational sickness absence	3 (5)	Liechtenstein, Norway, Switzerland
Neurotoxic substances	3 (4)	Liechtenstein, Norway, Switzerland
Machine dictated workplace	3 (4)	Iceland, Liechtenstein, Norway
Personal protective equipment	3 (6)	Liechtenstein, Norway, Switzerland
Fatal accidents	3 (6)	Liechtenstein, Norway, Switzerland
Carcinogenic substances	3 (6)	Liechtenstein, Norway, Switzerland
Non-infectious biological factors	2 (5)	Norway, Switzerland
Accidents with more than three days absence	2 (7)	Liechtenstein, Norway
Infectious biological factors	1 (6)	Norway
Reproductive hazards	1 (5)	Norway
High temperature	1 (6)	Liechtenstein
Low temperature	1 (7)	Liechtenstein

The above table indicates that a number of occupational hazards were reported by all the EFTA Focal Points as still requiring the development of additional preventive further actions, these include repetitive movements, strenuous working postures, monotonous work, high speed work, workplace dictated by social demand, physical violence, sexual harassment and noise.

It should be mentioned that the main part of the risks which are pointed out by the EFTA Focal Points and for which a need for additional preventive actions have been identified, are related to the organisation of the work (except noise, physical violence and sexual harassment).

The above table indicates for the EU Member States a fairly evenly distribution for the need for further preventive action across all exposure indicators/OSH outcomes. The traditional workplace risks, represented in the physical exposures group, were still reported as needing to be adequately addressed, particularly exposure to vibration. However, within each exposure/OSH outcome groups there are varying degrees of differences for the need of further preventive actions between each Member State.

In the posture/movement exposure group, lifting/moving of heavy loads, often associated with manual handling, was a risk for which nine Member States identified the need for further preventive action.

In the psycho-social working conditions group both 'Physical violence' and 'Bullying and victimisation' were the leading risks for which further preventive action was required, closely followed by 'High speed work' and 'Monotonous work'.

Out of all the exposure indicators/OSH outcomes 'Stress' was the risk identified by ten Member States requiring the need for additional prevention actions for further control in the working environment.

2.3 RISK CATEGORY - SECTOR

For each exposure indicator and OSH outcome the most identified sector in the EFTA Countries and in the EU Member States is presented in this section.

Exposure indicator/ OSH outcome	Most identified sector(s) in EFTA Countries	Most identified sector(s) in EU Member States
Physical Exposures		
Noise	Construction; and manufacture of food products and beverage	Manufacture of fabricated metal products, except machinery and equipment; and manufacture of wood, wood products and cork, except furniture and straw articles and plaiting material
Vibration	Construction	Construction
High temperature	Manufacture of basic metals; and hotels and restaurants	Manufacture of basic metals
Low temperature	Forestry, logging and related service activities; and construction	Manufacture of food products and beverages; and construction
Posture and movement exposures		
Lifting/moving heavy loads	Agriculture, hunting and related service activities; construction; and land transport, transport via pipelines	Construction
Repetitive movements	Manufacture of food products and beverages	Manufacture of food products and beverages
Strenuous working postures	Construction	Construction

Exposure indicator/ OSH outcome	Most identified sector(s) in EFTA Countries	Most identified sector(s) in EU Member States
Handling chemicals		
Handling chemicals	Manufacture of chemicals and chemical products	Manufacture of chemicals and chemical products
Carcinogenic substances	Manufacture of fabricated metal products, except machinery and equipment	Construction
Neurotoxic substances	Construction	Manufacture of chemicals and chemical products
Reproductive hazards	Health and social work	Manufacture of chemicals and chemical products
Infectious biological hazards	Health and social work	Health and social work
Non-infectious biological hazards	Agriculture, hunting and related service activities	Agriculture, hunting and related service activities
Psycho-social working conditions		
High speed work	Manufacture of food products and beverages; and post and telecommunications	Hotels and restaurants
Workpace dictated by social demand	Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods; public administration and defence; compulsory social security; and health and social work	Hotels and restaurants
Machine dictated workplace	Manufacture of food products and beverages	Manufacture of textiles
Physical violence	Public administration and defence; compulsory social security; and health and social work	Health and social work
Bullying and victimisation	Health and social work; hotels and restaurants; and public administration and defence; compulsory social security	Health and social work
Sexual harassment	Hotels and restaurants	Hotels and restaurants; and health and social work
Monotonous work	Manufacture of food products and beverages; and computer and related activities	Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear; manufacture of textiles; and manufacture of food products and beverages
Context of work		
PPE	Construction	Construction
OSH outcomes		
Accidents with more than three days absence	Construction	Construction
Fatal accidents	Construction	Construction
Occupational diseases	Construction	Construction
Musculoskeletal disorders	Agriculture, hunting and related service activities; manufacture of food products and beverages; construction; and health and social work	Construction
Stress	No EFTA information could be given	Health and social work; and education
Occupational sickness absence	No EFTA information could be given	Health and social work; and public administration, defence and compulsory social security

EFTA Focal Points and EU Member States identified the same sectors for the following exposure indicators: vibration, high temperature, low temperature, lifting/ moving heavy loads, repetitive movements, strenuous working postures, handling chemicals, infectious biological hazards, physical violence, bullying and victimisation, sexual harassment and monotonous work. The sector 'Construction' was mentioned by EFTA Focal Points and EU Member States as mostly identified sector regarding use of personal protective equipment, accidents with more than three days absence, fatal accidents, occupational diseases and musculoskeletal disorders.

3.



THE WORKING ENVIRONMENT

- 3.1 INTRODUCTION
- 3.2 NOISE
- 3.3 VIBRATION
- 3.4 HIGH TEMPERATURE
- 3.5 LOW TEMPERATURE
- 3.6 LIFTING/ MOVING HEAVY LOADS
- 3.7 REPETITIVE MOVEMENTS
- 3.8 STRENUOUS WORKING POSTURES
- 3.9 HANDLING CHEMICALS
- 3.10 CHEMICAL/ BIOLOGICAL RISKS
- 3.11 HIGH SPEED WORK
- 3.12 WORKPACE DICTATED BY SOCIAL DEMAND
- 3.13 MACHINE DICTATED WORKPACE
- 3.14 PHYSICAL VIOLENCE
- 3.15 BULLYING AND VICTIMISATION
- 3.16 SEXUAL HARASSMENT
- 3.17 MONOTONOUS WORK
- 3.18 USE OF PERSONAL PROTECTIVE EQUIPMENT
- 3.19 INFORMATION ABOUT RISKS AT WORK
- 3.20 TRAINING PROVIDED BY EMPLOYERS

3.1

INTRODUCTION

This section contains qualitative and quantitative information on the working environment in the EFTA Countries.

In collating and presenting the following information, it must be appreciated that the method by which each EFTA Focal Point derived responses to particular questions was different. In many cases statistical data were not available. The information provided by the individual EFTA Focal Point mainly represents their expert opinion after relevant consultation with identified experts.

The data provided are used to present the following:

For each exposure indicator the five sectors and the five occupations pointed out as being of most risk by each of the four countries are presented. Furthermore, the five sectors and five occupations pointed out by EU Focal Points are presented as overview tables together with the indications of the EFTA Focal Points. In addition the EFTA Countries viewpoints on the other risk categories such as company size, gender, age category and employment status having particular high risk related to each exposure indicator are described. Again, as a reference, the European picture is presented whenever available. Finally, the trends - if the EFTA Countries and the EU Focal Points consider the specific risks as decreasing, stable or increasing - are presented and the evaluation of the EFTA Countries and EU Member States.

3.1.1 Exposure indicators

The exposure indicators that the EFTA Focal Points were asked to consider were:

- Physical exposures: noise, vibration, high temperature, low temperature;
- Postures and movement exposures: lifting/moving heavy loads, repetitive movements, strenuous working postures;
- Handling chemicals;
- Exposure to carcinogenic and neurotoxic substances;
- Reproductive hazards;
- Exposure to biological factors; and
- Psycho-social working conditions: high speed work, workplace dictated by social demand, machine dictated workplace, physical violence, bullying and victimisation, sexual harassment, monotonous work.

3.1.2 Risk categories

For each of the above exposure indicators, the EFTA Focal Points identified:

- 5 Sectors;
- 5 Occupations; and if relevant
- Company size;
- Gender;
- Age; and
- Employment status.

Further they presented trends and an evaluation of the present state for each of the exposure indicators.

3.2

NOISE

Sectors

- 15 Manufacture of food products and beverages - **Iceland, Liechtenstein, Norway, Switzerland**
- 45 Construction - **Iceland, Liechtenstein, Norway, Switzerland**
- 20 Manufacture of wood and products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials - **Iceland, Liechtenstein, Norway**
- 27 Manufacture of basic metals - **Iceland, Norway**
- 05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing - **Iceland**
- 22 Publishing and printing and reproduction of recorded media - **Switzerland**
- 26 Manufacture of other non-metallic mineral products - **Switzerland**
- 28 Manufacture of fabricated metal products, except machinery and equipment - **Liechtenstein**
- 29 Manufacture of machinery and equipment - **Liechtenstein**
- 35 Manufacture of other transport equipment - **Norway**
- 36 Manufacture of furniture; manufacturing NEC - **Switzerland**

The two most recorded sectors with regard to noise exposure were 'Construction' and 'Manufacture of food products and beverages'.

The following table provides an overview on the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Sectors	EFTA Countries	EU-Member States ⁶⁹
05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing	1	1
15 Manufacture of food products and beverages	4	1
20 Manufacture of wood and products of wood and cork, except furniture; manufacture of articles of straw and plaiting material	3	10
22 Publishing and printing and reproduction of recorded media	1	2
26 Manufacture of other non-metallic mineral products	1	2
27 Manufacture of basic metals	2	9
28 Manufacture of fabricated metal products, except machinery and equipment	1	10
29 Manufacture of machinery and equipment	1	2
35 Manufacture of other transport equipment	1	1
36 Manufacture of furniture; manufacturing NEC	1	2
45 Construction	4	7

'Manufacture of wood and products of wood and cork, except furniture; manufacture of articles of straw and plaiting material' is considered as a risk sector regarding noise exposure for both the EFTA Countries and the EU Member States. 'Construction' is another sector pointed out for both EFTA Countries and the EU Member States. Furthermore, for the EFTA Countries 'Manufacture of food products and beverages' was assessed as a high-risk sector. This sector was only pointed out for one of the Member States.

⁶⁹ Number of Focal Points indications

Occupations

- 72 Metal, machinery and related trades workers - **Iceland, Liechtenstein, Norway, Switzerland**
 93 Labourers in mining, construction, manufacturing and transport - **Iceland, Liechtenstein, Norway, Switzerland**
 71 Extraction and building trades workers - **Iceland, Liechtenstein, Switzerland**
 01 Armed Forces - **Norway, Switzerland**
 82 Machine operators and assemblers - **Liechtenstein, Switzerland**
 61 Skilled agricultural and fishery workers - **Iceland**
 81 Stationary-plant and related operators - **Norway**
 83 Drivers and mobile plant operators - **Norway**
 92 Agricultural, fishery and related labourers - **Iceland**

The two most frequently recorded occupations with regard to noise exposure were 'Metal machinery and related trades workers' and 'Labourers in mining, construction, manufacturing and transport'.

The following table provides an overview of the occupations indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Occupations	EFTA Countries	EU-Member States ⁷⁰
01 Armed Forces	2	1
61 Skilled agricultural and fishery workers	1	1
71 Extraction and building trades workers	3	6
72 Metal, machinery and related trades workers	4	12
81 Stationary-plant and related operators	1	10
82 Machine operators and assemblers	2	14
83 Drivers and mobile plant operators	1	5
92 Agricultural, fishery and related labourers	1	-
93 Labourers in mining, construction, manufacturing and transport	4	9

The same picture was seen for both the EFTA Countries and EU Member States with regard to the occupations 'Metal, machinery and related trades workers' and 'Labourers in mining, construction, manufacturing and transport'.

Noise - company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk'.

Liechtenstein and Switzerland indicated 'small and medium enterprises'. Iceland indicated 'small companies'. Norway had inconclusive data, and therefore no information could be provided.

These findings for the EFTA Countries are similar to the EU picture, which indicated that small companies employing less than 49 employees were most at risk with regard to noise exposure.

Noise - gender at risk

Each EFTA Focal Point was asked to: 'State which gender category has a particular high risk'.

Gender category most at risk	Number of EFTA Focal Point responses
Female	0 (0) ⁷¹
Male	4 (11)
No response	0 (4)

⁷⁰ Number of Focal Points indications

⁷¹ Number of Focal Point responses in brackets

In their national reports all 4 EFTA Focal Points reported that the male workers were most at risk in the workplace. This is in line with the responses of the Focal Points.

Noise - age at risk

Each EFTA Focal Point was asked to: 'State which age category has a particular high risk'.

Iceland, Liechtenstein and Switzerland indicated the age category 25-54 years. Norway regarded this risk category as not relevant.

The age category 25-54 years is indicated as having the highest risk for the EFTA Countries. Data provided by Focal Points did not allow a European picture with regard to noise and age at risk. But younger persons were considered by the Focal Points to be most vulnerable to noise exposure.

Noise - employment status at risk

Each EFTA Focal Point was asked to: 'State if employment status is of importance'.

Iceland and Norway indicated 'permanent employment'. Liechtenstein reported 'full-time employment'. Switzerland regarded this risk category as not relevant.

The Focal Points mentioned temporary workers, self-employed workers, fixed term contract workers, those on apprenticeships and casual labour to be the status of worker at risk from noise exposure.

Noise - trend in the number of workers exposed

Each EFTA Focal Point was asked to: 'Consider if the number of workers exposed to noise over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by 3 EFTA Focal Points (by 6 Focal Points): **Iceland, Liechtenstein and Switzerland** (Austria, Belgium, Finland, Luxembourg, Portugal and Spain)

Stable trend indicated by 1 EFTA Focal Point (by 6 Focal Points): **Norway** (Denmark, Greece, Netherlands, Ireland, Italy, and Sweden*)

Increased trend indicated by no EFTA Focal Point (by 2 Focal Points): - (France and Germany)

Category 'Other' indicated by no EFTA Focal Point (by 1 Focal Point): - (United Kingdom**)

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

* This trend refers to male workers. The number of female workers being exposed to noise increased (1991 12.4%, 1997 14.4%)

** The trend regarding the number of workers exposed to noise over the last 3-5 years is unknown.

A decreasing trend is indicated for 3 EFTA Countries. Data provided by the Focal Points indicated a decreasing or stable trend in the Member States.

The EFTA Focal Points submitted the following comments in relation to the trends:

Iceland: Insufficient information to draw conclusions.

Norway: There is reason to believe that the increasing number of reports of hearing damages is due to better occupational health services. However, there might be areas with increased risk without sufficient prevention action. Action is taken by the Labour Inspection to give an answer.

Switzerland: The distribution in sectors and occupations is expected to change as a result of changing work patterns. Many traditionally noisy jobs in industry are being eliminated or the noise exposure reduced; however the need for workers to concentrate has increased.

Noise - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by no EFTA Focal Point (by 6 Focal Points): - (Austria, Denmark, Greece, Netherlands, Luxembourg and Sweden)

Development of additional preventive action was indicated by 4 EFTA Focal Points (by 7 Focal Points): **Iceland, Liechtenstein, Norway and Switzerland** (Belgium, Finland, Ireland, Italy, Portugal, Spain and United Kingdom)

The category 'Other' was indicated by no EFTA Focal Point (by 1 Focal Point): - (France)

For all the EFTA Countries additional prevention action was reported as needed. The need for development of additional prevention action is less pronounced in the European Union. For six of the fifteen Member States it was indicated that taken/planned preventive actions were sufficient, while for seven Member States a need for development was indicated.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Iceland: Employers and employees need to be informed on the hazard of noise exposure; also on their responsibility in reducing the noise level at the workplace.

Liechtenstein: Examination of workplaces in respect of harmful noise. Giving orders for hearing tests and technical noise protection measures. Motivation of employees to wear hearing protection equipment.

Norway: Reporting of hearing damages is increasing. This gives a better basis for preventive actions. Most sectors with noise problems have occupational health services, which can assist in planning actions. Sufficient legal framework exists, but requires better enforcement. Need for greater efforts to influence the attitudes of employers and employees.

Switzerland: The nuisance value of noise at the workplace and its role in stress-related disorders needs to be more addressed than it has been. Preventive measures in small enterprises need to be improved.

3.3 VIBRATION

Sectors

- 45 Construction - **Iceland, Liechtenstein, Norway, Switzerland**
- 01 Agriculture, hunting and related service activities - **Liechtenstein, Norway, Switzerland**
- 02 Forestry, logging and related service activities - **Liechtenstein, Norway, Switzerland**
- 60 Land transport; transport via pipelines - **Iceland, Liechtenstein, Switzerland**
- 50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel - **Iceland, Norway**
- 05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing - **Iceland**
- 20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials - **Iceland**
- 27 Manufacture of basic metals - **Norway**
- 28 Manufacture of fabricated metal products, except machinery and equipment - **Liechtenstein**
- 62 Air transport - **Switzerland**

The most recorded sector with regard to vibration exposure is 'Construction'.

The following table provides an overview on the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Sectors	EFTA Countries	EU-Member States ⁷²
01 Agriculture, hunting and related service activities	3	6
02 Forestry, logging and related service activities	3	5
05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing	1	-
14 Other mining and quarrying	-	6
20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	1	-
27 Manufacture of basic metals	1	-
28 Manufacture of fabricated metal products, except machinery and equipment	1	9
45 Construction	4	11
50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel	2	-
60 Land transport; transport via pipelines	3	6
62 Air transport	1	-

Both for the EFTA Countries and the EU Member States 'Construction' was indicated as the most recorded sector with regard to vibration exposure. Furthermore, for the EFTA Countries 'Agriculture, hunting and related service activities', 'Forestry, logging and related service activities' and 'Land transport; transport via pipelines' were indicated as high-risk sectors regarding vibration exposure. These two sectors were also mentioned for six and five of the Member States respectively. For nine of the Member States 'Manufacture of fabricated metal products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials' was pointed out as a high-risk sector, while only for one of the EFTA Countries this sector was pointed out.

Occupations

- 83 Drivers and mobile plant operators - **Iceland, Liechtenstein, Norway, Switzerland**
- 82 Machine operators and assemblers - **Iceland, Liechtenstein, Switzerland**
- 93 Labourers in mining, construction, manufacturing and transport - **Liechtenstein, Norway, Switzerland**
- 61 Skilled agricultural and fishery workers - **Liechtenstein, Switzerland**
- 81 Stationary-plant and related operators - **Iceland, Norway**
- 71 Extraction and building trades workers- **Iceland**
- 72 Metal, machinery and related trades workers - **Iceland**
- 74 Other craft and related trades workers - **Norway**
- 92 Agricultural, fishery and related labourers - **Norway**

The most recorded occupation with regard to vibration exposure is 'Drivers and mobile plant operators'.

The following table provides an overview of the occupations indicated for the EFTA Countries and the picture in the Member States of the European Union.

⁷² Number of Focal Points indications

Overview table

Occupations	EFTA Countries	EU-Member States ⁷³
61 Skilled agricultural and fishery workers	2	-
71 Extraction and building trades workers	1	10
72 Metal, machinery and related trades workers	1	9
74 Other craft and related trades workers	1	-
81 Stationary-plant and related operators	2	-
82 Machine operators and assemblers	3	6
83 Drivers and mobile plant operators	4	10
92 Agricultural, fishery and related labourers	1	6
93 Labourers in mining, construction, manufacturing and transport	3	10

Both for the EFTA Countries and the Member States of the European Union 'Drivers and mobile plant operators' was among the most recorded occupations with regard to vibration exposure. Also 'Labourers in mining, construction, manufacturing and transport' was mentioned for both EFTA Countries and Member States as an often recorded occupation regarding vibration exposure.

Vibration - company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk'.

Iceland and Switzerland indicated 'smaller companies'. Liechtenstein indicated 'small and medium enterprises'. Norway had inconclusive data, therefore no information could be provided.

Data provided by the Focal Points did not allow a European picture with regard to vibration and company size at risk.

Vibration - gender at risk

Each EFTA Focal Point was asked to: 'State which gender category has a particular high risk'.

The following information was provided:

Gender category most at risk	Number of EFTA Focal Point responses
Female	0 (0) ⁷⁴
Male	4 (11)
No response	0 (4)

In their national reports all 4 EFTA Focal Points reported that the male workers were most exposed to vibration in the workplace. This is in line with the responses of the Focal Points.

Vibration - age at risk

Each EFTA Focal Point was asked to: 'State which age category has a particular high risk'.

Iceland, Liechtenstein and Switzerland indicated the age category 25-54 years. Norway responded that data is inconclusive, though, it is possible that elder workers are most exposed.

The age category 25-54 years was in general indicated as having the highest risk for the EFTA Countries. Data provided by Focal Points did not allow a European Picture with regard to vibration and age at risk.

⁷³ Number of Focal Points indications

⁷⁴ Number of Focal Point responses in brackets

Vibration - employment status at risk

Each EFTA Focal Point was asked to: 'State if employment status is of importance'.

Iceland indicated 'permanent employment'. Liechtenstein reported 'full-time employment'. Norway had inconclusive data, therefore no data could be provided. Switzerland regarded this risk category as not relevant.

In the Member States the self-employed and contractors were considered to be at risk from vibration.

Vibration - trend in the number of workers exposed

Each EFTA Focal Point was asked to: 'Consider if the number of workers exposed to vibration over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by 2 EFTA Focal Points (by 4 Focal Points): **Iceland and Switzerland** (Belgium, Finland, Germany and Greece).

Stable trend indicated by 2 EFTA Focal Points (by 6 Focal Points): **Liechtenstein and Norway** (Austria, Denmark, Netherlands, Portugal, Spain and Sweden*)

Increased trend indicated by no EFTA Focal Point (by 3 Focal Points): - (France, Ireland and Italy)

Category 'Other' indicated by no EFTA Focal Point (by 2 Focal Points): - (Luxembourg and United Kingdom **)

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

* This trend is based on male (1991 12.8 %; 1997 11.4 %) and female (1991 1.5 %; 1997 1.7 %)

** The trend regarding the number of workers exposed to noise over the last 3-5 years is unknown.

A decreasing or stable trend was indicated by two EFTA Countries each. The data provided by the Focal Points showed individual Member States where the trend was decreasing or stable or increasing.

Vibration - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by 1 EFTA Focal Point (by 3 Focal Points): **Iceland** (Greece, Netherlands and Sweden)

Development of additional preventive action was indicated by 3 EFTA Focal Points (by 9 Focal Points): **Liechtenstein, Norway and Switzerland** (Austria, Belgium, Denmark, Finland, Ireland, Italy, Portugal, Spain and United Kingdom)

The category 'Other' was indicated by no EFTA Focal Point (by 2 Focal Points): - (France and Luxembourg)

Three EFTA Countries saw a need for the development of additional preventive action. 9 Member States expressed the same need.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Norway: Little is done in this area. There is a need for norms and information.

Liechtenstein: Registration of vibrations at workplaces. Giving orders for technical and organisational measures at workplaces.

Switzerland: Additional data is required to assess reliably the seriousness of the problem.

3.4 HIGH TEMPERATURE

Sectors

- 27 Manufacture of basic metals - **Iceland, Norway, Switzerland**
- 55 Hotels and restaurants - **Liechtenstein, Norway, Switzerland**
- 28 Manufacture of fabricated metal products, except machinery and equipment - **Liechtenstein, Switzerland**
- 60 Land transport; transport via pipelines - **Liechtenstein, Switzerland**
- 15 Manufacture of food products and beverages - **Liechtenstein**
- 29 Manufacture of machinery and equipment NEC - **Liechtenstein**
- 45 Construction - **Norway**
- 75 Public administration and defence; compulsory social security - **Norway**
- 80 Education - **Norway**
- 93 Other service activities - **Switzerland**

The two most recorded sectors with regard to exposure to high temperature were 'Manufacture of basic metals' and 'Hotels and restaurants'.

The following table provides an overview on the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Sectors	EFTA Countries	EU-Member States ⁷⁵
15 Manufacture of food products and beverages	1	9
26 Manufacture of other non-metallic mineral products	-	8
27 Manufacture of basic metals	3	10
28 Manufacture of fabricated metal products, except machinery and equipment	2	5
29 Manufacture of machinery and equipment NEC	1	-
45 Construction	1	-
55 Hotels and restaurants	3	-
60 Land transport; transport via pipelines	2	-
75 Public administration and defence; compulsory social security	1	-
80 Education	1	-
93 Other service activities	1	-

'Manufacture of basic metals' was the most recorded sector both for the EFTA Countries and the EU Member States. 'Hotels and restaurants' was not pointed out as a high-risk sector regarding high temperature for the EU Member States. For many of the EU Member States 'Manufacture of other non-metallic mineral products' and 'Manufacture of food products and beverages' were pointed out as high-risk sectors; sectors which were pointed out for none or only one of the EFTA Countries.

⁷⁵ Number of Focal Points indications

Occupations

- 72 Metal, machinery and related trades workers - **Iceland, Liechtenstein, Switzerland**
 74 Other craft and related trades workers - **Liechtenstein, Norway, Switzerland**
 83 Drivers and mobile plant operators - **Liechtenstein, Norway, Switzerland**
 91 Sales and services elementary occupations - **Liechtenstein, Switzerland**
 33 Teaching associate professionals - **Norway**
 41 Office clerks - **Norway**
 81 Stationary-plant and related operators - **Iceland**
 82 Machine operators and assemblers - **Norway**

The three most recorded occupations with regard to high temperature exposure were 'Metal, machinery and related trades workers', 'Other craft and related trades workers' and 'Drivers and mobile plant operators'.

The following table provides an overview of the occupations indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Occupations	EFTA Countries	EU-Member States ⁷⁶
33 Teaching associate professionals	1	-
41 Office clerks	1	-
71 Extraction and building trades workers	-	4
72 Metal, machinery and related trades workers	3	8
74 Other craft and related trades workers	3	5
81 Stationary-plant and related operators	1	6
82 Machine operators and assemblers	1	5
83 Drivers and mobile plant operators	3	-
91 Sales and services elementary occupations	2	-
93 Labourers in mining, construction, manufacturing and transport	-	10

For a majority of the EFTA Countries and the EU Member States 'Metal, machinery and related trades workers' was assessed as an occupation with high risk regarding exposure of high temperature. Also for three of the EFTA Countries 'Drivers and mobile plant operators' was assessed as a high-risk occupation with regard to high temperature exposure. For none of the EU Member States this occupation was pointed out. For ten of the EU Member States 'Labourers in mining, construction, manufacturing and transport' was assessed as an occupation with high risk for being exposed to high temperature. This sector was not pointed out for any EFTA Countries.

High temperature - company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk'.

Iceland indicated 'medium sized companies'. *Liechtenstein* indicated 'small and medium enterprises'. *Switzerland* indicated 'smaller companies'. *Norway* had inconclusive data, therefore no information could be provided.

Data provided by Focal Points did not allow a European picture with regard to high temperature and company size at risk.

High temperature - gender at risk

Each EFTA Focal Point was asked to: 'State, which gender category has a particular high risk'.

The following information was provided:

⁷⁶ Number of Focal Points indications

Gender category most at risk	Number of EFTA Focal Point responses
Female	1 (0) ⁷⁷
Male	3 (10)
No response	0 (5)

In their national reports *Iceland* and *Liechtenstein* reported that the male workers were most exposed to high temperature in the work place. *Norway* reported that both female and male workers were most exposed to high temperature. *Switzerland* reported no relevance. Males were also mentioned as the gender most exposed by the majority of the EU Member States.

High temperature - age at risk

Each EFTA Focal Point was asked to: 'State, which age category has a particular high risk'.

Iceland and *Liechtenstein* indicated the age category 25-54 years. *Switzerland* reported the age category >55 years. *Norway* had inconclusive data but pointed out that risk increases with high blood pressure, which again increases with age.

Several Focal Points identified younger worker, less than 25 years old, as being exposed to high temperature.

High temperature - employment status at risk

Each EFTA Focal Point was asked to: 'State if employment status is of importance'.

Iceland and *Norway* indicated 'permanent employment'. *Liechtenstein* reported 'full-time employment'. *Switzerland* regarded this risk category as not relevant.

Data provided by Focal Points did not allow a European picture with regard to high temperature and employment status at risk.

High temperature - trend in the number of workers exposed

Each EFTA Focal Point was asked to: 'Consider if the number of workers exposed to high temperature over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by 1 EFTA Focal Point (by 2 Focal Points): **Switzerland** (Belgium and Portugal)

Stable trend indicated by 3 EFTA Focal Points (by 9 Focal Points): **Iceland, Liechtenstein and Norway** (Austria, Denmark, Finland, France, Greece, Italy, Luxembourg, Spain and Sweden*)

Increased trend indicated by no EFTA Focal Point (by 1 Focal Point): - (Germany)

Category 'Other' indicated by no EFTA Focal Point (by 3 Focal Points): - (Netherlands, Ireland and United Kingdom)

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

* This trend is based on male (1991 7.9 %; 1997 8.2 %) and female (1991 4.1 %; 1997 3.6 %)

** The trend regarding the number of workers exposed to noise over the last 3-5 years is unknown.

A decreasing trend was indicated for 3 EFTA Countries, while 9 EU Member States indicated a stable trend.

High temperature - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

⁷⁷ Number of Focal Point responses in brackets

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by 3 EFTA Focal Points (by 5 Focal Points): **Iceland, Norway and Switzerland** (Austria, Denmark, Luxembourg, Netherlands and Sweden)

Development of additional preventive action was indicated by 1 EFTA Focal Point (by 6 Focal Points): **Liechtenstein** (Belgium, Finland, Greece, Italy, Portugal and Spain)

The category 'Other' was indicated by no EFTA Focal Point (by 2 Focal Points): - (France and Ireland)

No response: - (United Kingdom)

Three EFTA Countries indicated that the taken or planned preventive actions were sufficient. However, 6 EU Member States indicated that additional preventive action needed to be developed.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Liechtenstein: Improvement of climatic conditions in working rooms by installation of room ventilations.

3.5

LOW TEMPERATURE

Sectors

- 02 Forestry, logging and related service activities - **Liechtenstein, Norway, Switzerland**
- 45 Construction - **Liechtenstein, Norway, Switzerland**
- 05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing **Iceland, Norway**
- 15 Manufacture of food products and beverages - **Liechtenstein, Switzerland**
- 01 Agriculture, hunting and related service activities - **Liechtenstein**
- 40 Electricity, gas, steam and hot water supply - **Norway**
- 51 Wholesale trade and commission trade, except of motor vehicles and motorcycles - **Switzerland**
- 55 Hotels and restaurants - **Switzerland**
- 60 Land transport; transport via pipelines - **Liechtenstein**
- 64 Post and telecommunications - **Norway**

The two most recorded sectors with regard to low temperature exposure were 'Forestry, logging and related service activities' and 'Construction'.

The following table provides an overview on the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Sectors	EFTA Countries	EU-Member States ⁷⁸
01 Agriculture, hunting and related service activities	1	5
02 Forestry, logging and related service activities	3	4
05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing	2	6
15 Manufacture of food products and beverages	2	9
40 Electricity, gas, steam and hot water supply	1	3
45 Construction	3	9
51 Wholesale trade and commission trade, except of motor vehicles and motorcycles	1	-
55 Hotels and restaurants	1	-
60 Land transport; transport via pipelines	1	-
64 Post and telecommunications	1	-
90 Sewage and refuse disposal, sanitation and similar activities	-	3

'Construction' was assessed as a sector with high risk regarding low temperature for both the EFTA Countries and the EU Member States. Furthermore, for three EFTA Countries 'Forestry, logging and related service activities' was pointed out as a high-risk sector. This sector was pointed out for less than a third part of the EU Member States.

Occupations

- 93 Labourers in mining, construction, manufacturing and transport - **Liechtenstein, Norway, Switzerland**
- 61 Skilled agricultural and fishery workers - **Iceland, Norway**
- 71 Extraction and building trades workers - **Liechtenstein, Norway**
- 74 Other craft and related trades workers - **Liechtenstein, Switzerland**
- 82 Machine operators and assemblers - **Liechtenstein, Switzerland**
- 92 Agricultural, fishery and related labourers - **Liechtenstein, Norway**
- 72 Metal, machinery and related trades workers - **Norway**

The most recorded occupation with regard to low temperature was 'Labourers in mining, construction, manufacturing and transport'.

The following table provides an overview on the occupations indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Occupations	EFTA Countries	EU-Member States ⁷⁹
61 Skilled agricultural and fishery workers	2	6
71 Extraction and building trades workers	2	8
72 Metal, machinery and related trades workers	1	-
74 Other craft and related trades workers	2	6
82 Machine operators and assemblers	2	-
92 Agricultural, fishery and related labourers	2	7
93 Labourers in mining, construction, manufacturing and transport	3	8

The assessment which occupations were most at risk regarding low temperature was distributed on more occupation categories. However, 'Labourers in mining, construction, manufacturing and transport' was assessed as the occupation with highest risk for both the EFTA Countries and the EU Member States.

⁷⁸ Number of Focal Points indications

⁷⁹ Number of Focal Points indications

Low temperature - company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk'.

Iceland, Liechtenstein and Switzerland indicated 'small companies'. Norway indicated 'small and medium enterprises'.

For the EFTA Countries small companies, or in the case of Norway, small and medium sized enterprises, were indicated as the companies having highest risk with regard to low temperature exposure. Data provided by the Focal Points did not allow a European picture with regard to low temperature and company size at risk.

Low temperature - gender at risk

Each EFTA Focal Point was asked to: 'State, which gender category has a particular high risk'.

The following information was provided:

Gender category most at risk	Number of EFTA Focal Point responses
Female	1 (0) ⁸⁰
Male	2 (8)
No response/insufficient data	1 (7)

In their national report *Switzerland* reported that the female workers were most exposed to low temperature. *Liechtenstein* and *Norway* reported that the male workers were most exposed to low temperature in the workplace. *Iceland* has insufficient data. The EU Member States assessed males as the gender mostly exposed to low temperature.

Low temperature - age at risk

Each EFTA Focal Point was asked to: 'State, which age category has a particular high risk'.

Iceland indicated the age category 25-54 years. *Liechtenstein* and *Switzerland* stated the age category >55 years. *Norway* had inconclusive data, and therefore no information could be provided.

The European Member States considered the older individual to be more susceptible to ill effects of cold conditions.

Low temperature - employment status at risk

Each EFTA Focal Point was asked to: 'State if employment status is of importance'.

Iceland and *Norway* indicated 'permanent employment'. *Liechtenstein* reported 'full-time employment'. *Switzerland* regarded this risk category as not relevant.

Data provided by Focal Points did not allow a European picture with regard to low temperature and employment status at risk.

Low temperature - trend in the number of workers exposed

Each EFTA Focal Point was asked to: 'Consider if the number of workers exposed to low temperature over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by 2 EFTA Focal Points (by 3 Focal Points): **Norway and Switzerland** (Belgium, Germany and Sweden*)

Stable trend indicated by 1 EFTA Focal Point (by 7 Focal Points): **Iceland** (Austria, Denmark, Finland, France, Greece, Italy and Spain)

Increased trend indicated by 1 EFTA Focal Point (by 1 Focal Point): **Liechtenstein** (Portugal)

Category 'Other' indicated by no EFTA Focal Point (by 4 Focal Points): - (Netherlands, Ireland, Luxembourg and United Kingdom**)

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

* This trend is based on males (1991 24.6 %; 1997 22.3 %)

** The trend regarding the number of workers exposed to noise over the last 3-5 years is unknown.

⁸⁰ Number of Focal Point responses in brackets

3 EFTA Countries indicated a decreasing trend, while only for three of the fifteen EU Member States a decreasing trend was indicated.

Low temperature - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by 3 EFTA Focal Points (by 3 Focal Points): Iceland, Norway and Switzerland (Denmark, Greece and Netherlands)
Development of additional preventive action was indicated by 1 EFTA Focal Point (by 7 Focal Points): Liechtenstein (Austria, Belgium, Finland, Italy, Portugal, Spain and Sweden)
The category 'Other' was indicated by no EFTA Focal Point (by 1 Focal Point): - (France)
No response: - (Ireland, Luxembourg and United Kingdom)

For three EFTA Countries the taken or planned preventive actions was indicated to be sufficient. This was the case for only three of the EU Member States, while for seven EU Member States it was indicated that additional preventive action needed to be developed.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Liechtenstein: Not yet established.

3.6 LIFTING/ MOVING HEAVY LOADS

Sectors

- 01 Agriculture, hunting and related service activities - **Iceland, Liechtenstein, Norway, Switzerland**
- 45 Construction - **Iceland, Liechtenstein, Norway, Switzerland**
- 60 Land transport; transport via pipelines - **Iceland, Liechtenstein, Norway, Switzerland**
- 85 Health and social work - **Iceland, Norway, Switzerland**
- 52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods - **Liechtenstein, Switzerland**
- 02 Forestry, logging and related service activities - **Norway**
- 05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing - **Iceland**
- 15 Manufacture of food products and beverages - **Norway**
- 28 Manufacture of fabricated metal products, except machinery and equipment - **Liechtenstein**
- 64 Post and telecommunications - **Switzerland**

The three most recorded sectors with regard to lifting/moving heavy loads were 'Agriculture, hunting and related service activities', 'Construction' and 'Land transport; transport via pipelines'.

The following table provides an overview on the sectors indicated by the EFTA Focal Points and the picture in the Member States of the European Union.

Overview table

Sectors	EFTA Countries	EU-Member States ⁸¹
01 Agriculture, hunting and related service activities	4	9
02 Forestry, logging and related service activities	1	-
05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing	1	-
14 Other mining and quarrying	-	3
15 Manufacture of food products and beverages	1	-
20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	-	4
28 Manufacture of fabricated metal products, except machinery and equipment	1	6
45 Construction	4	14
52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	2	-
60 Land transport; transport via pipelines	4	-
64 Post and telecommunications	1	-
85 Health and social work	3	8

'Construction' was the sector assessed of being most at risk regarding lifting/moving heavy loads in the EFTA Countries and the EU Member States. 'Land transport; transport via pipelines' was mentioned for all the EFTA Countries, but was not mentioned for any of the EU Member States. 'Agriculture, hunting and related service activities' was mentioned for all the EFTA Countries and was also pointed out for nine of the fifteen EU Member States.

Occupations

- 71 Extraction and building trades workers - **Iceland, Liechtenstein, Norway, Switzerland**
- 92 Agricultural, fishery and related labourers - **Iceland, Liechtenstein, Switzerland**
- 93 Labourers in mining, construction, manufacturing and transport - **Iceland, Liechtenstein, Switzerland**
- 32 Life science and health associate professionals - **Iceland, Switzerland**
- 61 Skilled agricultural and fishery workers - **Iceland, Norway**
- 91 Sales and services elementary occupations - **Liechtenstein, Switzerland**
- 51 Personal and protective services workers - **Norway**
- 72 Metal, machinery and related trades workers - **Liechtenstein**
- 82 Machine operators and assemblers - **Norway**
- 83 Drivers and mobile plant operators - **Norway**

The most recorded occupation with regard to lifting/moving heavy loads was 'Extraction and building trades workers'.

The following table provides an overview on the occupations indicated by the EFTA Focal Points and the picture in the Member States of the European Union.

⁸¹ Number of Focal Points indications

Overview table

Occupations	EFTA Countries	EU-Member States ⁸²
32 Life science and health associate professionals	2	6
51 Personal and protective services workers	1	-
61 Skilled agricultural and fishery workers	2	-
71 Extraction and building trades workers	4	5
72 Metal, machinery and related trades workers	1	7
82 Machine operators and assemblers	1	5
83 Drivers and mobile plant operators	1	-
91 Sales and services elementary occupations	2	5
92 Agricultural, fishery and related labourers	3	-
93 Labourers in mining, construction, manufacturing and transport	3	11

For all EFTA Countries 'Extraction and building trades workers' was assessed as the occupation being most at risk with regard to lifting/moving heavy loads. This occupation category was only pointed out for a third part of the EU Member States. 'Labourers in mining, construction, manufacturing and transport' was the occupation recorded most at risk in the EU Member States and this occupation was also recorded for three EFTA Countries.

Lifting/moving heavy loads - company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk'.

Liechtenstein and Norway indicated 'small and medium enterprises'. Switzerland indicated 'small companies'. Iceland had insufficient data, and therefore no information could be provided.

Data provided by the Focal Points did not allow a European picture with regard to lifting/moving heavy loads and company size at risk.

Lifting/moving heavy loads - gender at risk

Each EFTA Focal Point was asked to: 'State which gender category has a particular high risk'.

The following information was provided:

Gender category most at risk	Number of EFTA Focal Point responses
Female	0 (3) ⁸³
Male	2 (5)
Both gender	1
Not relevant	1
No response	0 (7)

In their national reports Iceland and Liechtenstein reported that the male workers were most exposed to lifting/moving heavy loads. Norway reported both female and male workers. Switzerland reported that gender has no relevance.

A total of five Focal Points identified males and three Focal Points identified females to be most exposed to lifting/moving heavy loads.

Lifting/moving heavy loads - age at risk

Each EFTA Focal Point was asked to 'State, which age category has a particular high risk'.

Norway indicated elder workers may seem more prevalent, but this must be seen in relation to the time being in the same occupation as well as natural selection. Iceland had insufficient data, and therefore no information could be provided. Liechtenstein and Switzerland regarded this risk category as not relevant.

Comments made in the national reports of the EU Member States identify the younger individuals as being more exposed to carrying out lifting of heavy loads.

⁸² Number of Focal Points indications

⁸³ Number of Focal Point responses in brackets

Lifting/moving heavy loads - employment status at risk

Each EFTA Focal Point was asked to: 'State if employment status is of importance'.

Liechtenstein reported 'full-time employment'. *Norway* indicated 'permanent employment'. *Switzerland* regarded this risk category as not relevant. *Iceland* had insufficient data, and therefore no information could be provided.

Data provided by Focal Points did not allow a European picture with regard to lifting/moving heavy loads and employment status at risk.

Lifting/moving heavy loads - trend in the number of workers exposed

Each EFTA Focal Point was asked to: 'Consider if the number of workers exposed to lifting/moving heavy loads over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by no EFTA Focal Point (by 6 Focal Points): - (Belgium, Denmark, Greece, Italy, Luxembourg and Sweden)

Stable trend indicated by 4 EFTA Focal Points (by 4 Focal Points): **Iceland, Liechtenstein, Norway and Switzerland** (Austria, Finland, Germany and Netherlands)

Increased trend indicated by no EFTA Focal Point (by 2 Focal Points): - (Portugal and Spain)

Category 'Other' indicated by no EFTA Focal Point (by 3 Focal Points): - (France, Ireland and United Kingdom)

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

All EFTA Countries indicated a stable trend, whereas 6 Focal Points indicated a decreased trend.

Lifting/moving heavy loads - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by 1 EFTA Focal Point (by 3 Focal Points): **Iceland** (Greece, Luxembourg and Netherlands)

Development of additional preventive action was indicated by 3 EFTA Focal Points (by 9 Focal Points): **Liechtenstein, Norway and Switzerland** (Austria, Denmark, Finland, Italy, Portugal, Spain, Sweden and United Kingdom)

The category 'Other' was indicated by no EFTA Focal Point (by 1 Focal Point): - (France)

No response: - (Ireland)

Three EFTA Countries saw a need for developing additional preventive action. Also 9 EU Member States indicated that development of additional preventive action was needed.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Liechtenstein: Changes in working method and use of aids and jacks.

Norway: More technical aids, more training, increased staffing and better organisation of the work.

Switzerland: Attention is currently being focussed on the manual handling tasks of checkout cashiers.

3.7

REPETITIVE MOVEMENTS

Sectors

- 15 Manufacture of food products and beverages - **Iceland, Liechtenstein, Norway, Switzerland**
 52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods - **Liechtenstein, Norway, Switzerland**
 72 Computer and related activities - **Iceland, Liechtenstein, Switzerland**
 17 Manufacture of textiles - **Iceland, Norway**
 18 Manufacture of wearing apparel; dressing and dyeing of fur - **Iceland, Norway**
 05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing - **Iceland**
 19 Tanning and dressing of leather; manufacture of luggage, handbags - **Norway**
 28 Manufacture of fabricated metal products, except machinery and equipment - **Liechtenstein**
 32 Manufacture of radio, television and communication equipment and apparatus - **Switzerland**
 33 Manufacture of medical, precision and optical instruments, watches and clocks - **Switzerland**
 64 Post and telecommunications - **Liechtenstein**
 74 Other business activities - **Norway**
 75 Public administration and defence; compulsory social security - **Norway**
 93 Other service activities - **Norway**

The most recorded sector with regard to repetitive movements was 'Manufacture of food products and beverages'.

The following table provides an overview on the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Sectors	EFTA Countries	EU-Member States ⁸⁴
05 Fishing, operation of fish hatcheries and fish farms; service activities related to fishing	1	-
15 Manufacture of food products and beverages	4	9
17 Manufacture of textiles	2	5
18 Manufacture of wearing apparel; dressing and dyeing of fur	2	5
19 Tanning and dressing of leather; manufacture of luggage, handbags	1	3
28 Manufacture of fabricated metal products, except machinery and equipment	1	3
32 Manufacture of radio, television and communication equipment and apparatus	1	-
33 Manufacture of medical, precision and optical instruments, watches and clocks	1	-
52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	3	-
60 Land transport; transport via pipelines	-	5
64 Post and telecommunications	1	-
72 Computer and related activities	3	-
74 Other business activities	1	-
75 Public administration and defence; compulsory social security	1	-
93 Other service activities	1	-

⁸⁴ Number of Focal Points indications

Both for the EFTA Countries and the EU Member States it was indicated that the sector 'Manufacture of food products and beverages' was most of risk with regard to repetitive movements.

Occupations

- 41 Office clerks - **Iceland, Liechtenstein, Norway, Switzerland**
- 91 Sales and services elementary occupations - **Liechtenstein, Norway, Switzerland**
- 82 Machine operators and assemblers - **Liechtenstein, Norway**
- 93 Labourers in mining, construction, manufacturing and transport - **Iceland, Switzerland**
- 52 Models, salespersons and demonstrators - **Norway**
- 72 Metal, machinery and related trades workers - **Liechtenstein**
- 92 Agricultural, fishery and related labourers - **Iceland**

The occupation most recorded with regard to repetitive movements was 'Office clerks'.

The following table provides an overview on the occupations indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Occupations	EFTA Countries	EU-Member States ⁸⁵
41 Office clerks	4	-
42 Customer services clerks	-	7
52 Models, salespersons and demonstrators	1	-
72 Metal, machinery and related trades workers	1	-
74 Other craft and related trades workers	-	5
82 Machine operators and assemblers	2	11
91 Sales and services elementary occupations	3	7
92 Agricultural, fishery and related labourers	1	-
93 Labourers in mining, construction, manufacturing and transport	2	8

The occupation 'Office clerks' which was indicated as being most of risk for the EFTA Countries was not mentioned for any of the EU Member States. 'Machine operators and assemblers' was the occupation indicated as most of risk regarding repetitive movements for the EU Member States. This occupation was also mentioned for two EFTA Countries.

Repetitive movements - company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk'.

Liechtenstein indicated 'small and medium sized companies'. Norway and Switzerland indicated 'medium and large enterprises'. Iceland had insufficient data, and therefore no information could be provided.

Data provided by the Focal Points did not allow a European picture with regard to repetitive movement and company size at risk.

Repetitive movements - gender at risk

Each EFTA Focal Point was asked to: 'State, which gender category has a particular high risk'.

The following information was provided:

Gender category most at risk	Number of EFTA Focal Point responses
Female	4 (7) ⁸⁶
Male	0 (1)
No response	0 (8)

⁸⁵ Number of Focal Points indications

⁸⁶ Number of Focal Point responses in brackets

In their national reports all 4 EFTA Focal Points reported that the female workers were most exposed to repetitive movements in the workplace. Also for 7 EU Member States females were reported as the gender most of risk regarding repetitive movements.

Repetitive movements - age at risk

Each EFTA Focal Point was asked to: 'State, which age category has a particular high risk'.

Norway indicated the age category < 25 years. Iceland had insufficient data, and therefore no information could be provided. Liechtenstein and Switzerland regarded this risk category as not relevant.

It was reported in several EU Member States reports that younger workers (<30 years), particularly young females, were frequently more exposed to repetitive tasks.

Repetitive movements - employment status at risk

Each EFTA Focal Point was asked to: 'State if employment status is of importance'.

Liechtenstein reported 'full-time employment'. Norway indicated apprentices, seasonal workers and labour market measures. Iceland had insufficient data, and therefore no information could be provided. Switzerland regarded this risk category as not relevant.

Data provided by the Focal Points did not allow a European picture with regard to repetitive movements and employment status at risk.

Repetitive movements - trend in the number of workers exposed

Each EFTA Focal Point was asked to: 'Consider if the number of workers exposed to repetitive movements over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by no EFTA Focal Point (by 2 Focal Points): - (Belgium and France)

Stable trend indicated by 1 EFTA Focal Point (by 3 Focal Points): **Iceland** (Germany, Greece and Netherlands)

Increased trend indicated by 3 EFTA Focal Points (by 5 Focal Points): **Liechtenstein, Norway and Switzerland** (Denmark, Finland, Portugal, Spain and Sweden*)

Category 'Other' indicated by no EFTA Focal Point (by 5 Focal Points): - (Austria***, Ireland, Italy, Luxembourg and United Kingdom**)

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

* This trend is based on 'Repetitive tasks several times per hour' - half the time or more.

** The trend regarding the number of workers exposed to noise over the last 3-5 years is unknown.

*** No available data regarding number of exposed workers

For three EFTA Countries an increased trend with regard to repetitive movements was considered. 5 EU Member States shared this assessment.

Repetitive movements - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by no EFTA Focal Point (by 3 Focal Points): - (Denmark, Greece and Netherlands)

Development of additional preventive action was indicated by 4 EFTA Focal Points (by 7 Focal Points): **Iceland, Liechtenstein, Norway and Switzerland** (Austria, Belgium, Finland, Italy, Portugal, Spain and Sweden)

The category 'Other' was indicated by no EFTA Focal Point (by 1 Focal Point): - (France)

No response: - (Ireland, Luxembourg and United Kingdom)

All EFTA Countries indicated that additional preventive action should be developed regarding repetitive movements. Also for 7 EU Member States it was indicated that additional preventive action should be developed.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Iceland : Measures to diminish repetitive work need to be done in many fields; increase awareness and responsibility among employers, designers, technicians and labour market unions. Knowledge must be spread to employers and health care workers. In the workplace the participative approach needs to be introduced and developed. Cost benefit analysis needs to be done to see the economical consequences of actions.

Liechtenstein: Automation of production.

Norway: Increased staffing, better organisation of the work and differentiated tasks.

Switzerland: Companies need to be encouraged to allocate repetitive tasks more equitably such that long periods of repetitive movements are not required of individual workers.

3.8 STRENUOUS WORKING POSTURES

Sectors

- 45 Construction - **Iceland, Liechtenstein, Norway, Switzerland**
- 52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods - **Liechtenstein, Norway, Switzerland**
- 01 Agriculture, hunting and related service activities - **Iceland, Norway**
- 15 Manufacture of food products and beverages - **Iceland, Liechtenstein**
- 28 Manufacture of fabricated metal products, except machinery and equipment - **Liechtenstein, Norway**
- 60 Land transport; transport via pipelines - **Liechtenstein, Switzerland**
- 72 Computer and related activities - **Liechtenstein, Switzerland**
- 05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing - **Iceland**
- 29 Manufacture of machinery and equipment NEC - **Norway**
- 33 Manufacture of medical, precision and optical instruments, watches and clocks - **Switzerland**
- 35 Manufacture of other transport equipment - **Norway**
- 55 Hotels and restaurants - **Iceland**

The most recorded sector with regard to strenuous working postures was 'Construction'.

The following table provides an overview on the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Sectors	EFTA Countries	EU-Member States ⁸⁷
01 Agriculture, hunting and related service activities	2	7
05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing	1	-
15 Manufacture of food products and beverages	2	4
17 Manufacture of textiles	-	4
28 Manufacture of fabricated metal products, except machinery and equipment	2	-
29 Manufacture of machinery and equipment NEC	1	-
33 Manufacture of medical, precision and optical instruments, watches and clocks	1	-
35 Manufacture of other transport equipment	1	-
45 Construction	4	12
52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	3	-
55 Hotels and restaurants	1	-
60 Land transport; transport via pipelines	2	-
72 Computer and related activities	2	-
85 Health and social work	-	5
93 Other service activities	-	4

Both for the EFTA Countries and for the EU Member States the most recorded sector with regard to strenuous working postures was 'Construction'.

Occupations

- 91 Sales and services elementary occupations - **Iceland, Liechtenstein, Switzerland**
- 41 Office clerks - **Liechtenstein, Switzerland**
- 61 Skilled agricultural and fishery workers - **Iceland, Norway**
- 71 Extraction and building trades workers - **Iceland, Norway**
- 72 Metal, machinery and related trades workers - **Liechtenstein, Norway**
- 42 Customer services clerks - **Norway**
- 51 Personal and protective services workers - **Norway**
- 73 Precision, handicraft, craft printing and related trades workers - **Switzerland**
- 74 Other craft and related trades workers - **Iceland**
- 82 Machine operators and assemblers - **Liechtenstein**

The most recorded occupation regarding strenuous working postures was 'Sales and services elementary occupations'.

The following table provides an overview on the occupations indicated for the EFTA Countries and the picture in the Member States of the European Union.

⁸⁷ Number of Focal Points indications

Overview table

Occupations	EFTA Countries	EU-Member States ⁸⁸
41 Office clerks	2	-
42 Customer services clerks	1	-
51 Personal and protective services workers	1	-
61 Skilled agricultural and fishery workers	2	4
71 Extraction and building trades workers	2	6
72 Metal, machinery and related trades workers	2	6
73 Precision, handicraft, craft printing and related trades workers	1	-
74 Other craft and related trades workers	1	4
82 Machine operators and assemblers	1	-
91 Sales and services elementary occupations	3	-
92 Agricultural, fishery and related labourers	-	4
93 Labourers in mining, construction, manufacturing and transport	-	9

For the EFTA Countries the occupation 'Sales and services elementary occupations' was the most recorded regarding strenuous working postures. This occupation was not mentioned for any of the EU Member States. For the EU Member States 'Labourers in mining, construction, manufacturing and transport' was the most recorded occupation, mentioned for nine of the fifteen Member States.

Strenuous working postures - company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk'.

Liechtenstein indicated 'medium sized enterprises'. *Norway* indicated 'small and medium enterprises'. *Iceland* had insufficient data and therefore no information was provided. *Switzerland* regarded this risk category as not relevant.

Data provided by the Focal Points did not allow a European picture with regard to strenuous postures and company size at risk.

Strenuous working postures - gender at risk

Each EFTA Focal Point was asked to: 'State, which gender category has a particular high risk'.

The following information was provided:

Gender category most at risk	Number of EFTA Focal Point responses
Female	0
Male	1
Both	1
Not relevant	1

In their national report *Iceland* reported that the gender differs according to occupation. *Liechtenstein* stated that the male workers were most exposed to strenuous working postures. *Norway* reported that both female and male workers were most exposed to strenuous working postures. *Switzerland* mentioned no relevance.

Data provided by the Focal Points did not allow a European picture with regard to strenuous working postures and gender at risk.

⁸⁸ Number of Focal Points indications

Strenuous working postures- age at risk

Each EFTA Focal Point was asked to: 'State, which age category has a particular high risk'.

Norway reports that all age was exposed. Iceland had insufficient data, and therefore no information was provided. Liechtenstein did not provide an appropriate answer. Switzerland indicated this risk category as not relevant.

Data provided by the Focal Points did not allow a European picture with regard to strenuous working postures and age at risk.

Strenuous working postures -employment status at risk

Each EFTA Focal Point was asked to: 'State if employment status is of importance'.

Norway indicated 'permanent employment'. Liechtenstein and Switzerland regarded this risk category as not relevant. Iceland had insufficient data and therefore, no information was provided.

Data provided by the Focal Points did not allow a European picture with regard to strenuous working postures and employment status at risk.

Strenuous working postures - trend in the number of workers exposed

Each EFTA Focal Point was asked to: 'Consider if the number of workers exposed to strenuous working postures over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by 1 EFTA Focal Point (by 5 Focal Points): **Liechtenstein** (Belgium, Germany, Netherlands, Italy and Luxembourg)

Stable trend indicated by 2 EFTA Focal Points (by 2 Focal Points): **Iceland and Norway** (Greece and Sweden*)

Increased trend indicated by 1 EFTA Focal Point (by 2 Focal Points): **Switzerland** (Finland and Spain)

Category 'Other' indicated by no EFTA Focal Point (by 6 Focal Points): - (Austria***, Denmark**, France, Ireland, Portugal and United Kingdom**)

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

* This trend is based on male/female responses to four national questions (1991-1997)

** The trend regarding the number of workers exposed to noise over the last 3-5 years is unknown.

*** No available data regarding number of exposed workers

Neither the data provided for the EFTA Countries nor the data provided for EU Member States allow conclusions with regard to strenuous working postures and trends.

Strenuous working postures - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by no EFTA Focal Point (by 4 Focal Points): - (Denmark, Greece, Luxembourg and Netherlands)

Development of additional preventive action was indicated by 4 EFTA Focal Points (by 6 Focal Points): **Iceland, Liechtenstein, Norway and Switzerland** (Austria, Belgium, Finland, Italy, Spain and Sweden)

The category 'Other' was indicated by no EFTA Focal Point (by 1 Focal Point): - (France)

No response: - (Ireland, Portugal and United Kingdom)

All the EFTA Countries indicated that additional preventive action should be developed regarding repetitive movements. Also 6 EU Member States indicated that additional preventive action should be developed.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Iceland: Measures to diminish strenuous working postures need to be done in many fields; increase awareness and responsibility among employers, designers, technicians and labour market unions. Knowledge must be spread to employers and health care workers. In the workplace the participative approach needs to be introduced and developed. Cost benefit analysis needs to be done to see the economical consequences of actions.

Liechtenstein: Change in working procedures and working organisation. Installations of ergonomically perfect workplaces. Training of the employees.

Norway: This represents a substantial health problem. Preventive measures are insufficient. Technical aids at the workplaces need improvement. Variation and organisation of the work are necessary.

Switzerland: Companies need to be encouraged to distribute tasks more equitably such that long periods without adequate changes of posture are not required of individual workers.

3.9 HANDLING CHEMICALS

Sectors

- 24 Manufacture of chemicals and chemical products - **Iceland, Liechtenstein, Norway, Switzerland**
- 45 Construction - **Liechtenstein, Norway, Switzerland**
- 25 Manufacture of rubber and plastic products - **Iceland, Switzerland**
- 28 Manufacture of fabricated metal products, except machinery and equipment - **Liechtenstein, Norway**
- 50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel - **Norway, Switzerland**
- 01 Agriculture, hunting and related service activities - **Liechtenstein**
- 22 Publishing, printing and reproduction of recorded media - **Iceland**
- 27 Manufacture of basic metals - **Iceland**
- 36 Manufacture of furniture; manufacturing NEC - **Iceland**
- 85 Health and social work - **Norway**

The most recorded sector with regard to handling chemicals was 'Manufacture of chemicals and chemical products'.

The following table provides an overview on the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Sectors	EFTA Countries	EU-Member States ⁸⁹
01 Agriculture, hunting and related service activities	1	7
22 Publishing, printing and reproduction of recorded media	1	-
24 Manufacture of chemicals and chemical products	4	8
25 Manufacture of rubber and plastic products	2	-
27 Manufacture of basic metals	1	-
28 Manufacture of fabricated metal products, except machinery and equipment	2	-
36 Manufacture of furniture; manufacturing NEC	1	-
45 Construction	3	5
50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel	2	4
85 Health and social work	1	-
93 Other service activities	-	4

⁸⁹ Number of Focal Points indications

Both for the EFTA Countries and the EU Member States the most recorded sector with regard to handling chemicals was 'Manufacture of chemicals and chemical products'.

Occupations

- 93 Labourers in mining, construction, manufacturing and transport - **Iceland, Liechtenstein, Switzerland**
- 82 Machine operators and assemblers - **Liechtenstein, Switzerland**
- 61 Skilled agricultural and fishery workers - **Liechtenstein**
- 72 Metal, machinery and related trades workers - **Iceland**
- 73 Precision, handicraft, craft printing and related trades workers - **Iceland**
- 74 Other craft and related trades workers - **Iceland**
- 81 Stationary-plant and related operators - **Iceland**

Norway indicated as occupations smelters, welders, building trades workers, tunnel workers and health care personnel.

The most recorded occupation with regard to handling chemicals was 'Labourers in mining, construction, manufacturing and transport'.

Overview table

	Occupations	EFTA Countries	EU-Member States ⁹⁰
61	Skilled agricultural and fishery workers	1	-
71	Extraction and building trades workers	-	5
72	Metal, machinery and related trades workers	1	5
73	Precision, handicraft, craft printing and related trades workers	1	-
74	Other craft and related trades workers	1	-
81	Stationary-plant and related operators	1	7
82	Machine operators and assemblers	2	-
92	Agricultural, fishery and related labourers	-	6
93	Labourers in mining, construction, manufacturing and transport	3	7

Both for the EFTA Countries and the EU Member States the most recorded occupation with regard to handling chemicals was 'Labourers in mining, construction, manufacturing and transport'.

Handling chemicals - company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk'.

Iceland and Liechtenstein indicated 'medium sized enterprises'. Norway and Switzerland indicated 'small companies'.

Data provided by Focal Points did not allow a European picture with regard to handling chemicals and company size at risk.

Handling chemicals - gender at risk

Each EFTA Focal Point was asked to: 'State, which gender category has a particular high risk'.

The following information was provided:

Gender category most at risk	Number of EFTA Focal Point responses
Female	0
Male	4
No response	0

In their national reports all 4 EFTA Focal Points reported that the male workers were most exposed to handling chemicals in the workplace. Data provided by Focal Points did not allow a European picture with regard to handling chemicals and gender at risk.

⁹⁰ Number of Focal Points indications

Handling chemicals - age at risk

Each EFTA Focal Point was asked to: 'State, which age category has a particular high risk'.

Iceland, Norway and Switzerland indicated the age category 25-54 years. Liechtenstein regarded this risk category as not relevant.

For three EFTA Countries the age category 25-54 years was indicated as the age category with highest risk regarding handling chemicals. Data provided by Focal Points did not allow a European picture with regard to handling chemicals and age at risk.

Handling chemicals - employment status at risk

Each EFTA Focal Point was asked to: 'State if employment status is of importance'.

Iceland indicated 'permanent employment'. Liechtenstein reported 'full-time employment'. Norway indicated that employment status is of importance due to the legal rights of the worker. Seasonal workers and short-term contract workers were indicated as two groups with high risk. Switzerland regarded this risk category as not relevant.

Data provided by Focal Points did not allow a European picture with regard to handling chemicals and employment status at risk.

Handling chemicals - trend in the number of workers exposed

Each EFTA Focal Point was asked to: 'Consider if the number of workers exposed to handling chemicals over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by no EFTA Focal Point (by 1 Focal Point): - (Finland)

Stable trend indicated by 4 EFTA Focal Points (by 7 Focal Points): **Iceland, Liechtenstein, Norway and Switzerland** (Germany, Greece, Netherlands, Italy, Luxembourg, Sweden and United Kingdom)

Increased trend indicated by no EFTA Focal Point (by 3 Focal Points): - (Austria, Ireland and Spain)

Category 'Other' indicated by no EFTA Focal Point (by 4 Focal Points): - (Belgium, Denmark**, France and Portugal)

' Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

** The trend regarding the number of workers exposed to noise over the last 3-5 years is unknown.

For all the EFTA Countries a stable trend was indicated. Also for 7 EU Member States a stable trend was considered.

Handling chemicals - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by 1 EFTA Focal Point (by 4 Focal Points): **Iceland** (Austria, Denmark, Greece and Sweden)

Development of additional preventive action was indicated by 3 EFTA Focal Points (by 8 Focal Points): **Liechtenstein, Norway and Switzerland** (Belgium, Finland, Ireland, Italy, Luxembourg, Portugal, Spain and United Kingdom)

The category 'Other' was indicated by no EFTA Focal Point (by 2 Focal Points): - (France and Netherlands)

For three EFTA Countries it was considered that development of additional preventive action with regard to handling chemicals was needed. Also for 6 EU Member States additional preventive action was considered as a need.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Liechtenstein: Training of the employees.

Norway: Every year new chemicals are introduced in to working environment. To keep up with the development, about 10 new occupational exposure limits are recommended by the authorities every other year. The Labour authorities have campaigns that run over a period of time for different industries.

Switzerland: Awareness of the risks needs to be increased in specific sectors.

3.10 CHEMICAL/ BIOLOGICAL RISKS

3.10.1. Carcinogenic substances

Each EFTA Focal Point was asked to: Choose a maximum of 5 carcinogens that are considered to be the most important risks for the working population in your country.

Polycyclic aromatic hydrocarbons (PAH) was recorded for all four EFTA Countries as a substance considered being most important. Also three EFTA Countries mentioned wood dust and asbestos as important carcinogenic substances.

The following table provides an overview of the carcinogens.

Carcinogens	Number of indications
Wood dust	3
Asbestos	3
PAH	4
Compounds of nickel	1
Compounds of chromium	1
Tetrachlorethylene	1
Styrene	1
Passive smoke	1
Mineral oil	1
Formaldehyde	1
Welding fumes	1

All EFTA Focal Points were also asked to: Of the (maximum) 5 carcinogens chosen, please present the EFTA Countries data on sectors and number of exposed persons. Further, please give your opinion regarding trends in the exposure situation over the last 3-5 years.

The two occupations most recorded with regard to exposure of carcinogenic substances were 'Manufacture of fabricated metal products, except machinery and equipment' and 'Construction'.

The following table provides an overview of the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Sector code	Sectors exposed to carcinogens	Number of times identified in the EFTA reports	Number of times identified in the EU reports
05	Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing	1	
20	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	2	
23	Manufacture of coke, refined petroleum products and nuclear fuel	1	10
24	Manufacture of chemicals and chemical products	1	20
25	Manufacture of rubber and plastic products	1	13
26	Manufacture of other non-metallic mineral products		15
27	Manufacture of basic metals	2	
28	Manufacture of fabricated metal products, except machinery and equipment	6	
36	Manufacture of furniture; manufacturing NEC	3	
45	Construction	5	24
50	Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel		17
55	Hotels and restaurants	1	
60	Land transport; transport via pipelines		10
93	Other service activities	1	

Both for the EFTA Countries and the EU Member States one of the most recorded sectors with regard to exposure of carcinogenic substances was 'Construction'. However, for the EFTA Countries the most recorded sector was 'Manufacture of fabricated metal products, except machinery and equipment'.

Below the trends for the most mentioned carcinogenics are presented.

Overview table - trends polycyclic aromatic hydrocarbons (PAH's)

Sector codes Countries	23	24	27	28	45
Iceland			↔		
Liechtenstein					↓
Norway	↑	↑		↑	
Switzerland					↔

↓ = decreasing, ↑ = increasing, ↔ = stable

Overview table - trends wood dust

Sector codes Countries	20	36
Iceland		↓
Liechtenstein	↓	↓
Norway		
Switzerland	↓	↓

↓ = decreasing, ↑ = increasing, ↔ = stable

Overview table - trends asbestos

Sector codes	
Countries	45
Iceland	
Liechtenstein	↓
Norway	↓
Switzerland	Not known

↓ = decreasing, ↑ = increasing, ↔ = stable

Regarding the trends in the exposure situation it was recorded that for PAH the trend was assessed to be stable in *Iceland* and *Switzerland*, increasing in *Norway* and decreasing in *Liechtenstein*. For the EFTA Countries exposure to wood dust and asbestos were assessed to be important, the exposure was in general assessed to be decreasing (though for Switzerland the trend regarding exposure of asbestos was reported not known).

Evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by 1 EFTA Focal Point (by 4 Focal Points): Iceland (Austria, Denmark, Greece and Sweden)
Development of additional preventive action was indicated by 3 EFTA Focal Points (by 4 Focal Points): Liechtenstein, Norway and Switzerland (Belgium, Luxembourg, Portugal and Spain)
The category 'Other' was indicated by no EFTA Focal Point (by 2 Focal Points): - (Finland and Netherlands)
No response: - (France, Italy and United Kingdom)

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Liechtenstein: Lower exposure levels

Norway: Wood dust needs to be regulated. According to IARC there is sufficient evidence in humans for the carcinogenicity of wood dust. The wood dust is classified by IARC in group 1. The current Norwegian legislation concerning carcinogens does not cover wood dust, but this will be changed in the near future. OELs are set according to their different critical effects. The carcinogenic effect should be emphasised more when OELs are established in the future. According to regulations concerning asbestos, the asbestos exposure occurs only in rehabilitation and demolition of existing buildings and installations. The Labour Authorities do not usually ban the use of chemicals because often not enough is known about the substitutes and what health effects these can cause. They focus on the handling and use of the chemicals at the workplace and workers' right to get information about the chemicals they are exposed to.

Switzerland: Lower exposure levels.

3.10.2 Neurotoxic substances

Each EFTA Focal Point was asked to: Choose a maximum of 5 neurotoxic substances that are considered to be the most important risks for the working population in your country.

The following table provides an overview of the neurotoxic substances indicated for the EFTA Countries.

Neurotoxic substances	Number of indications
Organic solvents	3
Tetrachlorethylene	1
White spirit	1
Manganese	1
Polychlorinated biphenyl; PCB	1
Xylene	1
Styrene	1
Mercury	1
1.1.1 Trichlorethane	1
Acrylamide	1

Organic solvents were the most recorded substances presented by three EFTA Countries.

All EFTA Focal Points were also asked to: Of the (maximum) 5 neurotoxic substances chosen, please present the EFTA Countries data on sectors and number of exposed persons. Further, please give your opinion regarding trends in the exposure situation over the last 3-5 years.

The following table provides an overview of the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Sector code	Sectors exposed to neurotoxic substances	Number of times identified in the EFTA reports	Number of times identified in the EU reports
22	Publishing, printing and reproduction of recorded media	1	
23	Manufacture of coke, refined petroleum products and nuclear fuel	1	
24	Manufacture of chemicals and chemical products	3	33
25	Manufacture of rubber and plastic products	1	
27	Manufacture of basic metals	1	10
28	Manufacture of fabricated metal products, except machinery and equipment	1	17
29	Manufacture of machinery and equipment NEC	1	
45	Construction	4	15
50	Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel	1	
85	Health and social work	1	
90	Sewage and refuse disposal, sanitation and similar activities	1	
93	Other service activities	2	

The two sectors most recorded with regard to exposure of neurotoxic substances were 'Construction' and 'Manufacture of chemicals and chemical products'. Both sectors were also frequently reported for the EU Member States.

Below the trend for the most mentioned neurotoxic substance is presented.

Overview table -trends organic solvents

Sector codes			
Countries	23	24	45
Iceland			
Liechtenstein		↓	↓
Norway	↓, ↑	↓, ↑	
Switzerland			↓

↓ = decreasing, ↑ = increasing, ↔ = stable

Regarding exposure of organic solvents the trend was assessed to be decreasing in *Liechtenstein* and *Switzerland*. In *Norway* the trend also was assessed to be decreasing regarding substances being phased out as CS₂ and n-hexane but increasing for new substances.

Evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by 1 EFTA Focal Point (by 4 Focal Points): **Iceland** (Austria, Denmark, Greece and Sweden)

Development of additional preventive action was indicated by 3 EFTA Focal Points (by 4 Focal Points): **Liechtenstein, Norway and Switzerland** (Finland, Ireland, Portugal and Spain)

The category 'Other' was indicated by no EFTA Focal Point (by 2 Focal Points): - (France and Netherlands)

No response: - (Belgium, Italy, Luxembourg and United Kingdom)

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Liechtenstein: Lower exposure levels and substitution.

Norway: Preventing actions will be a stricter control in the sense of more often and more detailed controls from the Labour Inspection towards construction that uses these neurotoxic substances. In Norway a recent example exists where MSDS's were not correct and an incorrect use of an acrylamide based grouting agent resulted in exposed workers who developed reversible neurotoxic symptoms. This is also an example where organic molecules are the source of neurone-damage. It is worth noting that there are no suitable alternative products available.

Switzerland: Lower exposure levels and substitution.

3.10.3 Reproductive hazards

Each EFTA Focal Point was asked to: Choose a maximum of 5 reproductive hazards that are considered to be the most important risks for the working population in your country.

The following table provides an overview of the reproductive hazards indicated for the EFTA Countries.

Reproductive hazards	Number of indications
Physical workload	2
Glycolether	1
Ethanol	1
Gases	1
Exposure to biological agents	1
Exposure to cardiogenic	1
Solvents	1
Mycotoxins	1
Lead	1

Physical workload was the reproductive hazard recorded by two EFTA Countries.

All EFTA Focal Points were also asked to: Of the (maximum) 5 reproductive hazards chosen, please present the EFTA Countries data on sectors and number of exposed persons. Further, please give your opinion regarding trends in the exposure situation over the last 3-5 years.

The following table provides an overview of the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Sector code	Sectors exposed to reproductive hazards	Number of times identified in the EFTA reports	Number of times identified in the EU reports
01	Agriculture, hunting and related service activities	1	
22	Publishing, printing and reproduction of recorded media	2	
24	Manufacture of chemicals and chemical products		14
25	Manufacture of rubber and plastic products		7
26	Manufacture of other non-metallic mineral products	1	
27	Manufacture of basic metals		7
31	Manufacture of electrical machinery and apparatus NEC	1	
36	Manufacture of furniture; manufacturing NEC	1	
45	Construction	1	7
51	Wholesale trade and commission trade, except of motor vehicles and motorcycles	1	
55	Hotels and restaurants	1	
73	Research and development	2	
85	Health and social work	5	8
93	Other service activities	1	

The sector most recorded with regard to exposure of reproductive hazards was 'Health and social work'.

For the EFTA Countries the most recorded sector with regard to exposure of reproductive hazards was 'Health and social work'. This sector was also quite frequent reported for the EU Member States.

Below the trend for the most indicated reproductive hazard is presented.

Overview table - trends physical workload

Sector codes	
Countries	23
Iceland	↔
Liechtenstein	
Norway	↔
Switzerland	

↓ = decreasing, ↑ = increasing, ↔ = stable

For the EFTA Countries presenting physical workload as an important reproductive hazards, the trend in the exposure situation was assessed to be stable.

Evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by 2 EFTA Focal Points (by 5 Focal Points): **Iceland and Switzerland** (Austria, Denmark, Greece, Netherlands and Sweden)

Development of additional preventive action was indicated by 1 EFTA Focal Point (by 4 Focal Points): **Norway** (Belgium, Ireland, Finland, Portugal and Spain)

The category 'Other' was indicated by no EFTA Focal Point (by 1 Focal Point): - (France)

No response: **Liechtenstein** (Italy, Luxembourg and United Kingdom)

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Norway: The Council Directive 92/85/EEC of 19 October 1992 on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding exists. Additional preventive actions may be to control workplaces where pregnant women should not work. Campaigns to focus on this Directive and make pregnant workers aware of their rights etc.

3.10.4 Exposure to infectious biological factors

Each EFTA Focal Point was asked to: Choose a maximum of 5 infectious biological factors that are considered to be the most important in your country.

The following table provides an overview of the infectious biological factors indicated as most important for the EFTA Countries.

Infectious biological factors	Number of indications
Hepatitis	3
HIV	1
Multi Resistant Staphylococcus Aureus (MRSA)	1
Tb	1
Tropical Diseases	1
Zoonooser	1
AIDS	1

Hepatitis was the most recorded infectious biological factor recorded by three EFTA Countries.

Also the EFTA Focal Points were asked to: Of the (maximum) 5 infectious micro-organisms chosen, please present the EFTA Countries data on sectors and number of exposed persons. Further, please give your opinion regarding trends in the exposure situation over the last 3-5 years.

The following table provides an overview of the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Sector code	Sectors exposed to infectious biological factors	Number of times identified in the EFTA reports	Number of times identified in the EU reports
01	Agriculture, hunting and related service activities	1	18
15	Manufacture of food products and beverages	1	8
74	Other business activities	1	
85	Health and social work	6	41
90	Sewage and refuse disposal, sanitation and similar activities	1	14
92	Recreational, cultural and sporting activities	2	

Both for the EFTA Countries and the EU Member States the most recorded sector with regard to exposure of infectious biological factors was 'Health and social work'.

Below the trend for the most important infectious biological factor is presented.

Overview table - trends hepatitis

Sector codes	85	90	92
Countries			
Iceland			
Liechtenstein	Not known		
Norway	↑	Not reported	
Switzerland	↑		↑

↓ = decreasing, ↑ = increasing, ↔ = stable

For *Norway* and *Switzerland* the opinion with regard to an exposure of Hepatitis was an increasing trend. *Liechtenstein* reported that the trend was not known and *Iceland* had no information available.

Evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by 1 EFTA Focal Point (by 5 Focal Points): **Switzerland** (Austria, Belgium, Denmark, Greece and Sweden)

Development of additional preventive action was indicated by 1 EFTA Focal Point (by 4 Focal Points): **Norway** (Finland, Ireland, Italy, Portugal, Spain and United Kingdom)

The category 'Other' was indicated by 1 EFTA Focal Point (by 2 Focal Points): **Iceland** (France and Netherlands)

No response: **Liechtenstein** (Luxembourg)

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Norway: Improvement of statistical data. Better liaisons between the general health care system and the workers' health authorities.

In addition *Iceland* commented that the regulation for biological hazards at the workplace is relatively new in Iceland. So further work in this area is necessary to evaluate the present state.

3.10.5 Non-infectious biological factors

Each EFTA Focal Point was asked to: Choose a maximum of 5 non-infectious biological factors that are considered to be the most important in your country.

The following table provides an overview of the non-infectious biological factors indicated for the EFTA Countries.

Non-infectious biological factors	Number of indications
Endotoxins	2
Organic dust	1
Fungal spores	1

Two EFTA Countries recorded endotoxins.

Also all EFTA Focal Points were asked to: Of the (maximum) 5 non-infectious biological factors chosen, please present the EFTA Countries data on sectors and number of exposed persons. Further, please give your opinion regarding trends in the exposure situation over the last 3-5 years.

The following table provides an overview of the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Sector code	Sectors exposed to non-infectious biological factors	Number of times identified in the EFTA reports	Number of times identified in the EU reports
01	Agriculture, hunting and related service activities	3	17
02	Forestry, logging and related service activities	1	
15	Manufacture of food products and beverages		8
17	Manufactures of textiles		4
20	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	1	
55	Hotels and restaurants	1	
73	Research and development		5
85	Health and social work		4
90	Sewage and refuse disposal, sanitation and similar activities	2	

Both for the EFTA Countries and the EU Member States the most recorded sector with regard to exposure of non- infectious biological factors was 'Agriculture, hunting and related service activities'.

Below the trend for the most indicated non-infectious biological factor is presented.

Overview table - trends endotoxins

Sector codes		
Countries	01	90
Iceland		
Liechtenstein		
Norway	↔	Not reported
Switzerland		↑

↓ = decreasing, ↑ = increasing, ↔ = stable

Among those EFTA Countries for which endotoxins was mentioned as the most important non-infectious biological factor the trend was reported to be stable for *Norway* and increasing for *Switzerland*.

Evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by no EFTA Focal Point (by 4 Focal Points): - (Austria, Belgium, Greece and Sweden)

Development of additional preventive action was indicated by 2 EFTA Focal Points (by 5 Focal Points): **Norway and Switzerland** (Finland, France, Ireland, Portugal and Spain)

The category 'Other' was indicated by 1 EFTA Focal Point (by 1 Focal Point): **Iceland** (Netherlands)

No response: **Liechtenstein** (Denmark, Italy, Luxembourg and United Kingdom)

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Norway: Improvement of statistical data. Better liaisons between the general health care system and the workers' health authorities.

Switzerland: For food poisoning no additional action is necessary. More research needed for endotoxin problems.

Further *Iceland* stated that the regulation for biological hazards at the workplace is relatively new in Iceland. So further work in this area is necessary to evaluate the present state.

3.11 HIGH SPEED WORK

Sectors

- 15 Manufacture of food products and beverages - **Iceland, Liechtenstein, Norway, Switzerland**
- 64 Post and telecommunications - **Iceland, Liechtenstein, Norway, Switzerland**
- 17 Manufacture of textiles - **Iceland, Norway**
- 28 Manufacture of fabricated metal products, except machinery and equipment - **Liechtenstein, Switzerland**
- 29 Manufacture of machinery and equipment NEC - **Liechtenstein, Switzerland**
- 65 Financial intermediation, except insurance and pension funding - **Liechtenstein, Switzerland**
- 05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing - **Iceland**
- 22 Publishing, printing and reproduction of recorded media - **Norway**
- 52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods - **Norway**
- 60 Land transport; transport via pipelines - **Norway**
- 72 Computer and related activities - **Iceland**

The two most recorded sectors with regard to high speed work were 'Manufacture of food products and beverages' and 'Post and telecommunications'.

The following table provides an overview on the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Sectors	EFTA Countries	EU-Member States ⁹¹
05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing	1	-
15 Manufacture of food products and beverages	4	3
17 Manufacture of textiles	2	-
18 Manufacture of wearing apparel; dressing and dyeing of fur	-	3
22 Publishing, printing and reproduction of recorded media	1	3
28 Manufacture of fabricated metal products, except machinery and equipment	2	-
29 Manufacture of machinery and equipment NEC	2	-
30 Manufacture of office, accounting and computing machinery	-	3
34 Manufacture of motor vehicles, trailers and semi-trailers	-	3
45 Construction	-	3
52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	1	-
55 Hotels and restaurants	-	4
60 Land transport; transport via pipelines	1	3
64 Post and telecommunications	4	3
65 Financial intermediation, except insurance and pension funding	2	3
72 Computer and related activities	1	-

Both for the EFTA Countries and the EU Member States it was indicated that the sectors 'Manufacture of food products and beverages' and 'Post and telecommunications' were of risk with regard to high speed work. The indications for the Member States were diverse and no individual sector was pointed out by more than four Focal Points.

Occupations

- 41 Office clerks - **Iceland, Liechtenstein, Switzerland**
- 93 Labourers in mining, construction, manufacturing and transport - **Liechtenstein, Norway, Switzerland**
- 24 Other professionals - **Liechtenstein, Switzerland**
- 42 Customer services clerks - **Iceland, Norway**
- 51 Personal and protective services workers - **Norway**
- 71 Extraction and building trades workers - **Iceland**
- 72 Metal, machinery and related trades workers - **Iceland**
- 74 Other craft and related trades workers - **Iceland**
- 82 Machine operators and assemblers - **Norway**
- 91 Sales and services elementary occupations - **Norway**

The occupations most recorded with regard to high speed work were 'Office clerks' and 'Labourers in mining, construction, manufacturing and transport'.

The following table provides an overview on the occupations indicated for the EFTA Countries and the picture in the Member States of the European Union.

⁹¹ Number of Focal Points indications

Overview table

Occupations	EFTA Countries	EU-Member States ⁹²
12 Corporate managers	-	5
24 Other professionals	2	-
41 Office clerks	3	-
42 Customer services clerks	2	5
51 Personal and protective services workers	1	-
71 Extraction and building trades workers	1	-
72 Metal, machinery and related trades workers	1	4
74 Other craft and related trades workers	1	-
82 Machine operators and assemblers	1	-
83 Drivers and mobile plant operators	-	4
91 Sales and services elementary occupations	1	-
93 Labourers in mining, construction, manufacturing and transport	3	-

The two occupations 'Office clerks' and 'Labourers in mining, construction, manufacturing and transport' which were indicated as being most of risk for the EFTA Countries were not mentioned for any of the EU Member States. 'Customer services clerks' and 'Corporate managers' were the two occupations most frequently indicated by the Member States.

High speed work - company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk'.

Iceland indicated 'small companies'. Liechtenstein indicated 'medium and large enterprises'. Norway reported 'all sizes' and Switzerland indicated 'large companies'.

Data provided by Focal Points did not allow a European picture with regard to high speed work and company size at risk.

High speed work -gender at risk

Each EFTA Focal Point was asked to: 'State, which gender category has a particular high risk'.

The following information was provided:

Gender category most at risk	Number of EFTA Focal Point responses
Female	1
Male	0
Both gender	1
Not relevant	2
No response	0

In their national report Iceland stated that female workers were most exposed to high speed work in the workplace. Norway reported that both female and male workers were most exposed to high speed work. Liechtenstein and Switzerland reported that it was not relevant.

Data provided by Focal Points did not allow a European picture with regard to high speed work and gender at risk.

High speed work - age at risk

Each EFTA Focal Point was asked to: 'State, which age category has a particular high risk'.

⁹² Number of Focal Points indications

Iceland reported 'all ages'. Liechtenstein and Switzerland indicated the age category > 55 years and for Norway the age category was unknown, however the EFTA Focal Point believe there may be some tendency that older people disappear from such jobs when the health problems arise.

Data provided by Focal Points did not allow a European picture with regard to high speed work and age at risk.

High speed work - employment status at risk

Each EFTA Focal Point was asked to: 'State if employment status is of importance'.

Iceland and Norway indicated 'permanent employment' Liechtenstein reported 'full-time employment'. Switzerland regarded this risk category as not relevant.

Data provided by Focal Points did not allow a European picture with regard to high speed work and employment status at risk.

High speed work - trend in the number of workers exposed

Each EFTA Focal Point was asked to: 'Consider if the number of workers exposed to high speed work over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by no EFTA Focal Point (by 0 Focal Point): - (-)

Stable trend indicated by 2 EFTA Focal Points (by 1 Focal Point): **Liechtenstein and Switzerland** (Italy)

Increased trend indicated by 2 EFTA Focal Points (by 8 Focal Points): **Iceland and Norway** (Austria, Belgium, Finland, Germany, Greece, Netherlands, Spain and Sweden)

Category 'Other' indicated by no EFTA Focal Point (by 6 Focal Points): - (Denmark, France Ireland, Luxembourg, Portugal and United Kingdom*)

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

* Trend regarding the number of workers exposed to high speed work over the last 3-5 years is unknown.

Neither the data provided for the EFTA Countries nor the data provided for EU Member States allow conclusions with regard to high speed work and trends.

High speed work - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by no EFTA Focal Point (by 1 Focal Point): - (Greece)

Development of additional preventive action was indicated by 4 EFTA Focal Points (by 6 Focal Points): **Iceland, Liechtenstein, Norway and Switzerland** (Belgium, Denmark, Finland, Italy, Netherlands and Spain)

The category 'Other' was indicated by no EFTA Focal Point (by 3 Focal Points): - (France, Portugal and Sweden)

No response: - (Austria, Ireland, Luxembourg and United Kingdom)

All the EFTA Countries indicated that additional preventive action should be developed regarding high speed work. Also for many of the EU Member States it was indicated that additional preventive action should be developed.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Iceland: Knowledge must be spread to employers and health care workers about the connection between high speed at the workplace and the risk of increasing stress.

Internal preventing activities in the companies need to be expanded and be more structured.

Liechtenstein: Modification of the organisation of the work. Reduction of piecework.

Norway: Some workplaces operate with deadlines which increase the speed of work. Must be seen in connection with rationalisation and increased demands of efficiency. Organisation and adjustment of the work. Add other tasks that break the speed.

Switzerland: Companies need to be encouraged to redistribute tasks that long periods of high speed work are not required of individual workers for long periods. Investigation of other solutions should also be encouraged.

3.12 WORKSPACE DICTATED BY SOCIAL DEMAND

Sectors

- 52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods - **Liechtenstein, Norway, Switzerland**
- 75 Public administration and defence; compulsory social security - **Liechtenstein, Norway, Switzerland**
- 85 Health and social work - **Liechtenstein, Norway, Switzerland**
- 55 Hotels and restaurants - **Liechtenstein, Switzerland**
- 05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing - **Iceland**
- 15 Manufacture of food products and beverages - **Iceland**
- 17 Manufacture of textiles - **Iceland**
- 64 Post and telecommunications - **Iceland**
- 65 Financial intermediation, except insurance and pension funding - **Norway**
- 72 Computer and related activities - **Iceland**
- 80 Education - **Switzerland**
- 93 Other service activities - **Norway**

The three sectors most recorded with regard to workspace dictated by social demand were 'Retail trade, except motor vehicles and motorcycles; repair of personal and household goods', 'Public administration and defence; compulsory social security' and 'Health and social work'.

The following table provides an overview on the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Sectors	EFTA Countries	EU-Member States ⁹³
05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing	1	-
15 Manufacture of food products and beverages	1	-
17 Manufacture of textiles	1	-
52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	3	4
55 Hotels and restaurants	2	6
64 Post and telecommunications	1	-
65 Financial intermediation, except insurance and pension funding	1	-
72 Computer and related activities	1	-
75 Public administration and defence; compulsory social security	3	3
80 Education	1	-
85 Health and social work	3	5
93 Other service activities	1	3

For the EFTA Countries it was indicated that the sectors 'Retail trade, except motor vehicles and motorcycles, repair of personal and household goods', 'Public administration and defence; compulsory social security', and 'Health and social work' were of specific high risk with regard to workplace dictated by social demand. The European picture is more diverse. The most recorded sector was 'Hotels and restaurants' which was pointed out by six Member States. 'Hotel and restaurants' was a sector recorded by 2 EFTA Countries.

Occupations

- 23 Teaching professionals - **Iceland, Liechtenstein, Switzerland**
- 42 Customer services clerks - **Iceland, Norway, Switzerland**
- 32 Life science and health associate professionals - **Liechtenstein, Switzerland**
- 91 Sales and services elementary occupations - **Liechtenstein, Switzerland**
- 34 Other associate professionals - **Norway**
- 41 Office clerks - **Iceland**
- 51 Personal and protective services workers - **Norway**
- 52 Models, salespersons and demonstrators - **Switzerland**
- 72 Metal, machinery and related trades workers - **Iceland**
- 74 Other craft and related trades workers - **Iceland**

The occupations most recorded with regard to workplace dictated by social demand were 'Teaching professionals' and 'Customer services clerks'.

The following table provides an overview on the occupations indicated for the EFTA Countries and the picture in the Member States of the European Union.

⁹³ Number of Focal Points indications

Overview table

Occupations	EFTA Countries	EU-Member States ⁹⁴
22 Life science and health professionals	-	4
23 Teaching professionals	3	-
32 Life science and health associate professionals	2	4
34 Other associate professionals	1	-
41 Office clerks	1	-
42 Customer services clerks	3	5
51 Personal and protective services workers	1	4
52 Models, salespersons and demonstrators	1	3
72 Metal, machinery and related trades workers	1	-
74 Other craft and related trades workers	1	-
91 Sales and services elementary occupations	2	-

Both for the EFTA Countries and for the EU Member States the occupation 'Customer services clerks' was indicated as being most of risk with regard to workplace dictated by social demand. The other occupation 'Teaching professionals' which was mentioned also as a high risk occupation by three EFTA Countries was not mentioned for any Member State.

Workplace dictated by social demand - company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk'.

Iceland, Liechtenstein and Norway indicated 'small companies'. Switzerland regarded this risk category as not relevant.

For the EFTA Countries small companies were indicated to have a specific high risk. Data provided by the Focal Points did not allow a European picture with regard to workplace dictated by social demand and company size at risk.

Workplace dictated by social demand - gender at risk

Each EFTA Focal Point was asked to: 'State, which gender category has a particular high risk'.

The following information was provided:

Gender category most at risk	Number of EFTA Focal Point responses
Female	4
Male	0
No response	0

In their national reports all 4 EFTA Focal Points reported that the female workers were most exposed to workplace dictated by social demand. Data provided by the Focal Points did not allow a European picture with regard to workplace dictated by social demand and gender at risk.

Workplace dictated by social demand - age at risk

Each EFTA Focal Point was asked to: 'State which age category has a particular high risk'.

Iceland indicated 'all ages'. Norway reported the age category > 55 years. Liechtenstein and Switzerland regarded this risk category as not relevant. Data provided by the Focal Points did not allow a European picture with regard to workplace dictated by social demand and age at risk.

⁹⁴ Number of Focal Points indications

Workspace dictated by social demand - employment status at risk

Each EFTA Focal Point was asked to: 'State if employment status is of importance'.

Iceland stated 'permanent employment'. Liechtenstein indicated 'full-time and part time employment'. Norway reported 'permanent employment and substitutes/locums', while Switzerland stated 'part-time'.

Data provided by the Focal Points did not allow a European picture with regard to workspace dictated by social demand and employment status at risk.

Workspace dictated by social demand - trend in the number of workers exposed

Each EFTA Focal Point was asked to: 'Consider if the number of workers exposed to workspace dictated by social demand over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by no EFTA Focal Point (by 0 Focal Point): - (-)

Stable trend indicated by no EFTA Focal Point (by 3 Focal Points): - (Greece, Netherlands and Spain)

Increased trend indicated by 4 EFTA Focal Points (by 3 Focal Points): **Iceland, Liechtenstein, Norway and Switzerland** (Austria, Germany and Sweden)

Category 'Other' indicated by no EFTA Focal Point (by 9 Focal Points): - (Belgium, Denmark*, Finland, France, Ireland, Italy, Luxembourg, Portugal and United Kingdom)

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

* The trend regarding the number of workers exposed over the last 3-5 years is unknown.

The data provided by the EFTA Countries indicates that exposure with regard to workspace dictated by social demand had increased. The data provided for the EU Member States does not allow conclusions in this respect.

Workspace dictated by social demand - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by no EFTA Focal Point (by 2 Focal Points): - (Greece and Netherlands)

Development of additional preventive action was indicated by four EFTA Focal Points (by 3 Focal Points): **Iceland, Liechtenstein, Norway and Switzerland** (Denmark, Spain and Sweden)

The category 'Other' was indicated by no EFTA Focal Point (by 2 Focal Points): - (France and Portugal)

No response: - (Austria, Belgium, Finland, Ireland, Italy, Luxembourg and United Kingdom)

All EFTA Countries indicated that additional preventive action should be developed regarding workspace dictated by social demand. The data provided for EU Member States does not allow conclusions in this respect.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Iceland: More measures have to be done in these fields. More information / knowledge has to be spread about how this can increase stress and decrease the well-being of the workers.

Liechtenstein: Reduction of stress by changing the organisation of work.

Norway: This is accepted as a problem area and has been taken care of locally.

Switzerland: There is a general lack of awareness in the community about the causes of work-related stress. Attention is currently being directed at the working conditions of cashiers.

3.13

MACHINE DICTATED WORKSPACE

Sectors

- 15 Manufacture of food products and beverages - **Iceland, Liechtenstein, Norway, Switzerland**
- 17 Manufacture of textiles - **Iceland, Norway, Switzerland**
- 21 Manufacture of paper and paper products - **Norway, Switzerland**
- 29 Manufacture of machinery and equipment NEC - **Liechtenstein, Switzerland**
- 05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing - **Iceland**
- 20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials - **Norway**
- 22 Publishing, printing and reproduction of recorded media - **Switzerland**
- 28 Manufacture of fabricated metal products, except machinery and equipment - **Liechtenstein**
- 36 Manufacture of furniture; manufacturing NEC - **Norway**
- 64 Post and telecommunications - **Iceland**

The most recorded sector with regard to machine dictated workspace was 'Manufacture of food products and beverages'.

The following table provides an overview on the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Sectors	EFTA Countries	EU-Member States ⁹⁵
05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing	1	-
15 Manufacture of food products and beverages	4	4
17 Manufacture of textiles	3	6
18 Manufacture of wearing apparel; dressing and dyeing of fur	-	3
20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	1	-
21 Manufacture of paper and paper products	2	-
22 Publishing, printing and reproduction of recorded media	1	-
25 Manufacture of rubber and plastic products	-	3
27 Manufacture of basic metals	-	3
28 Manufacture of fabricated metal products, except machinery and equipment	1	3
29 Manufacture of machinery and equipment NEC	2	-
36 Manufacture of furniture; manufacturing NEC	1	-
64 Post and telecommunications	1	-

The two most frequently recorded sectors both for the EFTA Countries and the EU Member States were 'Manufacture of food products and beverages' and 'Manufacture of textiles'.

⁹⁵ Number of Focal Points indications

Occupations

- 82 Machine operators and assemblers - **Liechtenstein, Norway, Switzerland**
 41 Office clerks - **Norway**
 72 Metal, machinery and related trades workers - **Iceland**
 74 Other craft and related trades workers - **Iceland**
 81 Stationary-plant and related operators - **Norway**
 93 Labourers in mining, construction, manufacturing and transport - **Norway**

The occupation most recorded with regard to machine dictated workplace was 'Machine operators and assemblers'.

The following table provides an overview on the occupations indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Occupations		EFTA Countries	EU-Member States ⁹⁶
41	Office clerks	1	-
72	Metal, machinery and related trades workers	1	-
74	Other craft and related trades workers	1	-
81	Stationary-plant and related operators	1	4
82	Machine operators and assemblers	3	7
83	Drivers and mobile plant operators	-	5
93	Labourers in mining, construction, manufacturing and transport	1	6

Both for the EFTA Countries and the EU Member States the occupation 'Machine operators and assemblers' was indicated as being most of risk regarding machine dictated workplace.

Machine dictated workplace - company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk'.

Iceland indicated 'small companies'. *Liechtenstein* stated 'medium sized enterprises'. *Norway* indicated 'large enterprises'. *Switzerland* regarded this risk category as not relevant.

Data provided by the Focal Points did not allow a European picture with regard to machine dictated workplace and company size at risk.

Machine dictated workplace - gender at risk

Each EFTA Focal Point was asked to: 'State, which gender category has a particular high risk'.

The following information was provided:

Gender category most at risk	Number of EFTA Focal Point responses
Female	1
Male	0
Both gender	2
Not relevant	1
No response	0

In the national report *Iceland* reported that the female workers were most exposed to machine dictated workplace in the workplace. *Liechtenstein* and *Norway* reported that both females and males workers were most exposed to machine dictated workplace. *Switzerland* reported no relevance. Data provided by the Focal Points did not allow a European picture with regard to machine dictated workplace and gender at risk.

⁹⁶ Number of Focal Points indications

Machine dictated workspace - age at risk

Each EFTA Focal Point was asked to: 'State, which age category has a particular high risk'.

Iceland stated 'all ages'. Norway stated the age category < 25 years and Switzerland reported the category >55 years. Liechtenstein regarded this risk category as not relevant.

Data provided by the Focal Points did not allow a European picture with regard to machine dictated workspace and age at risk.

Machine dictated workspace - employment status at risk

Each EFTA Focal Point was asked to: 'State if employment status is of importance'.

Iceland stated 'permanent employment'. Norway stated 'trainees' and Switzerland stated 'part-time and temporary employees'. Liechtenstein regarded this risk category as not relevant.

Data provided by the Focal Points did not allow a European picture with regard to machine dictated workspace and employment status at risk.

Machine dictated workspace - trend in the number of workers exposed

Each EFTA Focal Point was asked to: 'Consider if the number of workers exposed to machine dictated workspace over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by 1 EFTA Focal Point (by 2 Focal Points): Switzerland (Germany and Sweden)
Stable trend indicated by 1 EFTA Focal Point (by 1 Focal Point): Liechtenstein (Greece)
Increased trend indicated by 2 EFTA Focal Points (by 4 Focal Points): Iceland and Norway (Belgium, Finland, Italy and Spain)
Category 'Other' indicated by no EFTA Focal Point (by 8 Focal Points): - (Austria*, Denmark**, France, Netherlands, Ireland, Luxembourg, Portugal and United Kingdom)

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

* This trend is based on 'Repetitive tasks several times per hour' half the time or more. Male (1991 32.5 %; 1997 36.5 %) and female (1991 8.7 %; 1997 44.8 %).

** The trend regarding the number of workers exposed over the last 3-5 years is unknown.

Neither the data provided for the EFTA Countries nor the data provided for EU Member States allow conclusions with regard to machine dictated workspace and trends.

Machine dictated workspace - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by 1 EFTA Focal Point (by 4 Focal Points): Switzerland (Finland, Greece, Netherlands and Sweden)
Development of additional preventive action was indicated by 3 EFTA Focal Points (by 4 Focal Points): Iceland, Liechtenstein and Norway (Belgium, Denmark, Italy and Spain)
The category 'Other' was indicated by no EFTA Focal Point (by 2 Focal Points): - (France and Portugal)
No response: - (Austria, Ireland, Luxembourg and United Kingdom)

Three EFTA Countries indicated that additional preventive action is needed with regard to machine dictated workspace. The need is less pronounced for the EU Member States.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Iceland: Knowledge has to be spread to employers about how machine dictated workplace could increase stress and decrease the well-being of the workers.

Cost benefit analyses need to be done to see the economic consequences of actions.

Liechtenstein: Changes of the organisation of work and reduction of piecework.

Norway: Ergonomic standards being developed in relation to the machine directive.

3.14 PHYSICAL VIOLENCE

Sectors

- 75 Public administration and defence; compulsory social security - **Iceland, Liechtenstein, Norway, Switzerland**
- 85 Health and social work - **Iceland, Liechtenstein, Norway, Switzerland**
- 80 Education - **Liechtenstein, Switzerland**
- 50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel - **Norway**
- 52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods - **Norway**
- 65 Financial intermediation, except insurance and pension funding - **Norway**
- 74 Other business activities - **Norway**

The two most recorded sectors with regard to physical violence were 'Health and social work' and 'Public administration and defence; compulsory social security'.

The following table provides an overview on the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Sectors	EFTA Countries	EU-Member States ⁹⁷
50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel	1	-
52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	1	5
55 Hotels and restaurants	-	6
60 Land transport; transport via pipelines	-	6
65 Financial intermediation, except insurance and pension funding	1	-
74 Other business activities	1	-
75 Public administration and defence; compulsory social security	4	7
80 Education	2	-
85 Health and social work	4	11
93 Other service activities	-	4

Both for the EFTA Countries and the EU Member States it was indicated that the sectors 'Health and social work' and 'Public administration and defence; compulsory social security' were most of risk with regard to physical violence.

⁹⁷ Number of Focal Points indications

Occupations

- 51 Personal and protective services workers - **Iceland, Liechtenstein, Norway, Switzerland**
- 22 Life science and health professionals - **Liechtenstein, Switzerland**
- 23 Teaching professionals - **Liechtenstein, Switzerland**
- 32 Life science and health associate professionals - **Liechtenstein, Switzerland**
- 33 Teaching associate professionals - **Norway, Switzerland**
- 42 Customer services clerks - **Iceland, Norway**
- 34 Other associate professionals - **Norway**
- 52 Models, salespersons and demonstrators- **Iceland**
- 91 Sales and services elementary occupations - **Norway**

The occupation most recorded with regard to physical violence was 'Personal and protective services workers'.

The following table provides an overview on the occupations indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Occupations		EFTA Countries	EU-Member States ⁹⁸
22	Life science and health professionals	2	5
23	Teaching professionals	2	-
32	Life science and health associate professionals	2	7
33	Teaching associate professionals	2	-
34	Other associate professionals	1	-
42	Customer services clerks	2	5
51	Personal and protective services workers	4	7
52	Models, salespersons and demonstrators	1	4
91	Sales and services elementary occupations	1	6

Both for the EFTA Countries and the EU Member States the occupation 'Personal and protective services workers' was indicated as being most of risk with regard to physical violence. Also the occupation 'Life science and health associate professionals' was pointed out by 7 Member States. Two EFTA Countries also mentioned this occupation.

Physical violence - company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk'.

Iceland and Liechtenstein stated 'small companies'. Norway reported 'medium to large enterprises'. Switzerland regarded this risk category as not relevant.

Data provided by the Focal Points did not allow a European picture with regard to physical violence and company size at risk.

Physical violence -gender at risk

Each EFTA Focal Point was asked to: 'State, which gender category has a particular high risk'.

The following information was provided:

Gender category most at risk	Number of EFTA Focal Point responses
Female	1
Male	0
Both	1
Not relevant	2

⁹⁸ Number of Focal Points indications

In their national report *Norway* reported that the female workers were most exposed to physical violence in the workplace. *Iceland* reported that both female and male workers were exposed to physical violence. *Liechtenstein* and *Switzerland* reported not relevant. Data provided by the Focal Points did not allow a European picture with regard to physical violence and gender at risk.

Physical violence - age at risk

Each EFTA Focal Point was asked to: 'State, which age category has a particular high risk'.

Iceland stated 'age category 25-54 years'. *Norway* indicated the age category < 25 years. *Liechtenstein* and *Switzerland* regarded this risk category as not relevant.

Data provided by the Focal Points did not allow a European picture with regard to physical violence and age at risk.

Physical violence - employment status at risk

Each EFTA Focal Point was asked to: 'State if employment status is of importance'.

Iceland stated 'permanent employment'. *Liechtenstein* reported 'full-time employment'. *Norway* stated 'substitutes/locums and seasonal workers'. *Switzerland* regarded this risk category as not relevant.

Data provided by the Focal Points did not allow a European picture with regard to physical violence and employment status at risk.

Physical violence - trend in the number of workers exposed

Each EFTA Focal Point was asked to: 'Consider if the number of workers exposed to physical violence over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by no EFTA Focal Point (by 1 Focal Point): - (Greece)

Stable trend indicated by 1 EFTA Focal Point (by 2 Focal Points): **Iceland** (Austria and Ireland)

Increased trend indicated by 2 EFTA Focal Points (by 4 Focal Points): **Norway and Switzerland** (Belgium, Finland, Netherlands and Sweden)

Category 'Other' indicated by 1 EFTA Focal Point (by 8 Focal Points): **Liechtenstein** (Denmark**, France, Germany, Italy, Luxembourg, Portugal, Spain and United Kingdom)

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

** The trend regarding the number of workers exposed over the last 3-5 years is unknown.

Neither the data provided for the EFTA Countries nor the data provided for EU Member States allow conclusions with regard to physical violence and trends.

Physical violence - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by no EFTA Focal Point (by 1 Focal Point): - (Greece)

Development of additional preventive action was indicated by 4 EFTA Focal Points (by 7 Focal Points): **Iceland, Liechtenstein, Norway and Switzerland** (Belgium, Denmark, Finland, Ireland, Netherlands, Spain and Sweden)

The category 'Other' was indicated by no EFTA Focal Point (by 2 Focal Points): - (Portugal and United Kingdom)

No response:- (Austria, France, Italy and Luxembourg)

All the EFTA Countries indicated that additional preventive action should be developed regarding physical violence. Also 7 EU Member States indicated that additional preventive action should be developed.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Iceland: Regulations on the field have to be developed.

Liechtenstein: Preventive measures are not yet established.

Norway: Security measures (alarms, surveillance cameras, increased staffing) and training needed.

Switzerland: Little attention has been focussed on this until recently. Preventive measures have not yet been developed.

3.15 BULLYING AND VICTIMISATION

Sectors

- 85 Health and social work - **Iceland, Liechtenstein, Norway, Switzerland**
- 55 Hotels and restaurants - **Iceland, Liechtenstein, Switzerland**
- 75 Public administration and defence; compulsory social security - **Liechtenstein, Norway, Switzerland**
- 65 Financial intermediation, except insurance and pension funding - **Liechtenstein, Switzerland**
- 80 Education - **Iceland, Norway**
- 15 Manufacture of food products and beverages - **Iceland**
- 66 Insurance and pension funding, except compulsory social security - **Switzerland**
- 73 Research and development - **Norway**
- 91 Activities of membership organisations NEC - **Norway**
- 93 Other service activities - **Iceland**

The most recorded sector with regard to bullying and victimisation was 'Health and social work'.

The following table provides an overview on the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Sectors	EFTA Countries	EU-Member States ⁹⁹
15 Manufacture of food products and beverages	1	-
24 Manufacture of chemicals and chemical products	-	2
55 Hotels and restaurants	3	3
65 Financial intermediation, except insurance and pension funding	2	2
66 Insurance and pension funding, except compulsory social security	1	-
73 Research and development	1	-
75 Public administration and defence; compulsory social security	3	2
80 Education	2	3
85 Health and social work	4	5
91 Activities of membership organisations NEC	1	-
93 Other service activities	1	-

⁹⁹ Number of Focal Points indications

Both for the EFTA Countries and the EU Member States it was indicated that the sector 'Health and social work' was most of risk with regard to bullying and victimisation.

Occupations

- 23 Teaching professionals - **Iceland, Liechtenstein, Switzerland**
- 41 Office clerks - **Iceland, Liechtenstein, Switzerland**
- 42 Customer services clerks - **Iceland, Liechtenstein, Switzerland**
- 22 Life science and health professionals - **Iceland, Switzerland**
- 32 Life science and health associate professionals - **Liechtenstein, Switzerland**
- 51 Personal and protective services workers - **Iceland, Norway**
- 61 Skilled agricultural and fishery workers - **Norway**
- 71 Extraction and building trades workers - **Norway**
- 82 Machine operators and assemblers - **Norway**

The most recorded occupations with regard to bullying and victimisation were 'Teaching professionals', 'Office clerks' and 'Customer services clerks'.

The following table provides an overview on the occupations indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Occupations	EFTA Countries	EU-Member States ¹⁰⁰
22 Life science and health professionals	2	2
23 Teaching professionals	3	2
32 Life science and health associate professionals	2	-
41 Office clerks	3	-
42 Customer services clerks	3	4
51 Personal and protective services workers	2	4
52 Models, salespersons and demonstrators	-	2
61 Skilled agricultural and fishery workers	1	-
71 Extraction and building trades workers	1	-
74 Other craft and related trades workers	-	2
82 Machine operators and assemblers	1	-
91 Sales and services elementary occupations	-	4
93 Labourers in mining, construction, manufacturing and transport	-	2

Both for the EFTA Countries and the EU Member States 'Customer services clerks' was among the occupations indicated as being most of risk with regard to bullying and victimisation. Also the occupation 'Teaching professionals' was pointed out as a high risk occupation for 3 EFTA Countries and 2 Member States.

Bullying and victimisation - company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk'.

Iceland indicated 'small companies'. *Switzerland* reported 'medium and large enterprises'. *Liechtenstein* regarded this risk category as not relevant. *Norway* had inconclusive data and therefore no information was provided.

Data provided by Focal Points did not allow a European picture with regard to bullying and victimisation and company size at risk.

¹⁰⁰ Number of Focal Points indications

Bullying and victimisation - gender at risk

Each EFTA Focal Point was asked to: 'State, which gender category has a particular high risk'.

Iceland stated that both female and male workers were exposed to bullying and victimisation in the workplace. *Liechtenstein* and *Switzerland* reported that it was not relevant. *Norway* had inconclusive data and therefore did not provide any information.

Data provided by Focal Points did not allow a European picture with regard to bullying and victimisation and gender at risk.

Bullying and victimisation - age at risk

Each EFTA Focal Point was asked to: 'State, which age category has a particular high risk'.

Iceland stated 'all ages'. *Norway* indicated the age category < 25 years. *Liechtenstein* and *Switzerland* regarded this risk category as not relevant.

Data provided by Focal Points did not allow a European picture with regard to bullying and victimisation and age at risk.

Bullying and victimisation - employment status at risk

Each EFTA Focal Point was asked to: 'State if employment status is of importance'.

Norway stated 'substitutes/locums'. *Iceland* had no data. *Liechtenstein* and *Switzerland* regarded this risk category as not relevant.

Data provided by Focal Points did not allow a European picture with regard to bullying and victimisation and employment status at risk.

Bullying and victimisation - trend in the number of workers exposed

Each EFTA Focal Point was asked to: 'Consider if the number of workers exposed to bullying and victimisation over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by no EFTA Focal Point (by 1 Focal Point): - (Greece)

Stable trend indicated by no EFTA Focal Point (by 0 Focal Point): - (-)

Increased trend indicated by 3 EFTA Focal Points (by 6 Focal Points): **Iceland, Norway and Switzerland** (Austria, Belgium, Netherlands, Ireland, Spain and Sweden)

Category 'Other' indicated by 1 EFTA Focal Point (by 8 Focal Points): **Liechtenstein** (Denmark**, Finland, France, Germany, Italy, Luxembourg, Portugal and United Kingdom)

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

** The trend regarding the number of workers exposed over the last 3-5 years is unknown.

Three EFTA Countries recorded an increased trend regard to bullying and victimisation. The data for the EU Member States did not allow conclusions in this respect.

Bullying and victimisation - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by no EFTA Focal Point (by 1 Focal Point): - (Greece)

Development of additional preventive action was indicated by 3 EFTA Focal Points (by 7 Focal Points): **Iceland, Norway and Switzerland** (Belgium, Denmark, Finland, Ireland, Netherlands, Spain and Sweden)

The category 'Other' was indicated by 1 EFTA Focal Point (by 2 Focal Points): **Liechtenstein** (Portugal and United Kingdom)

No response: - (Austria, France, Italy and Luxembourg)

Three EFTA Countries indicated that additional preventive action should be developed regarding bullying and victimisation. Also 7 EU Member States stated that additional preventive action should be developed.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Iceland: Regulation on this field has to be developed. Knowledge has to be spread to the employers, employees and health care workers.

Norway: Companies are required to develop routines for dealing with victimisation and bullying in the workplace.

Switzerland: Little attention has been focussed on this issue until recently. Studies are under way to better evaluate the incidence and distribution. Preventive measures have not been fully developed

3.16 SEXUAL HARASSMENT

Sectors

- 55 Hotels and restaurants - **Iceland, Liechtenstein, Norway, Switzerland**
- 75 Public administration and defence; compulsory social security - **Iceland, Norway, Switzerland**
- 73 Research and development - **Iceland, Norway**
- 74 Other business activities - **Iceland, Liechtenstein**
- 85 Health and social work - **Iceland, Norway**
- 92 Recreational, cultural and sporting activities - **Iceland, Norway**
- 93 Other service activities - **Iceland, Switzerland**
- 51 Wholesale trade and commission trade, except of motor vehicles and motorcycles - **Iceland**
- 52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods - **Iceland**
- 80 Education - **Iceland**

The most recorded sector with regard to sexual harassment was 'Hotel and restaurants'.

The following table provides an overview on the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Sectors		EFTA Countries	EU-Member States ¹⁰¹
51	Wholesale trade and commission trade, except of motor vehicles and motorcycles	1	2
52	Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	1	2
55	Hotels and restaurants	4	4
73	Research and development	2	-
74	Other business activities	2	-
75	Public administration and defence; compulsory social security	3	-
80	Education	1	2
85	Health and social work	2	4
92	Recreational, cultural and sporting activities	2	-
93	Other service activities	2	-

Both for the EFTA Countries and the EU Member States it was indicated that the sector 'Hotel and restaurants' was among the sectors most of risk with regard to sexual harassment. Also the sector 'Public administration and defence; compulsory social security' was pointed out for three EFTA Countries. This sector was not pointed out for any of the EU Member States.

Occupations

- 41 Office clerks - **Iceland, Liechtenstein, Switzerland**
- 01 Armed forces - **Iceland, Norway**
- 02 Professionals - **Iceland, Norway**
- 23 Teaching professionals - **Iceland, Switzerland**
- 32 Life science and health associate professionals - **Iceland, Switzerland**
- 34 Other associate professionals - **Iceland, Norway**
- 61 Skilled agricultural and fishery workers - **Iceland, Norway**
- 91 Sales and services elementary occupations - **Iceland, Norway**
- 42 Customer services clerks - **Iceland**
- 51 Personal and protective services workers - **Iceland**
- 52 Models, salespersons and demonstrators - **Iceland**

The occupations most recorded with regard to sexual harassment was 'Office clerks'.

The following table provides an overview on the occupations indicated for the EFTA Countries and the picture in the Member States of the European Union.

¹⁰¹ Number of Focal Points indications

Overview table

Occupations	EFTA Countries	EU-Member States ¹⁰²
01 Armed forces	2	-
02 Professionals	2	-
23 Teaching professionals	2	-
32 Life science and health associate professionals	2	2
34 Other associate professionals	2	-
41 Office clerks	3	3
42 Customer services clerks	1	3
51 Personal and protective services workers	1	6
52 Models, salespersons and demonstrators	1	3
61 Skilled agricultural and fishery workers	2	-
91 Sales and services elementary occupations	2	2

The occupation 'Office clerks' which was indicated as being most of risk for the EFTA Countries was only mentioned for a minor portion of the EU Member States. For the EU Member States the occupation 'Personal and protective services workers' was the most frequently mentioned regarding sexual harassment. This occupation was also mentioned by one EFTA Country.

Sexual harassment - company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk'.

Iceland indicated 'small companies'. Liechtenstein reported 'small and medium sized companies'. Norway had inconclusive data and therefore no information was provided. Switzerland regarded this risk category as not relevant.

Data provided by Focal Points did not allow a European picture with regard to sexual harassment and company size at risk.

Sexual harassment - gender at risk

Each EFTA Focal Point was asked to: 'State, which gender category has a particular high risk'.

Gender category most at risk	Number of EFTA Focal Point responses
Female	4 (8) ¹⁰³
Male	0 (0)
No response	0 (7)

In their national reports all 4 EFTA Focal Points reported that the female workers were most exposed to sexual harassment in the workplace. This is in line with the responses of the Focal Points.

Sexual harassment - age at risk

Each EFTA Focal Point was asked to: 'State which age category has a particular high risk'.

Iceland indicated 'age category 25-54 years'. Liechtenstein and Switzerland indicated the age category < 25 years. Norway had inconclusive data, and therefore no data was provided.

Data provided by the Focal Points did not allow a European picture with regard to sexual harassment and age at risk.

¹⁰² Number of Focal Points indications

¹⁰³ Number of Focal Point responses in brackets

Sexual harassment - employment status at risk

Each EFTA Focal Point was asked to: 'State if employment status is of importance'.

Iceland stated 'temporary employment agency contract and apprenticeship or other training scheme'. Liechtenstein and Switzerland indicated 'part-time or temporary employees'. Norway stated 'substitutes/locums'.

Even though the EFTA Focal Points have used different categories when stating which employment status is of importance the answers indicate that temporary/part time employment is most of risk. Data provided by the Focal Points did not allow a European picture with regard to sexual harassment and employment status at risk.

Sexual harassment - trend in the number of workers exposed

Each EFTA Focal Point was asked to: 'Consider if the number of workers exposed to sexual harassment over the last 3-5 years has decreased, remained stable or increased'

The following responses were received:

Decreased trend indicated by no EFTA Focal Point (by 1 Focal Point): - (Greece)
Stable trend indicated by 2 EFTA Focal Points (by 4 Focal Points): Iceland and Norway (Austria, Belgium, Denmark and Netherlands)
Increased trend indicated by no EFTA Focal Point (by 2 Focal Points): - (Ireland and Spain)
Category 'Other' indicated by 2 EFTA Focal Points (by 8 Focal Points): Liechtenstein and Switzerland (Finland, France, Germany, Italy, Luxembourg, Portugal, Sweden and United Kingdom)

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

Neither the data provided for the EFTA Countries nor the data provided for EU Member States allow conclusions with regard to sexual harassment and trends.

Sexual harassment - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by 1 EFTA Focal Point (by 4 Focal Points): Norway (Belgium, Greece, Ireland and Netherlands)
Development of additional preventive action was indicated by 4 EFTA Focal Points (by 2 Focal Points): Iceland, Liechtenstein, Norway and Switzerland (Denmark and Spain)
The category 'Other' was indicated by no EFTA Focal Point (by 1 Focal Point): - (Sweden)
No response: - (Austria, Finland, France, Italy, Luxembourg, Portugal and United Kingdom)

Remark: Norway indicated two categories.

All EFTA Countries indicated that additional preventive action should be developed regarding sexual harassment. The data provided for EU Member States does not allow conclusions in this respect.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Iceland: Regulation on this field has to be developed. Knowledge has to be spread to employees.

Liechtenstein: Putting through the legal regulations.

Norway: Companies are required to develop routines for dealing with sexual harassment in the workplace.

Switzerland: Little attention has been focussed on this issue until recently and therefore preventive measures have not been fully developed.

3.17

MONOTONOUS WORK

Sectors

- 15 Manufacture of food products and beverages - **Iceland, Liechtenstein, Norway**
- 72 Computer and related activities - **Iceland, Liechtenstein, Switzerland**
- 17 Manufacture of textiles - **Iceland, Norway**
- 40 Electricity, gas, steam and hot water supply - **Norway, Switzerland**
- 52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods - **Liechtenstein, Switzerland**
- 05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing - **Iceland**
- 16 Manufacture of tobacco products - **Norway**
- 24 Manufacture of chemicals and chemical products - **Switzerland**
- 28 Manufacture of fabricated metal products, except machinery and equipment - **Liechtenstein**
- 60 Land transport; transport via pipelines - **Norway**
- 62 Air transport - **Norway**
- 64 Post and telecommunications - **Iceland**
- 66 Insurance and pension funding, except compulsory social security - **Switzerland**
- 75 Public administration and defence; compulsory social security - **Norway**

The most recorded sectors with regard to monotonous work were 'Manufacture of food products and beverages' and 'Computer and related activities'.

The following table provides an overview on the sectors indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Sectors	EFTA Countries	EU-Member States ¹⁰⁴
05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing	1	-
15 Manufacture of food products and beverages	3	4
16 Manufacture of tobacco products	1	3
17 Manufacture of textiles	2	4
19 Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear	-	4
20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	-	3
24 Manufacture of chemicals and chemical products	1	-
28 Manufacture of fabricated metal products, except machinery and equipment	1	3
40 Electricity, gas, steam and hot water supply	2	-
52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	2	-
60 Land transport; transport via pipelines	1	-
62 Air transport	1	-
64 Post and telecommunications	1	-
66 Insurance and pension funding, except compulsory social security	1	-
72 Computer and related activities	3	-
75 Public administration and defence; compulsory social security	1	-

¹⁰⁴ Number of Focal Points indications

Both for the EFTA Countries and the EU Member States it was indicated that the sector 'Manufacture of food products and beverages' was among the sectors most of risk with regard to monotonous work.

For three EFTA Countries the sector 'Computer and related activities' was pointed out as a high-risk sector.

Occupations

- 41 Office clerks - **Iceland, Liechtenstein, Switzerland**
- 82 Machine operators and assemblers - **Norway, Liechtenstein, Switzerland**
- 73 Precision, handicraft, craft printing and related trades workers - **Liechtenstein, Switzerland**
- 81 Stationary-plant and related operators - **Norway, Switzerland**
- 91 Sales and services elementary occupations - **Liechtenstein, Switzerland**
- 31 Physical and engineering science associate professionals - **Norway**
- 42 Customer services clerks - **Iceland**
- 51 Personal and protective services workers - **Iceland**
- 61 Skilled agricultural and fishery workers - **Norway**
- 72 Metal, machinery and related trades workers - **Iceland**
- 74 Other craft and related trades workers - **Iceland**
- 83 Drivers and mobile plant operators - **Norway**

The occupations most recorded with regard to monotonous work were 'Office clerks' and 'Machine operators and assemblers'.

The following table provides an overview on the occupations indicated for the EFTA Countries and the picture in the Member States of the European Union.

Overview table

	Occupations	EFTA Countries	EU-Member States ¹⁰⁵
31	Physical and engineering science associate professionals	1	-
41	Office clerks	3	-
42	Customer services clerks	1	6
52	Personal and protective services workers	1	-
61	Skilled agricultural and fishery workers	1	-
72	Metal, machinery and related trades workers	1	-
73	Precision, handicraft, craft printing and related trades workers	2	-
74	Other craft and related trades workers	1	-
81	Stationary-plant and related operators	2	6
82	Machine operators and assemblers	3	7
83	Drivers and mobile plant operators	1	4
91	Sales and services elementary occupations	2	7
93	Labourers in mining, construction, manufacturing and transport	1	4

'Machine operators and assemblers' was among the occupations indicated as most of risk regarding monotonous work for both the EFTA Countries and the EU Member States. The occupation 'Office clerks' which was indicated as being the other occupation most of risk for the EFTA Countries was not mentioned for any of the EU Member States.

Monotonous work - company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk'.

Iceland indicated 'small companies'. Liechtenstein stated 'small and medium sized companies'. Norway had inconclusive data and therefore no information was provided. Switzerland did not answer this specific question.

¹⁰⁵ Number of Focal Points indications

Data provided by Focal Points did not allow a European picture with regard to monotonous work and company size at risk.

Monotonous work - gender at risk

Each EFTA Focal Point was asked to: 'State, which gender category has a particular high risk'.

In their national reports *Switzerland* and *Iceland* reported that the female workers were most exposed to monotonous work in the workplace. *Liechtenstein* and *Norway* reported that both females and males workers were exposed to monotonous work. In general terms, the Focal Points considered females frequently exposed to monotonous work.

Monotonous work - age at risk

Each EFTA Focal Point was asked to: 'State which age category has a particular high risk'.

Iceland stated 'all ages'. *Norway* indicated the age category < 25 years. *Liechtenstein* and *Switzerland* regarded this risk category as not relevant.

Data provided by Focal Points did not allow a European picture with regard to monotonous work and age at risk.

Monotonous work - employment status at risk

Each EFTA Focal Point was asked to: 'State if employment status is of importance'.

Iceland and *Norway* stated 'permanent employment'. *Switzerland* reported 'permanent full-time employees'. *Liechtenstein* regarded this risk category as not relevant.

The data provided for the EFTA Countries indicates that (permanent) full-time employment might be most of risk regarding monotonous work. Data provided by Focal Points did not allow a European picture with regard to monotonous work and employment status at risk.

Monotonous work - trend in the number of workers exposed

Each EFTA Focal Point was asked to: 'Consider if the number of workers exposed to monotonous work over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by 1 EFTA Focal Point (by 2 Focal Points): **Switzerland** (Finland and Germany)

Stable trend indicated by 1 EFTA Focal Point (by 3 Focal Points): **Liechtenstein** (Greece, Netherlands and Spain)

Increased trend indicated by 2 EFTA Focal Points (by 2 Focal Points): **Iceland** and **Norway** (Belgium and Sweden*)

Category 'Other' indicated by no EFTA Focal Point (by 8 Focal Points): - (Austria, Denmark, France, Ireland, Italy, Luxembourg, Portugal and United Kingdom)

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

* This trend is based on 'Monotonous work' Male (1991 15.3 %; 1997 19.7 %) and female (1991 17.2 %; 1997 18.6 %).

Neither the data provided for the EFTA Countries nor the data provided for EU Member States allow drawing a picture with regard to monotonous work and trends.

Monotonous work - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by no EFTA Focal Point (by 2 Focal Points): - (Greece and Netherlands)

Development of additional preventive action was indicated by 4 EFTA Focal Points (by 6 Focal Points): **Iceland, Liechtenstein, Norway and Switzerland** (Austria, Belgium, Denmark, Finland, Spain and Sweden)

The category 'Other' was indicated by no EFTA Focal Point (by 1 Focal Point): - (Portugal)

No response: - (France, Ireland, Italy, Luxembourg and United Kingdom)

All EFTA Countries indicated that additional preventive action should be developed regarding monotonous work. Also for a third of the EU Member States it was indicated that additional preventive action should be developed.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Iceland: Internal preventive activities in the companies need to expand and be more structured.

Liechtenstein: Increased information and motivation of the employees.

Norway: 49% of the respondents found their work monotonous which is a high figure. Need to implement greater variety of tasks and better organisation of the work.

Switzerland: The public awareness of the health and safety problems in connection with this factor needs to be increased.

3.18 USE OF PERSONAL PROTECTIVE EQUIPMENT

Sectors

- 45 Construction - **Iceland, Liechtenstein, Norway**
- 02 Forestry, logging and related service activities - **Liechtenstein, Norway**
- 15 Manufacture of food products and beverages - **Iceland, Liechtenstein**
- 27 Manufacture of basic metals - **Iceland, Norway**
- 05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing - **Iceland**
- 14 Other mining and quarrying - **Norway**
- 25 Manufacture of rubber and plastic products - **Norway**
- 28 Manufacture of fabricated metal products, except machinery and equipment - **Liechtenstein**
- 29 Manufacture of machinery and equipment NEC - **Liechtenstein**
- 61 Water transport - **Iceland**

Switzerland did not have information.

The most recorded sector with regard to use of personal protective equipment is 'Construction'.

The following table provides an overview of the sectors indicated by the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Sectors	EFTA Countries	EU-Member States ¹⁰⁶
01 Agriculture, hunting and related service activities	-	4
02 Forestry, logging and related service activities	2	-
05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing	1	-
14 Other mining and quarrying	1	-
15 Manufacture of food products and beverages	2	-
24 Manufacture of chemicals and chemical products	-	4
25 Manufacture of rubber and plastic products	1	-
27 Manufacture of basic metals	2	4
28 Manufacture of fabricated metal products, except machinery and equipment	1	5
29 Manufacture of machinery and equipment NEC	1	-
45 Construction	3	11
61 Water transport	1	-

The 'Construction' sector was rated highest by both the EFTA Countries and the EU Member States.

Occupations

Switzerland: Most manufacturing activities (Occupation codes 10-37)

- 71 Extraction and building trades workers - **Iceland, Liechtenstein, Norway**
- 72 Metal, machinery and related trades workers - **Iceland, Liechtenstein, Norway**
- 61 Skilled agricultural and fishery workers - **Iceland, Norway**
- 82 Machine operators and assemblers - **Liechtenstein, Norway**
- 92 Agricultural, fishery and related labourers - **Iceland**
- 93 Labourers in mining, construction, manufacturing and transport - **Iceland**

The most recorded occupations with regard to use of personal protective equipment were 'Extraction and building trades workers' and 'Metal, machinery and related trades workers'.

The following table provides an overview of the occupations indicated by the EFTA Countries and the picture in the Member States of the European Union.

Overview table

Occupations	EFTA Countries	EU-Member States ¹⁰⁷
61 Skilled agricultural and fishery workers	2	3
71 Extraction and building trades workers	3	7
72 Metal, machinery and related trades workers	3	5
81 Stationary-plant and related operators	-	3
82 Machine operators and assemblers	2	3
92 Agricultural, fishery and related labourers	1	-
93 Labourers in mining, construction, manufacturing and transport	1	4

Extraction and building trades workers also received the highest number of indications by the Focal Points with regard to use of personal protective equipment and was closely followed by the metal, machinery and related trades workers.

¹⁰⁶ Number of Focal Points indications

¹⁰⁷ Number of Focal Points indications

PPE - trend in the number of workers using PPE

Each EFTA Focal Point was asked to: 'Consider if the number of workers using PPE's over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by no EFTA Focal Point (by 0 Focal Point): - (-)

Stable trend indicated by 2 EFTA Focal Points (by 5 Focal Points): **Liechtenstein and Switzerland** (Austria, Finland, Greece, Spain and Sweden)

Increased trend indicated by 2 EFTA Focal Points (by 2 Focal Points): **Iceland and Norway** (Germany and Portugal)

Category 'Other' indicated by no EFTA Focal Point (by 7 Focal Points): - (Denmark, France, Netherlands, Ireland, Italy, Luxembourg and United Kingdom)

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

'Increased' in this instance refers to more people wearing PPE.

Two EFTA Countries indicated a stable trend and two others an increased trend regarding the use of PPE.

The EFTA Focal Points submitted the following additional comments in relation to the trends:

Iceland, Liechtenstein and Switzerland indicated that there are no particular categories in sectors, professions, company size, gender, age or employment status that are expected to deviate from the reported development.

PPE - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing exposure related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing exposure related problems was indicated by no EFTA Focal Point (by 3 Focal Points): - (Austria, Denmark, and Greece)

Development of additional preventive action was indicated by 2 EFTA Focal Points (by 6 Focal Points): **Liechtenstein and Switzerland** (Belgium, Finland, Italy, Luxembourg, Portugal and Spain)

The category 'Other' was indicated by 1 EFTA Focal Point (by 4 Focal Points): **Iceland** (France, Netherlands, Ireland and Sweden)

No response: **Norway** (United Kingdom)

Three EFTA Focal Points and six Focal Points indicated that the development of additional preventive action was necessary. Three Focal Points found the taken/planned preventive actions sufficient.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Liechtenstein: Running campaigns to motivate employees for increased wearing of personal protective equipment. Putting through the legal regulations.

Switzerland: There are ongoing campaigns to increase awareness of risks and compliance with rules on industry level.

In addition, *Iceland* reported that other research is needed in this area.

3.19

INFORMATION ABOUT RISKS AT WORK

None of the four EFTA Countries had data available on this subject.

Switzerland commented based on expert opinion that the amount of information about risks, which is disseminated generally, depends on the size of the company. Larger companies generally have an introduction procedure, which includes health and safety aspects, although there are marked differences between branches. The content of these training courses generally focuses on safety aspects rather than general health protection. More complex occupational health issues are often ignored or only minimally covered particularly where occupational activities are not the sole causal factor. The issue of stress and other adverse health effects related to organisational factors are not well understood by the general public.

3.20

TRAINING PROVIDED BY EMPLOYERS

None of the four EFTA Countries had data available on this subject.

Switzerland reported that training is often paid by employers in Switzerland, where the importance of ongoing education is generally well accepted. There are marked differences between sectors and organisational levels. Differences are also expected for age and company size, with further education being more common for younger people and in larger companies. Recent changes in the law relating to occupational safety have resulted in an increase in the number of persons trained in occupational safety and health. This trend is expected to continue.

Norway presented data indicating the number of employees, which have received any formal education, such as courses etc., in the last 12 months:

Exact question: Have you received any formal education such as courses, etc. in this company in the last 12 months? Do not include your training period on the job or courses in conjunction with union representation, the Working Environment Act, etc. Include only courses completely or partially paid for by your employer.

Source: Survey of Level of Living

Year: 1996

	N	%	Never %	1 - 7 days %	8-30 days %	> 30 days %	Unknown %
Total	2157	100	55	23	11	2	10
Male	1126	52	54	19	12	2	13
Female	1031	48	57	27	9	2	6
Age							
< 25	257	12	72	16	4	1	7
25 - 54	1647	76	53	24	12	2	9
>= 55	253	12	55	21	5	–	19

	N	%	Never %	1 - 7 days %	8-30 days %	> 30 days %	Unknown %
Sector							
0	161	7	37	9	6	2	47
1	89	4	64	20	16	–	–
2	155	7	63	15	12	3	7
3	64	3	72	17	11	–	–
4	123	6	54	20	10	1	15
5	392	18	59	26	7	1	8
6	204	9	60	20	11	2	6
7	318	15	52	22	16	3	7
8	565	26	55	30	10	2	4
9	86	4	47	24	6	–	23
Company size							
<5	370	17	36	11	4	0	49
5- 19	506	23	58	28	11	1	3
20- 49	373	17	63	25	10	1	1
50- 99	215	10	66	20	9	3	1
100-199	176	8	69	21	8	2	1
>200	474	22	52	26	18	3	1
Varies	22	1	55	27	5	5	9
Unknown	21	1	62	29	–	–	10
Occupation							
Technical, scientific and humanistic work	555	26	49	29	13	3	7
Administration and management	341	16	48	26	19	2	5
Office work	163	8	55	29	13	1	2
Trade	266	12	56	26	10	0	8
Farming, forestry and fisheries	115	5	31	3	1	2	63
Mining and excavation	9	0	33	33	33	–	–
Transport and communication	116	5	68	13	3	4	11
Construction and industry (partial; see 1.3.1 classifications)	234	11	64	16	9	0	11
Industry (partial; see 1.3.1 classifications)	87	4	76	15	3	–	6
Service and safety work	271	13	68	20	5	1	6
Status							
Permanent	1699	79	60	26	13	2	–
Self-employed	178	8	–	–	–	–	100

	N	%	Never %	1 - 7 days %	8-30 days %	> 30 days %	Unknown %
Labour market measures	9	0	100	–	–	–	–
Fixed term contract	55	3	69	24	5	2	–
Seasonal worker	36	2	83	14	–	3	–
Substitute	87	4	68	28	5	–	–
Apprenticeship or other training scheme	18	1	78	17	6	–	–
Probation period	8	0	63	13	13	13	–
Other	33	2	73	15	12	–	–
Unknown	34	2	–	–	–	3	97

4.



OCCUPATIONAL SAFETY AND HEALTH OUTCOMES

- 4.1 ACCIDENTS AT WORK WITH MORE THAN 3 DAYS ABSENCE
- 4.2 FATAL ACCIDENTS
- 4.3 MUSCULOSKELETAL DISORDERS
- 4.4 STRESS
- 4.5 OCCUPATIONAL SICKNESS ABSENCE
- 4.6 OCCUPATIONAL DISEASES

4.1

ACCIDENTS AT WORK WITH MORE THAN 3 DAYS ABSENCE

Iceland, Liechtenstein and Switzerland had no detailed national statistics showing the number of accidents at work with more than 3 days absence. *Iceland* specifies that these accidents are underreported and exact information can therefore not be provided.

Norway did not report to Eurostat for the reference year 1994. Norway did not collect data on accidents with more than 3 days absence and had chosen to use data from Survey of Level of Living 1996. The exact question was as follows:

'Have you in the last 12 months had one or more accidents during working hours, which have caused you to take out sick leave in excess of the day of the accident? Yes/no'

Source: Survey of Level of Living

Year: 1996

	N	%	Yes %	No %
Total	2157	100	3	95
Male	1126	52	4	93
Female	1031	48	2	97
Age				
< 25	257	12	3	92
25 – 54	1647	76	4	96
>= 55	253	12	2	89
Sector				
0 Technical, scientific and humanistic work	161	7	5	92
1 Administration and management	89	4	3	96
2 Office work	155	7	6	90
3 Trade	64	3	6	94
4 Farming, forestry and fisheries	123	6	5	95
5 Mining and excavation	392	18	2	95
6 Transport and communication	204	9	4	95
7 Construction and industry (production of textiles, shoes and leather, smelting, mechanical work, iron and metal production, electro-work and woodworking)	318	15	1	97
8 Industry (graphical work, glass and ceramic production, production of foods, chemical processing, and other production work)	565	26	4	95
9 Service and safety work	86	4	2	94
Company size				
<5	370	17	3	92
5- 19	506	23	2	96
20- 49	373	17	4	95
50- 99	215	10	3	94

	N	%	Yes %	No %
100-199	176	8	7	92
>200	474	22	3	96
Varies	22	1	-	95
Unknown	21	1	10	81
Occupation				
Technical, scientific and humanistic work	555	26	3	95
Administration and management	341	16	1	96
Office work	163	8	1	98
Trade	266	12	1	96
Farming, forestry and fisheries	115	5	8	87
Mining and excavation	9	0	-	100
Transport and communication	116	5	9	91
Construction and industry (partial; see 1.3.1 classifications)	234	11	8	89
Industry (partial; see 1.3.1 classifications)	87	4	3	97
Service and safety work	271	13	2	97
Employment status				
Permanent	1699	79	3	96
Fixed term contract	55	3	2	98
Substitute/locum	87	4	3	95
Apprenticeship or other training scheme	18	1	6	94
Self-employed	178	8	5	89
Labour market measures	9	0	-	100
Seasonal worker	36	2	-	100
Probation period	8	0	13	88
Other	33	2	-	100
Unknown	34	2	-	26

Sectors

- 45 Construction - **Iceland, Liechtenstein, Switzerland**
- 02 Forestry, logging and related service activities - **Liechtenstein, Switzerland**
- 27 Manufacture of basic metals - **Iceland, Norway**
- 28 Manufacture of fabricated metal products, except machinery and equipment - **Liechtenstein, Norway**
- 01 Agriculture, hunting and related service activities - **Switzerland**
- 05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing - **Iceland**
- 10 Mining of coal and lignite; extraction of peat - **Norway**
- 12 Mining of uranium and thorium ores - **Norway**
- 13 Mining of metal ores - **Norway**
- 14 Other mining and quarrying - **Norway**
- 20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials - **Liechtenstein**
- 21 Manufacture of paper and paper products - **Norway**
- 26 Manufacture of other non-metallic mineral products - **Norway**
- 29 Manufacture of machinery and equipment NEC - **Liechtenstein**
- 34 Manufacture of motor vehicles, trailers and semi-trailers - **Norway**
- 35 Manufacture of other transport equipment - **Norway**
- 55 Hotels and restaurants - **Switzerland**
- 61 Water transport - **Iceland**

The most recorded sector with regard to the highest risk for accidents with more than 3 days absence is the 'Construction' sector.

The information from *Iceland* and *Liechtenstein* is based on expert opinions. The *Norwegian* estimate is based on accident rates from the Labour Inspection's database on accidents with more than and less than three days absence. The *Swiss* information is based on combined statistics of all workers' compensation insurers.

The following table provides an overview of the sectors indicated by the EFTA Focal Points and the picture in the Member States of the European Union.

Overview table

Sectors	EFTA Countries	EU-Member States ¹⁰⁸
01 Agriculture, hunting and related service activities	1	4
02 Forestry, logging and related service activities	2	-
05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing	1	-
10 Mining of coal and lignite; extraction of peat	1	-
12 Mining of uranium and thorium ores	1	-
13 Mining of metal ores	1	-
14 Other mining and quarrying	1	-
15 Manufacture of food products and beverages	-	5
20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	1	6
21 Manufacture of paper and paper products	1	-
26 Manufacture of other non-metallic mineral products	1	-
27 Manufacture of basic metals	2	-
28 Manufacture of fabricated metal products, except machinery and equipment	2	8
29 Manufacture of machinery and equipment NEC	1	-
34 Manufacture of motor vehicles, trailers and semi-trailers	1	-
35 Manufacture of other transport equipment	1	-
45 Construction	3	11
55 Hotels and restaurants	1	-
61 Water transport	1	-

The 'Construction' sector is reported in both EFTA Countries and EU Member States as the one with the highest risk of accidents with more than 3 days absence.

¹⁰⁸ Number of Focal Points indications

Occupations

- 61 Skilled agricultural and fishery workers - **Iceland, Liechtenstein, Norway**
- 71 Extraction and building trades workers - **Iceland, Liechtenstein**
- 72 Metal, machinery and related trades workers - **Iceland, Liechtenstein**
- 07 Craft and related trades workers - **Norway**
- 74 Other craft and related trades workers - **Liechtenstein**
- 82 Machine operators and assemblers - **Liechtenstein**
- 92 Agricultural, fishery and related labourers - **Iceland**
- 93 Labourers in mining, construction, manufacturing and transport - **Iceland**

Switzerland had no data available.

The most recorded occupation in relation to risk of accidents with more than 3 days absence is 'Skilled agricultural and fishery workers'.

The following table provides an overview of the occupations indicated by the EFTA Focal Points and the picture in the Member States of the European Union.

Overview table

Occupations	EFTA Countries	EU-Member States ¹⁰⁹
61 Skilled agricultural and fishery workers	3	-
07 Craft and related trades workers:	1	-
71 Extraction and building trades workers	2	6
72 Metal, machinery and related trades workers	2	8
74 Other craft and related trades workers	1	-
81 Stationary-plant and related operators	-	4
82 Machine operators and assemblers	1	9
92 Agricultural, fishery and related labourers	1	-
93 Labourers in mining, construction, manufacturing and transport	1	6

The most recorded occupation by the Focal Points is 'Machine operators and assemblers', which is indicated by nine Focal Points as opposed to only one from the EFTA Countries. The second most reported occupation among the EU Member States is 'Metal, machinery and related trades workers' with eight reporting Focal Points and two reporting EFTA Focal Points.

Accidents with more than 3 days absence- company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk'.

Iceland and Switzerland reported small companies. Liechtenstein stated small and medium size companies. Norway reported inconclusive data.

The findings from the EFTA Focal Points correspond with the picture in EU, where 5 Focal Points indicated that small companies employing less than 49 employees were most at risk, although this was not the case across all sectors.

Accidents with more than 3 days absence - gender at risk

Each EFTA Focal Point was asked to: 'State, which gender category has a particular high risk'.

¹⁰⁹ Number of Focal Points indications

Gender category most at risk	Number of EFTA Focal Point responses
Female	0 (0) ¹¹⁰
Male	4 (13)
No response	0 (2)

In their national reports all 4 EFTA Focal Points reported that male workers were most at risk in relation to accidents with more than 3 days absence. This was in line with the responses from the Focal Points.

Accidents with more than 3 days absence - age at risk

Each EFTA Focal Point was asked, to: 'State, which age category has a particular high risk'.

Iceland indicated age category 21-30 years, Norway age category 25-54 and Switzerland age category 20-35 years. Liechtenstein indicated not known.

Data provided by the Focal Points indicates that 6 EU Member States considered the age group < 25 years as the most vulnerable followed by the age category 25-54 years.

Accidents with more than 3 days absence - employment status at risk

Each EFTA Focal Point was asked to: 'State if the employment status is of importance'.

Norway reported the 'probation period'. Iceland, Liechtenstein and Switzerland had no data available.

Data provided by Focal Points did not allow a European picture with regard to accidents with more than 3 days absence and employment status at risk.

Accidents with more than 3 days absence - trend in the number of workers affected

Each EFTA Focal Point was asked to: 'Consider if the number of accidents at work with more than three days absence over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by 2 EFTA Focal Points (by 9 Focal Points): **Iceland and Switzerland** (Austria, France, Germany, Greece, Netherlands, Italy, Portugal, Sweden and United Kingdom)

Stable trend indicated by 1 EFTA Focal Point (by 4 Focal Points): **Liechtenstein** (Denmark, Finland, Ireland, Luxembourg)

Increased trend indicated by 1 EFTA Focal Point (by 2 Focal Points): **Norway** (Belgium* and Spain)

Category 'Other' indicated by no EFTA Focal Point (by no Focal Point): - (-)

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

* For the year 1997

Two EFTA Focal Points and nine Focal Points indicated a decreased trend. Norway as the only EFTA Country found an increasing trend, which probably is a result of better reporting routines and an increase in employment.

Accidents with more than 3 days absence - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing OSH outcome related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

¹¹⁰ Number of Focal Point responses in brackets

Preventive actions taken/planned are sufficient to deal with the existing OSH outcome related problems was indicated by 2 EFTA Focal Points (by 3 Focal Points): **Iceland and Switzerland** (Austria, Denmark and Greece)

Development of additional preventive action was indicated by 2 EFTA Focal Points (by 7 Focal Points): **Liechtenstein and Norway** (Belgium, Finland, Ireland, Italy, Luxembourg, Portugal and Spain)

The category 'Other' was indicated by no EFTA Focal Point (by 3 Focal Points): - (France, Netherlands and Sweden)

No response: - (United Kingdom)

Two EFTA Countries found that planned/taken preventive actions are sufficient and the other two find that development of additional preventive action is necessary. 7 Focal Points found that development of additional preventive action is necessary.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Liechtenstein: No measures yet taken.

Norway: A system to analyse accidents and 'close calls' may help in preventing accidents.

4.2 FATAL ACCIDENTS

Liechtenstein and *Switzerland* had not reported detailed national statistics showing the number of fatal accidents at work.

Norway reported the occupational deaths in 1998 from the Directorate of Labour Inspection's database.

Occupational deaths 1998 by sector (2-digit NACE)		Number of deaths	Frequency pr.10 million hours worked (weeks worked*37,5*44)
00-99	Total	64	0,22
01-02	Agriculture, hunting and forestry	13	0,87
5	Fishing	1	*
11	Extraction of crude petroleum and gas	0	*
10,12-14	Mining	4	6,06
15-37	Industry	12	0,27
15-16	Food products and beverages	3	0,38
17-19	Textiles, clothing and leather products	1	0,76
20	Wood and wood products	2	0,81
21	Pulp, paper and paper products	1	0,61
22	Publishing, printing and reproduction	0	0,00
23-25	Refined petroleum products, chemicals, rubber	0	0,00
26	Non-metallic mineral products	1	0,61
27-28	Basic metals and metal products	1	0,19
29	Machinery and equipment	0	0,00

Occupational deaths 1998 by sector (2-digit NACE)		Number of deaths	Frequency pr.10 million hours worked (weeks worked*37,5*44)
30-33	Electrical and optical equipment and machinery	0	0,00
34-35	Transport equipment	3	0,49
36-37	Furniture, recycling and other manufacturing	0	0,00
40-41	Electricity, gas, steam and water supply	0	0,00
45	Construction	15	0,70
50-55	Wholesale and retail trade, hotels and restaurants	3	0,06
50	Motor vehicles	0	0,00
51	Wholesale trade	1	0,06
52	Retail trade	0	0,00
55	Hotels, restaurants	2	0,24
60-64	Transport, storage and communication	10	0,41
60	Land transport	8	0,85
61	Water transport	0	*
62	Air transport	1	0,67
63	Supporting and auxiliary transport activities	1	0,28
64	Post and telecommunications	0	0,00
65-74	Financial intermediation, insurance and real estate and other business activities	1	0,03
65-67	Financial intermediation, insurance	0	0,00
70	Real estate	0	0,00
71-74	Other business activities	1	0,04
75-99	Other services	5	0,05
75	Public administration, defence and social security	2	0,09
80	Education	2	0,10
85	Health and social work	0	0,00
91	Activities of membership organisations	0	0,00
92	Recreational, cultural and sporting activities	1	0,21
95	Private households with employed persons	0	0,00
90,93,99	Other private services	0	0,00
0	Unknown sector	0	0,00

* Other directorates collect these data

Source: Hours worked: Statistics Norway

Iceland reported the fatal accidents for 1994 -1997 indicated at the 2-digit NACE level*.

Sector	1994	1995	1996	1997
01 Agriculture, hunting and related service activities	1	2	0	0
05 Fishing	1	0	1	0
20 Wood and wood products	1	0	0	0
28 Metal products	0	0	0	1
40 Electricity, gas, steam and hot water supply	0	1	0	0
45 Construction	3	0	1	2
60/61 Water and land transport	1	0	0	0
93 Other services activities	0	0	0	1
50 Sale, maintenance and repair of motor vehicles	1	0	1	0
Total	8	3	3	4

* The data source consists of the reports of accidents at work to the Administration of Occupational Safety and Health in Iceland each year.

Sectors

- 45 Construction - **Iceland, Liechtenstein, Norway, Switzerland**
- 01 Agriculture, hunting and related service activities - **Iceland, Norway, Switzerland**
- 60 Land transport; transport via pipelines - **Iceland, Norway**
- 02 Forestry, logging and related service activities - **Norway**
- 05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing - **Iceland**
- 10 Mining of coal and lignite; extraction of peat - **Norway**
- 12 Mining of uranium and thorium ores - **Norway**
- 13 Mining of metal ores - **Norway**
- 14 Other mining and quarrying - **Norway**
- 15-36 Manufacturing - **Switzerland**
- 20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials - **Norway**
- 27 Manufacture of basic metals - **Iceland**
- 50-52 Wholesale and retail trade - **Switzerland**
- 60-64 Transportation and communication - **Switzerland**
- 61 Water transport - **Iceland**

The most recorded sector with regard to the highest risk for fatal accidents is the 'Construction' sector.

The following table provides an overview of the sectors indicated by the EFTA Countries and the picture in the Member States of the European Union.

Sectors		EFTA Countries	EU-Member States ¹¹¹
01	Agriculture, hunting and related service activities	3	5
02	Forestry, logging and related service activities	1	3
05	Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing	1	5
10	Mining of coal and lignite; extraction of peat	1	-
12	Mining of uranium and thorium ores	1	-
13	Mining of metal ores	1	-
14	Other mining and quarrying	1	4
15-36	Manufacturing	1	-
20	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	1	-
27	Manufacture of basic metals	1	-
28	Manufacture of fabricated metal products, except machinery and equipment	-	3
45	Construction	4	11
50-52	Wholesale and retail trade	1	-
60	Land transport; transport via pipelines	2	5
60-64	Transportation and communication	1	-
61	Water transport	1	-

11 Focal Points have like the EFTA Countries also reported 'Construction' as the sector with the highest risk of fatal accidents.

Occupations

92 Agricultural, fishery and related labourers - **Iceland**

Only *Iceland* reported information about the occupations with highest risk of fatal accidents. The other countries did not have available information or found the question 'not relevant'.

Fatal accidents - company size at risk

Each EFTA Focal Point was asked to 'Indicate, in general terms, the size of the companies with the highest risk'.

Iceland and *Norway* reported small companies. *Liechtenstein* indicated small and medium enterprises. *Switzerland* had no data available.

Data provided by the Focal Points did not allow a European picture with regard to fatal accidents and company size at risk.

Fatal accidents - gender at risk

Each EFTA Focal Point was asked to: 'State, which gender category has a particular high risk'.

The following information was provided:

Gender category most at risk	Number of EFTA Focal Point responses
Female	0 (0) ¹¹²
Male	3 (12)
No response	0 (3)

¹¹¹ Number of Focal Points indications

¹¹² Number of Focal Points responses in brackets

In their national reports *Iceland*, *Norway* and *Switzerland* reported that the male workers were most at risk to fatal accidents in the workplace. *Liechtenstein* reported 'not relevant' due to the limited number of fatal accidents per year. The responses from the Focal Points also clearly identified males as most at risk.

Fatal accidents - age at risk

Each EFTA Focal Point was asked to: 'State which age category has a particular high risk'.

Iceland indicated the age category 21-30 years and *Norway* the age category 51-65 years. *Liechtenstein* regarded the risk category as not relevant. *Switzerland* had no data available.

Information from the EFTA Focal Points does not provide a uniform picture in the EFTA Countries. Data provided by Focal Points showed a fairly wide distribution of the age categories most at risk to fatal accidents at work. 5 Focal Points reported the age category more than 55 years as being most at risk.

Fatal accidents - employment status at risk

Each EFTA Focal Point was asked to: 'State if employment status is of importance'.

Iceland, *Norway* and *Switzerland* reported no data available. *Liechtenstein* regarded this risk category as not relevant.

Data provided by Focal Points did not allow a European picture with regard to fatal accidents and employment status at risk.

Fatal accidents - trend in the number of workers affected

Each EFTA Focal Point was asked to: 'Consider if the number fatal accidents at work over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by 2 EFTA Focal Points (by 7 Focal Points): **Iceland and Switzerland** (Austria, France, Germany, Portugal, Spain, Sweden, United Kingdom)

Stable trend indicated by 2 EFTA Focal Points (by 6 Focal Points): **Liechtenstein and Norway** (Denmark, Finland, Greece, Ireland, Italy and Luxembourg)

Increased trend indicated by no EFTA Focal Point (by 2 Focal Points): - (Belgium and Netherlands)

Category 'Other' indicated by no EFTA Focal Point (by no Focal Point): - (-)

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

Two of the EFTA Focal Points reported a decreased trend and the other two a stable trend. The same picture is seen in the EU Member States, where 7 Focal Points indicated a decreased trend and 6 a stable trend.

Switzerland stated that sectors with the highest risk are insured by the government workers compensation insurer. In these sectors the absolute number of fatal accidents has risen slightly over the last 5 years.

Iceland, *Liechtenstein* and *Norway* did not provide more information than shown in the table above.

Fatal accidents - evaluation

Each EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing OSH outcome related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing OSH outcome related problems was indicated by 1 EFTA Focal Point (by 3 Focal Points): **Iceland** (Austria, Denmark and Greece)

Development of additional preventive action was indicated by 3 EFTA Focal Points (by 6 Focal Points): **Liechtenstein, Norway and Switzerland** (Belgium, Finland, Ireland, Italy, Portugal and Spain)

The category 'Other' was indicated by no EFTA Focal Point (by 3 Focal Points): - (France, Netherlands and Sweden)

No response: - (Luxembourg and United Kingdom)

Three EFTA Focal Points indicated the need for development of additional preventive action. The responses from the Focal Points were less pronounced. 6 Focal Points indicated that development of additional preventive measures was necessary.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Liechtenstein: No measures taken as yet.

Norway: The Labour Inspection has recently had campaigns in agriculture and forestry and land transport, where a large portion of the occupational deaths occurs. Construction is also over-represented. A campaign in construction started in 2000.

Switzerland: A future reduction in the increase of fatal accidents will depend on the implementation of appropriate training and introduction courses, organisational management improvements and increased understanding of how errors are made and accidents occur. The traditional emphasis on personal protective equipment and machine safety is felt to be approaching the limit of its effectiveness.

4.3 MUSCULOSKELETAL DISORDERS

Sectors

- 01 Agriculture, hunting and related service activities - **Liechtenstein, Switzerland**
- 15 Manufacture of food products and beverages - **Liechtenstein, Norway**
- 45 Construction - **Liechtenstein, Switzerland**
- 85 Health and social work - **Norway, Switzerland**
- 28 Manufacture of fabricated metal products, except machinery and equipment - **Liechtenstein**
- 29 Manufacture of machinery and equipment NEC - **Liechtenstein**
- 60 Land transport; transport via pipelines - **Norway**
- 64 Post and telecommunications - **Switzerland**
- 90 Sewage and refuse disposal, sanitation and similar activities - **Norway**
- 93 Other service activities - **Switzerland**

Iceland had insufficient data for this OSH outcome with regard to sectors.

'Agriculture, hunting and related service activities', 'Manufacture of food products and beverages', 'Construction' and 'Health and social work' were each mentioned by two EFTA Countries with regard to a risk of musculoskeletal disorders.

The following table provides an overview of the sectors indicated by the EFTA Focal Points and the picture in the Member States of the European Union.

Overview table

Sectors		EFTA Countries	EU-Member States ¹¹³
01	Agriculture, hunting and related service activities	2	6
15	Manufacture of food products and beverages	2	-
27	Manufacture of basic metals	-	3
28	Manufacture of fabricated metal products, except machinery and equipment	1	3
29	Manufacture of machinery and equipment NEC	1	-
45	Construction	2	7
55	Hotels and restaurants	-	4
60	Land transport; transport via pipelines	1	-
64	Post and telecommunications	1	-
85	Health and social work	2	3
90	Sewage and refuse disposal, sanitation and similar activities	1	-
93	Other service activities	1	-

The picture in the EU Member States was similar with regard to 'Construction' (7 times indicated) and 'Agriculture, hunting and related service activities' (6 times indicated).

Occupations

- 71 Extraction and building trades workers - **Liechtenstein, Switzerland**
- 83 Drivers and mobile plant operators - **Norway, Switzerland**
- 93 Labourers in mining, construction, manufacturing and transport - **Norway, Switzerland**
- 22 Life science and health professionals - **Norway**
- 32 Life science and health associate professionals - **Switzerland**
- 41 Office clerks - **Norway**
- 42 Customer services clerks - **Norway**
- 72 Metal, machinery and related trades workers - **Liechtenstein**
- 74 Other craft and related trades workers - **Liechtenstein**
- 82 Machine operators and assemblers - **Liechtenstein**
- 91 Sales and services elementary occupations - **Switzerland**
- 92 Agricultural, fishery and related labourers - **Liechtenstein**

Iceland had insufficient data for this OSH outcome with regard to occupations.

The three occupations indicated by 2 EFTA Focal Points were 'Extraction and building trades workers', 'Drivers and mobile plant operators' and 'Labourers in mining, construction, manufacturing and transport'.

The following table provides an overview of the occupations indicated by the EFTA Focal Points and the picture in the Member States of the European Union.

¹¹³ Number of Focal Points indications

Overview table

Occupations	EFTA Countries	EU-Member States ¹¹⁴
22 Life science and health professionals	1	-
32 Life science and health associate professionals	1	-
41 Office clerks	1	-
42 Customer services clerks	1	-
61 Skilled agricultural and fishery workers	-	4
71 Extraction and building trades workers	2	6
72 Metal, machinery and related trades workers	1	5
74 Other craft and related trades workers	1	-
82 Machine operators and assemblers	1	-
83 Drivers and mobile plant operators	2	-
91 Sales and services elementary occupations	1	5
92 Agricultural, fishery and related labourers	1	4
93 Labourers in mining, construction, manufacturing and transport	2	9

The most recorded occupations by the Focal Points were 'Labourers in mining, construction, manufacturing and transport' followed by 'Extraction and building trades workers' which is a similar picture as in the EFTA Countries.

Musculoskeletal disorders - company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk'.

Liechtenstein indicated 'small and medium sized enterprises'. *Iceland* reported 'insufficient data'. *Norway* had no data and *Switzerland* stated 'not relevant'.

Data provided by Focal Points did not allow a European picture with regard to musculoskeletal disorders and company size at risk.

Musculoskeletal disorders - gender at risk

Each EFTA Focal Point was asked to: 'State, which gender category has a particular high risk'.

The following information was provided:

Gender category most at risk	Number of EFTA Focal Point responses
Female	2
Male	1
No response	0

In their national report *Liechtenstein* reported that the male workers were most exposed to musculoskeletal disorders in the workplace. *Switzerland* and *Norway* reported that the female workers were most exposed to musculoskeletal disorders. *Iceland* had insufficient data.

Data provided by Focal Points did not allow a European picture with regard to musculoskeletal disorders and gender at risk.

¹¹⁴ Number of Focal Points indications

Musculoskeletal disorders - age at risk

Each EFTA Focal Point was asked to: 'State which age category has a particular high risk'.

Norway indicated 'older workers' and Switzerland reported age category 25-54 years. Iceland had insufficient data. Liechtenstein had no information.

Data provided by Focal Points did not allow a European picture with regard to musculoskeletal disorders and age at risk.

Musculoskeletal disorders - employment status at risk

Each EFTA Focal Point was asked to: 'State if employment status is of importance'.

Liechtenstein indicated 'full-time'. Norway stated 'non-permanent employees' and Switzerland indicated temporary employees. Iceland reported insufficient data.

Data provided by Focal Points did not allow a European picture with regard to musculoskeletal disorders and employment status at risk.

Musculoskeletal disorders - trend in the number of workers affected

Each EFTA Focal Point was asked to: 'Consider if the number of workers affected by musculoskeletal disorders over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by no EFTA Focal Point (by 1 Focal Point): - (Luxembourg)

Stable trend indicated by no EFTA Focal Point (by 6 Focal Points): - (Austria, Belgium, Denmark, Finland, Greece and Netherlands*)

Increased trend indicated by 3 EFTA Focal Points (by 5 Focal Points): **Liechtenstein, Norway and Switzerland** (France, Germany, Portugal, Spain and Sweden)

Category 'Other' indicated by no EFTA Focal Point (by 3 Focal Points): - (Ireland, Italy and United Kingdom)

Insufficient data: **Iceland**

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

* This trend is based on data collected 1996-1997.

An increased trend is indicated by 3 EFTA Focal Points. The picture in the EU Member States is more diverse, as 6 Focal Points indicated a stable trend and 5 Focal Points reported an increased trend.

Musculoskeletal disorders - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing OSH outcome related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing OSH outcome related problems was indicated by no EFTA Focal Point (by 2 Focal Points): - (Greece and Netherlands)

Development of additional preventive action was indicated by 3 EFTA Focal Points (by 8 Focal Points): **Liechtenstein, Norway and Switzerland** (Austria, Belgium, Denmark, Finland, Luxembourg, Portugal, Spain and Sweden)

The category 'Other' was indicated by no EFTA Focal Point (by no Focal Point): - (-)

No response: - (France, Ireland, Italy and United Kingdom)

Insufficient data: **Iceland**

3 EFTA Focal Points indicated the need for development of additional preventive action. The same picture was seen in the EU Member States where 8 Focal Points reported the same need and only 2 Focal Points stated that sufficient preventive actions were in place or planned.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Liechtenstein: Running campaigns. Information and instruction of the employees.

Norway: Establish a better registration system for occupational diseases to discover the true extent of the disorder. Strengthen research to establish which workplace exposures cause occupational disorders.

Switzerland: Future preventive measures need to view this problem more globally than has previously been the case. Manual handling regulations are not expected to significantly affect the incidence of this problem, except in specific sectors where appropriate enforcement is also required. An emphasis on organisational improvement is expected to be much more effective. The high incidence of musculoskeletal disorders in the whole working population means that this subject requires more detailed investigation and coordinated prevention programmes.

4.4 STRESS

Sectors

Norway reported the following sectors:

- 55 Hotels and restaurants
- 60 Land transport; transport via pipelines
- 75 Public administration and defence; compulsory social security
- 80 Education
- 85 Health and social work

Iceland, Liechtenstein and Switzerland have no data available on stress and sectors.

Occupations

Norway reported the following occupations:

- 22 Life science and health professionals
- 32 Life science and health associate professionals
- 34 Other associate professionals
- 42 Customer services clerks
- 51 Personal and protective services workers
- 83 Drivers and mobile plant operators

Iceland, Liechtenstein and Switzerland have no data available on stress and occupations.

Stress - company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk.'

Iceland, Liechtenstein and Norway did not provide any data. *Switzerland* indicated 'no relevance'.

Data provided by Focal Points did not allow a European picture with regard to stress and company size at risk.

Stress - gender at risk

Each EFTA Focal Point was asked to 'State, which gender category has a particular high risk.'

Switzerland reported that the female workers were most exposed to stress in the workplace. *Iceland* and *Norway* had no data. In *Liechtenstein* such data was not known.

Data provided by Focal Points did not allow a European picture with regard to stress and gender at risk.

Stress - age at risk

Each EFTA Focal Point was asked to: 'State which age category has a particular high risk'.

Switzerland indicated age category 25-54 years. *Iceland* and *Norway* had no data. *Liechtenstein* indicated 'not known'.

Data provided by Focal Points did not allow a European picture with regard to stress and age at risk.

Stress - employment status at risk

Each EFTA Focal Point was asked to: 'State if the employment status is of importance'.

Liechtenstein and *Switzerland* indicated 'full-time'. *Iceland* and *Norway* indicated 'no data'.

Data provided by Focal Points did not allow a European picture with regard to stress and employment status at risk.

Stress - trend in the number of workers exposed

Each EFTA Focal Point was asked to: 'Consider if the number of workers suffering from stress over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by no EFTA Focal Point (by no Focal Point): - (-)

Stable trend indicated by no EFTA Focal Point (by 1 Focal Point): - (Greece)

Increased trend indicated by 2 EFTA Focal Points (by 9 Focal Points): **Norway and Switzerland** (Austria, Belgium, Finland, Germany, Ireland, Italy, Portugal, Spain and Sweden)

Category 'Other' indicated by no EFTA Focal Point (by 5 Focal Points): - (Denmark**, France, Netherlands, Luxembourg and United Kingdom)

Insufficient data/not known: **Liechtenstein and Iceland**

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

** The trend regarding the number of workers exposed over the last 3-5 years is unknown.

2 EFTA Countries reported an increased trend for stress at work.

9 Focal Points also reported an increased trend regarding stress at work.

Stress - evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing OSH outcome related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing OSH outcome related problems was indicated by no EFTA Focal Point (by no Focal Point): - (-)

Development of additional preventive action was indicated by 3 EFTA Focal Points (by 10 Focal Points): **Liechtenstein, Norway and Switzerland** (Belgium, Denmark, Finland, Greece, Ireland, Italy, Portugal, Spain, Sweden and United Kingdom)

The category 'Other' was indicated by no EFTA Focal Point (by 1 Focal Point): - (Netherlands)

No response: **Iceland** (Austria, France and Luxembourg)

Indications from the Focal Points showed the same picture in the EU Member States, where 10 Focal Points indicated the need for development of additional preventive action.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Liechtenstein: No measures taken as yet.

Norway: Multifactorial exposures which make it difficult to handle stress prevention. However, where clear stressors exist, like violence, much more preventive action could go into making the workplace safer. In order to untangle stressors and their impact on health, much more research is needed. A better knowledge to guide future preventive action is needed.

Switzerland: The public awareness of the health and safety problems in connection with this factor needs to be increased.

4.5 OCCUPATIONAL SICKNESS ABSENCE

Sectors

Iceland, Liechtenstein, Norway and Switzerland have no data available regarding occupational sickness absence and sectors.

Occupations

Iceland, Liechtenstein and Norway have no data available regarding occupational sickness absence and occupations. *Switzerland* reported 'Office clerks' and 'Customer service clerks'.

Occupational sickness absence - company size at risk

Each EFTA Focal Point was asked to : 'Indicate, in general terms, the size of companies with the highest risk.'

Switzerland indicated small and medium sized enterprises with more than 200 employees. *Iceland, Liechtenstein and Norway* had no data.

Data provided by Focal Points did not allow a European picture with regard to occupational sickness absence and company size at risk.

Occupational sickness absence - gender at risk

Each EFTA Focal Point was asked to: 'State which gender category has a particular high risk'.

In their national reports *Switzerland* and *Norway* reported that the female workers were most at risk with regard to occupational sickness absence in the workplace. *Iceland* and *Liechtenstein* had no data.

Data provided by Focal Points did not allow a European picture with regard to occupational sickness absence and gender at risk.

Occupational sickness absence - age at risk

Each EFTA Focal Point was asked to: 'State which age category has a particular high risk'.

Switzerland indicated age category < 25 years. Iceland, Liechtenstein and Norway had no data.

Data provided by Focal Points did not allow a European picture with regard to occupational sickness absence and age at risk.

Occupational sickness absence - employment status at risk

Each EFTA Focal Point was asked to: 'State if the employment status is of importance'.

Liechtenstein indicated full-time employees and Switzerland permanent employees. Iceland and Norway had no data.

Data provided by Focal Points did not allow a European picture with regard to occupational sickness absence and employment status at risk.

Occupational sickness absence - trend in the number of workers

Each EFTA Focal Point was asked to: 'Consider if the number of workers suffering occupational sickness absence over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by no EFTA Focal Point (by 2 Focal Points): - (Greece and Luxembourg)

Stable trend indicated by no EFTA Focal Point (by 2 Focal Points): - (Ireland and Sweden)

Increased trend indicated by 2 EFTA Focal Points (by 3 Focal Points): **Norway and Switzerland** (Germany, Netherlands and Portugal)

Category 'Other' indicated by no EFTA Focal Point (by 8 Focal Points): - (Austria, Belgium, Denmark**, Finland, France, Italy, Spain and United Kingdom)

Insufficient data/not known: **Liechtenstein and Iceland**

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

** The trend regarding the number of workers exposed over the last 3-5 years is unknown.

2 EFTA Focal Points and 3 Focal Points indicate an increased trend.

Switzerland submitted the following comment related to the trend: The amount of sickness absence depends to a large degree on Switzerland's economic prosperity. In times of recession absence rates decrease. A trend has, however, been found that although the frequency of small periods of absence decreases, the frequency of lengthy absence increases. This has been interpreted as indicators that in some industries frequent short absences are used as a coping device. When this is no longer utilised the frequency of serious health disturbance increases.

Occupational sickness absence – evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing OSH outcome related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing OSH outcome related problems was indicated by no EFTA Focal Point (by 1 Focal Point): - (Greece)

Development of additional preventive action was indicated by 3 EFTA Focal Points (by 5 Focal Points): **Liechtenstein, Norway and Switzerland** (Belgium, Ireland, Luxembourg, Portugal and Spain)

The category 'Other' was indicated by no EFTA Focal Point (by 2 Focal Point): - (Netherlands and Sweden)

No response: **Iceland** (Austria, Denmark, Finland, France, Italy and United Kingdom)

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Liechtenstein: Registration of data concerning professional diseases and co-operation with doctors is needed.

Norway: There is a high activity in various projects to prevent absenteeism. However, there is no clear picture yet concerning which interventions will be successful on a sustainable basis. In 1999 a secretariat was established to spread information of the most promising intervention.

Switzerland: Emphasis in the future will be directed towards establishing better monitoring methods for sickness absences.

4.6 OCCUPATIONAL DISEASES

Sectors

- 45 Construction - **Liechtenstein, Norway, Switzerland**
- 15 Manufacture of food products and beverages - **Liechtenstein, Switzerland**
- 28 Manufacture of fabricated metal products, except machinery and equipment - **Liechtenstein, Norway**
- 29 Manufacture of machinery and equipment NEC - **Liechtenstein, Norway**
- 01 Agriculture, hunting and related service activities - **Switzerland**
- 20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials - **Liechtenstein**
- 27 Manufacture of basic metals - **Norway**
- 36 Manufacture of furniture; manufacturing NEC - **Switzerland**
- 50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel - **Switzerland**
- 60 Land transport; transport via pipelines - **Norway**
- 75 Public administration and defence; compulsory social security - **Norway**

Iceland had insufficient data regarding occupational diseases and sectors.

The most recorded sector with regard to risk of occupational diseases was 'Construction'.

The following table provides an overview on the sectors indicated by the EFTA Focal Points and the picture in the Member States of the European Union.

Overview table

Sectors		EFTA Countries	EU-Member States ¹¹⁵
01	Agriculture, hunting and related service activities	1	5
15	Manufacture of food products and beverages	2	5
20	Manufacture of wood and of products of wood and cork, except furniture; Manufacture of articles of straw and plaiting materials	1	-
27	Manufacture of basic metals	1	5
28	Manufacture of fabricated metal products, except machinery and equipment	2	5
29	Manufacture of machinery and equipment NEC	2	-
36	Manufacture of furniture; manufacturing NEC	1	-
45	Construction	3	11
50	Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel	1	-
60	Land transport; transport via pipelines	1	-
75	Public administration and defence; compulsory social security	1	-
85	Health and social work	-	5

'Construction' got a similar assessment in the EFTA Countries and the Member States as being the sector with highest risk of occupational diseases.

Occupations

- 82 Machine operators and assemblers - **Liechtenstein, Norway, Switzerland**
- 93 Labourers in mining, construction, manufacturing and transport - **Liechtenstein, Norway, Switzerland**
- 01 Armed forces - **Norway**
- 71 Extraction and building trades workers - **Norway**
- 83 Drivers and mobile plant operators - **Norway**

Iceland had insufficient data regarding occupational diseases and occupations.

The two most recorded occupations with regard to risk of occupational diseases were 'Machine operators and assemblers' and 'Labourers in mining, construction, manufacturing and transport'.

The following table provides an overview on the occupations indicated by the EFTA Focal Points and the picture in the Member States of the European Union.

¹¹⁵ Number of Focal Points indications

Overview table

	Occupations	EFTA Countries	EU-Member States ¹¹⁶
01	Armed forces	1	-
51	Personal and protective services workers	-	2
71	Extraction and building trades workers	1	5
72	Metal, machinery and related trades workers	-	7
74	Other craft and related trades workers	-	2
82	Machine operators and assemblers	3	6
83	Drivers and mobile plant operators	1	3
93	Labourers in mining, construction, manufacturing and transport	3	7

The EFTA Focal Points and the Focal Points did for the occupation 'Labourers in mining, construction, manufacturing and transport' a similar assessment.

Occupational diseases - company size at risk

Each EFTA Focal Point was asked to: 'Indicate, in general terms, the size of companies with the highest risk.'

Liechtenstein indicated small and medium sized enterprises. Switzerland reported small companies. Iceland had insufficient data and Norway had no data.

Data provided by Focal Points did not allow a European picture with regard to occupational diseases and company size at risk.

Occupational diseases - gender at risk

Each EFTA Focal Point was asked to: 'State, which gender category has a particular high risk'.

Switzerland and Liechtenstein identified the male workers as being most at risk in relation to occupational diseases. Norway reported that this varies with sector type. Iceland had insufficient data. The Focal Points indicated that males were most at risk.

Occupational diseases - age at risk

Each EFTA Focal Point was asked to: 'State which age category has a particular high risk'.

Switzerland indicated age category 21-35 years. Iceland, Liechtenstein and Norway had no or insufficient data.

Data provided by Focal Points showed a fairly wide distribution on age categories most vulnerable to occupational diseases. 5 Focal Points reported that age category >55 years were most at risk.

Occupational diseases - employment status at risk

Each EFTA Focal Point was asked to: 'State if employment status is of importance'.

Liechtenstein indicated 'full-time employment'. Iceland reported insufficient data. Norway had no data, but reported that workers in non-permanent employment are considered to generally be at greater risk. Switzerland regarded this risk category as 'not relevant'.

Data provided by Focal Points did not allow a European picture with regard to occupational diseases and employment status at risk.

Occupational diseases - trend of workers suffering occupational diseases

Each EFTA Focal Point was asked to: 'Consider if the number of workers suffering occupational diseases over the last 3-5 years has decreased, remained stable or increased'.

The following responses were received:

Decreased trend indicated by 2 EFTA Focal Points (by 7 Focal Points): **Liechtenstein and Switzerland** (Austria, Belgium, Finland, Germany, Greece, Italy and Sweden)

Stable trend indicated by no EFTA Focal Point (by 2 Focal Points): - (Denmark and Ireland)

Increased trend indicated by 1 EFTA Focal Point (by 3 Focal Points): **Norway** (France, Portugal and Spain)

Category 'Other' indicated by no EFTA Focal Point (by 3 Focal Points): - (Netherlands, Luxembourg and United Kingdom)

Insufficient data: **Iceland**

'Other response' includes no response/unable to respond due to unavailability of national data/incompatibility of national data.

Two EFTA Countries indicate a decreased trend. A similar picture is seen among the EU Member States where 7 Focal Points have identified a decreased trend.

The EFTA Focal Points submitted the following comments in relation to the trends:

Switzerland: The number of compensated cases has declined however the experts believe that this may reflect a declining willingness to report rather than a real reduction in incidence. Changes are expected in the sectors which are most at risk. The experts were of the opinion that underreporting may be significantly higher in some sectors than others.

Liechtenstein did not expect any particular categories in sectors, professions, company size, gender, age or employment status to deviate from this development

Occupational diseases – evaluation

The EFTA Focal Points were asked to indicate if:

'Preventive actions taken or planned are sufficient to deal with the existing OSH outcome related problems'

'The development of additional preventive action is necessary'

'Other'

The following responses were received:

Preventive actions taken/planned are sufficient to deal with the existing OSH outcome related problems was indicated by no EFTA Focal Point (by 2 Focal Points): - (Austria and Greece)

Development of additional preventive action was indicated by 3 EFTA Focal Points (by 7 Focal Points): **Liechtenstein, Norway and Switzerland** (Belgium, Denmark, Finland, Ireland, Italy, Portugal and Spain)

The category 'Other' was indicated by no EFTA Focal Point (by 4 Focal Points): - (France, Netherlands, Sweden and United Kingdom)

No response: - (Luxembourg)

Insufficient data: **Iceland**

3 EFTA Countries found additional prevention action needed. Also the largest group of the EU Member States (seven out of fifteen) evaluate that development of additional preventive action is needed.

Where EFTA Focal Points gave the response 'The development of additional preventive action is necessary'; they were asked to elaborate on this action. Details of the responses received are given below:

Liechtenstein: Increased running of workplace examinations. Giving orders for preventive medical examinations and for technical and organisational measures.

Norway: Establish a better registration system for occupational diseases to discover the true extent of the disorder. Curb the spread of highly reactive chemicals (e.g. isocyanates, epoxy, etc.). Strengthen research to establish which workplace exposures cause occupational disorders.

Switzerland: The expert group was unanimously of the opinion that the legally (Accident Insurance Law) recognised occupational diseases represented only a small portion of work-related ill health and disease. Even where the connections between work and disease are quite clear there is a large number of unrecognised and therefore hidden cases. The reason for this is not so much due to THE level of acceptance by the insurance companies but rather to lack of recognition of

work-relatedness by both the treating physician and the affected employee. Particular examples of sectors where under-reporting is common are, for example, nasal cancer in carpenters and mesothelioma from asbestos work.

The sectors where under-reporting is most likely to occur are:

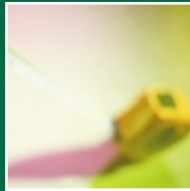
45 Construction (particularly interior finishing – solvent containing paints, tile glues, etc)

36 Carpenters (wood dust)

15 Bakers (flour dust)

50 Motor vehicle repairs (spray painting).

5.



CHANGES IN THE WORKLIFE

- 5.1 EMERGING RISKS
- 5.2 TELEWORK
- 5.3 EMPLOYMENT STATUS

5.1

EMERGING RISKS

Area of Concern	Topic	Considerations
Changing working patterns	• Increase in automation. • Decrease in workers with full-time permanent positions. • Technologic development/IT -VDU * • Working in the home of the client. • More jobs with high demands on emotional labour • Strong pressure working on large and complex projects. • Ambitions in flexible organisations • Changing working hours/'shops open day and night' • Downsizing and outsourcing • Equable distribution of tasks within organisations, allocations of responsibility, communication, hierarchical organisation	• More stress. • The traditional health and safety protection system does not adequately protect these employees • Iceland: There is in many workplaces a gap between technological investment and workers well-being. Norway: Expose the employees for new health problems; although work time/rest periods are regulated. • Quite an extensive amount of work is performed by service-/and care providers in the home of the client. Only recently measures to regulate the conditions of work in this branch have been taken. • There are research reports indicating that employees in this type of work, mainly women, suffer from emotional exhaustion and may develop mental and physical symptoms. • Projects with a number of contractors and subcontractors and time pressures represent major challenges. • Modern flexible organisations seem to stimulate ambitions to make high efforts. There is a worry about dynamics of the psychosocial environment, for example increases in horizontal conflicts among colleagues, between clients and customers and employees. • High risk of threats and violence against the personnel. • May affect the health and well-being among the employees as well as among those made redundant. • Further improvements in the areas of OSH depend on improving weakness in work organisation.

Area of Concern	Topic	Considerations
Changes in labour force	• Increase night and Sunday work of women. • Increase in number of new foreign workers.* • Increase in female employees. • Low unemployment.	• The ban for night work of women has been abolished • Switzerland: changes in labour laws governing the employment of foreign workers are currently being drafted. Norway: Language education is important to integrate immigrants/refugees. • Creates a demand for more flexible working hours, etc. • Persons who would otherwise be considered 'unemployable' are working.
Particularly sensitive risk groups	• Temporary employment. • Outsourced. • Teleworkers. • New foreign workers.* • Young workers. • Older workers.	• Norway: Special instruction is required in order to get working knowledge of the language and the culture. • Regarded as groups demanding special awareness and protection.
Clean and safe production and products	Commercial cleaning.	Increase of number of commercial cleaning firms; Increase of risk
Safety and health management	• New obligations on employers. • The Working environment act and internal control	New laws are currently being introduced to oblige employers with high-risk activities to enlist occupational health specialists. It would be of great interest to evaluate the success of the central policy and major instrument, which has been in operation since 1992 in Norway.
Psycho- social aspects	• Stress/ overload * • Bullying • Passive smoking • Inter-related causes of illness and injury • Globalisation • Rationalisation • Mechanisation	• Liechtenstein: Legal regulation has been established. Norway: Linked to musculoskeletal problems as well as coronary/heart conditions as mental problems, (risk groups i.e. nurses, kindergarten, teachers/pre-school teachers) • Legal regulation has been established. • The one-cause model for illness and accidents needs to be expanded to a multifactorial model, reflecting the influence and individual and social factors. • For all three parameters: Increased monotony, mental strain and observation of the workers.
Ergonomics	• Manual handling. • Repetitive/monotonous work. • Strenuous working positions. • High speed work. • Physically demanding work.	Increase of screen workplaces.

Area of Concern	Topic	Considerations
Safety risks	No information provided by the EFTA Countries	
Chemical risk factors	Handling of chemical substances	Increased use
Physical risk factors	- Noise. - Radiation. - Vibration.	For all three an increase of risk is not expected.
Biological risk factors	- Development of resistance to antibiotics. - Importation of new microbiological strains from abroad	- Norway has (at present) a more favourable situation with microbes resistant to antibiotics than other countries in general. - Fear importation of new virulent microbes.
Sector research.	No information provided by the EFTA Countries	
Other topics	Unionisation	The Norwegian work life is quite organised, the level of unionisation is comparable high and the employers also have a long tradition of being organised. The cultural and organisational conditions conducive to a broad co-operation in the field of health and safety is a very important issue to study and monitor.

* These topics are mentioned by two EFTA Countries, all other topics are mentioned only by one country.

By way of comparison the most identified themes associated with emerging risks, and the possible implications mentioned by the Member States of the European Union are presented below:

Topic	Implications
Changing working patterns	<i>Changed work organisation</i> was identified as a significant concern. That is the way in which the work is organised or structured has changed significantly. This may include changes to shift patterns or the order in which work tasks are completed, or alternatively, changes to the organisation of the management/company structure, all of which can increase the risks to workers.
Particularly sensitive risk groups	<i>Young workers</i> are defined as people under the age of 18. They are considered to be an 'at risk' group as they are deemed to be unfamiliar with the hazards present in the workplace. They often lack the experience of workplaces to safely deal with risks in comparison to adults. Their perception of risk can also vary from that of a mature worker.
Psycho-social aspects	<i>Stress</i> was identified as being of significant concern. When an individual perceives that the task at hand is unachievable in a particular time frame or is outside of his or her capabilities this can lead to stress. Stress can also be brought on by environmental conditions such as extremes of noise, temperature, humidity and light. Too little time to relax can also lead to stress. Anxiety about being unable to meet commitments outside of work can also generate a serious problem. The stress can lead to poor performance at work and an increase in mistakes made, thereby increasing the likelihood of accidents.
Ergonomics	<i>Manual handling</i> was identified as being of significant concern. Moving of heavy or awkward loads in the workplace poses a serious risk to employees and should be automated where possible or work practices changed to reduce the need to move and handle loads, for example good workplace layout. Peoples' backs are often most at risk from moving and handling. An example of this in the workplace is unloading of a truck by hand when it may be done using a fork lift truck.
Chemical risk factors	<i>New chemicals</i> such as pesticides or cold disinfectants for medical uses may have insufficient data on the physiological effects to ensure safe usage. The employer is unlikely to be familiar with the product, which increases the risks in using the chemical without adequate control measures or understanding of the associated risks.

Topic	Implications
Sector research	<i>Health and social work</i> was identified, as a sector with research needs. The main concerns within this area of work are lone working, temporary workers and manual handling.
Particularly sensitive risk groups	<i>Older workers</i> were also identified as a significant concern as a particular sensitive risk group. Older workers may have inherent muscular problems, which can reduce their ability to lift or move objects. Also, they may have an increased sensitivity to extremes of temperature and slower reflexes.
Psycho-social aspects	<i>Violence</i> may take the form of bullying at work or the threat of violence from working in high-risk areas. Such as violence from clients in an accident and emergency unit of a public hospital, from pupils for teachers or from members of the public when working on a construction site in a high crime area.
Ergonomics	<i>Repetitive strain</i> was identified as being of significant concern. Repetitive strain injuries are caused when movements are repeated excessively by particular parts of the body for long periods of time. Examples of tasks vulnerable to this risk include typing; computer related work and checkout operators moving items across a scanner.

5.2 TELEWORK

Quantitative data/estimates on the total number of workers that have telework facilities. Particular points of attention in the Countries regarding the OSH of people using telework facilities.

EFTA Country	Comments received
Iceland	- Unable to identify any studies relating to this topic. This lack of information highlights the need for a survey in this area. - No specific references are made in legislation, in inspection activities etc. to teleworkers. They do not distinguish between teleworkers and other type of workers.
Liechtenstein	- Data on the number of workers that have telework facilities are not available. - No particular points of attention regarding the OSH of people using telework facilities are known.
Norway	- Estimated to about 8% (i.e. 150.000) of the employees are teleworkers for 5 hours or more per week (another estimate made by the development department of Telenor, the Norwegian telecompany, says 7.3% in 1997). - In the last revision of the Basic Agreement, The Norwegian Confederation of Trade Unions (LO) and The Confederation of Norwegian Business and Industry (NHO) made an agreement on telework. Among other things, the following is said in the agreement: 'The main organisation acknowledge the importance of following the developments in this area carefully. Knowledge about this new type of working situation's organisational challenges and possibilities is of vital importance in order to give the members good advice with regards to how this work can and should be organised. LO and NHO therefore express their commitment to systematically collecting knowledge in this area, and maintaining a dialog with competent expertise. A group with representatives from the parties will be established, which will continue working with challenges and problems in relation to the use of telework.'

EFTA Country	Comments received
Switzerland	- Qualitative data on the number of workers that have telework facilities are not available. - The employer has to ensure the physical and psychological integrity of his employees (The Obligation Code, Art. 328). - The application of the Labour Law depends on who pays the rent for the premises where the work is undertaken. It is not applicable to teleworkers who work 100% in their own homes, but it is applicable in the situation of teleworkers who perform the work at a place, which is rented by the employer.

The picture from the EU Countries was too diverse to provide a common picture.

5.3 EMPLOYMENT STATUS

Below themes of particular concerns in the EFTA Countries regarding the working conditions of people that work on the basis of the following employment status is presented.

<i>Fixed term contract</i>	
Iceland	No data available
Liechtenstein	Not known
Norway	No data available
Switzerland	Persons with fixed-term contracts, temporary employment and agency contracts are disadvantaged in that they are often viewed as comparatively easy to replace from the point of view of the employers, and the employees themselves often fear that complaints about workplace conditions, or requests for improvements will ultimately result in loss of job. Their health risks are not perceived as being as significant to the company as the health of the permanent full-time employees, and often it is not necessary to replace wages if these employees are sick, so there is no financial incentive to the employer to protect them. These employees are often not adequately trained for the tasks, especially the safety and health aspects of the company induction is neglected for non-permanent employees. This results in an increased risk of accident or error.
<i>Temporary employment agency contract</i>	
Iceland	No data available
Liechtenstein	Not known
Norway	No data available
Switzerland	See text above under 'fixed term contract'

Apprenticeship or other training scheme

Iceland	No data available
Liechtenstein	Not known
Norway	No data available
Switzerland	The safety of apprentices has long been perceived as very important in Switzerland. The expert group is of the opinion that the protection of apprentices in Switzerland is exceptionally good compared to other EU Countries.

Self-employed

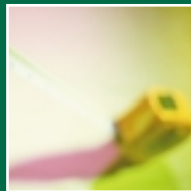
Iceland	No data available
Liechtenstein	Not known
Norway	No data available
Switzerland	There is a reported tendency for companies to outsource their risks. For example, where more dangerous sections or activities, which were traditionally part of a larger company, are separated off into pseudo-self-employing affiliates. Objective data are not available in Switzerland to verify how often and in what manner this is occurring. It may be done on an individual level, where employees are encouraged to offer the same services but as independent contractors rather than as employees, or it may involve a group of employees, who forms a smaller supply or service company. The parent company thereby reduces its own liability for the risk.

Switzerland added the the issues described above, which are altering the work patterns of the Swiss community, are currently presenting a challenge for the legal and enforcement authorities, as the traditional protective legal framework is based on a workforce substantially made up of permanent full-time employees in a long-term employer-employee relationship and it may not be adequate for protecting the working population where this relationship is of only short duration. The problem of stress-related illness, for example, cannot be adequately addressed on an individual level when the employer constantly changes. The problem is expected to increase in the future as the number of people in permanent employment decreases and the changing work forms involve more sectors of the community.

Norway commented that the terms of employment are central in the work contract. Stable employment conditions represent safety in Norwegian culture. New forms of activity and ownership have over the course of time led to changes in these conditions. A reduction of the welfare state involves exposure to increased competition on the part of employees in food production and industrial cleaning. Other services, like municipal refuse disposal and sanitation, have already been turned over to private enterprises. Over time, there has been a certain out-sourcing of services and tasks that the enterprises do not consider as their «core» activities. As an effect of Norwegian legislative control of the use of temporary employment, employers might also find it safer to out-source tasks rather than employing permanent manpower. These changes have several effects, some of which might be positive. Others, like increased insecurity, might lead to reduced well-being in employees.

Also the Member States of the European Union have indicated which particular concerns they have regarding the working conditions of people that work on the basis of the specific employment status. However, the data provided by the Focal Points does not allow a European picture (details see chapter 6.3 under http://agency.osha.eu.int/publications/reports/stateofosh/full_report.pdf).

6.



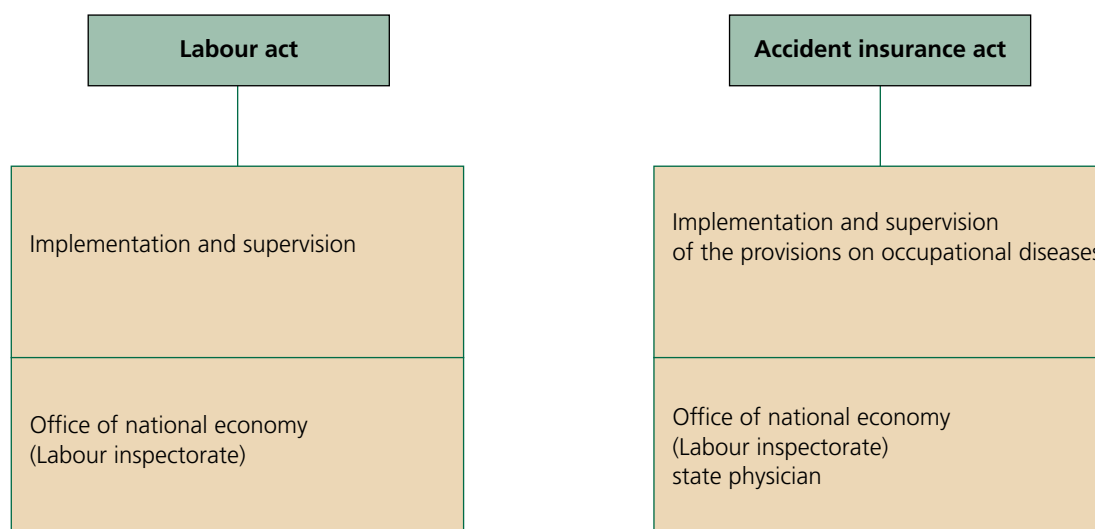
THE PREVENTIVE CAPACITY OF THE OCCUPATIONAL SAFETY AND HEALTH SYSTEM FOR EACH EFTA COUNTRY

- 6.1 THE ORGANISATIONAL STRUCTURE OF THE NATIONAL
OCCUPATIONAL SAFETY AND HEALTH SYSTEM
- 6.2 LABOUR INSPECTION
- 6.3 PREVENTIVE OCCUPATIONAL SAFETY AND HEALTH SERVICES
- 6.4 TRAINING ON OCCUPATIONAL SAFETY AND HEALTH

6.1

THE ORGANISATIONAL STRUCTURE OF THE NATIONAL OCCUPATIONAL SAFETY AND HEALTH SYSTEM

Liechtenstein



In Liechtenstein there are no private institutions, organisations or consultants that deal with safety and health protection at work issues.

The jurisdiction of the public authorities in the occupational health and safety system in Liechtenstein is based primarily on two laws:

- Act of 29 December 1966 on the work in industry, craft and trade (Labour Act), LGBl. 1967 No. 6; Law of 23 October 1997 amending the Labour Act, LGBl. 1997 No. 212 and
- Act of 28 November 1989 on the obligatory accident insurance, LGBl. 1990 No. 46

Different ordinances on health and safety of employees at work have been enacted based on the above-mentioned acts.

The practical implementation of the mentioned acts and ordinances is a duty of the Office of National Economy.

The Office of National Economy is responsible for the supervision of compliance with the mentioned acts and ordinances.

The practical implementation of the provisions of the ordinance on occupational diseases is the duty of the 'Landesphysikat' (State Physician).

The responsibility of the employer for a safe and healthy working environment is common to both laws:

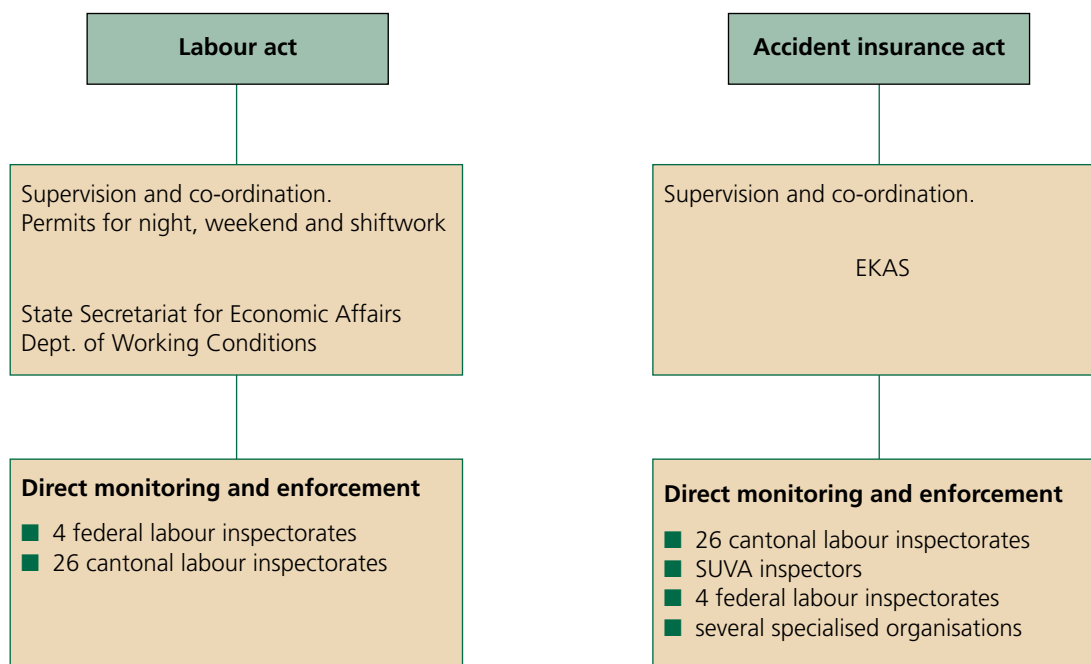
- 1) The Labour Act is basically a preventive law and calls for healthy working conditions in a very broad sense. The employer is responsible for the physical and psychological protection of the employee at the workplace and extends to the reduction of annoyances and the protection of personal integrity. The Act also includes the labour laws governing the work of children and the protection of mothers, the regulation of night, weekend and shift-work and general limitation on working hours. The Act covers all employed persons with the exception of agricultural primary producers, private household employees and several other smaller groups.
- 2) The Accident Insurance Act ensures the financial security and compensation of persons injured as a result of accidents, both at work and privately, and as a result of occupational diseases. This law defines occupational diseases as diseases,

which are exclusively or predominantly caused by workplace factors. The Act also obliges employers to take preventive measures in respect to these risks. All employed persons are covered by this Act.

All employees must have workers' compensation insurance, which is paid by the employer.

The social partners and other organisations have the possibility to cooperate in and influence the preparation of acts and ordinances. They have the possibility to give their comments on draft acts and draft ordinances in the course of the consultation procedures.

Switzerland



The jurisdiction of the public authorities in the occupational health and safety system in Switzerland is based primarily on two federal laws:

- The Labour Act (1964) and
- The Accident Insurance Act (1981)

The responsibility of the employer for a safe and healthy working environment is common to both laws.

The Labour Act is basically a preventive law and calls for healthy working conditions in a very broad sense. The employer is responsible for the physical and psychological protection of the employee at the workplace and extends to the reduction of annoyances and the protection of personal integrity (from sexual harassment, racism, etc). The Act also includes the labour laws governing the work of children and the protection of mothers, the regulation of night, weekend and shift-work, and general limitation on working hours. The Act covers all employed persons with the exception of agricultural primary producers, private household employees and several other smaller groups (independent researchers, flight personal, fishermen, etc.)

The co-ordination and supervisory responsibility for this Act lies with the Federal ministry – the State Secretariat for Economic Affairs, Directorate for Labour. This office is also responsible for issuing permits for permanent night and weekend shift-work.

The 26 cantonal labour inspectorates are responsible for the direct monitoring and enforcement of the Labour Act, including the processing of building permits where these encroach on worker well-being and safety (lighting, window size, ventilation, etc).

The Accident Insurance Act ensures the financial security and compensation of persons injured as a result of accidents, both at work and privately, and as a result of occupational diseases. This law defines occupational diseases as diseases, which are exclusively or predominantly caused by workplace factors. The Act also obliges employers to take preventive measures in respect to these risks. All employed persons are covered by this Act.

The Federal Co-ordination Commission for Occupational Accidents (EKAS) is responsible for the coordination of the enforcement of this Act and for supervising the prevention of workplace accidents and occupational diseases. Half of the

permanent members of this commission are made up of representatives from the workers' compensation insurers and half of representatives from the enforcement agencies (federal and cantonal inspectorates). Permanent employer and employee representatives are chosen to participate on the commission but these have no voting rights. The president is always from the Swiss National Accident Insurance Fund.

Direct enforcement is done by inspectors from the Swiss National Accident Insurance Fund and from the cantonal and federal inspectorates.

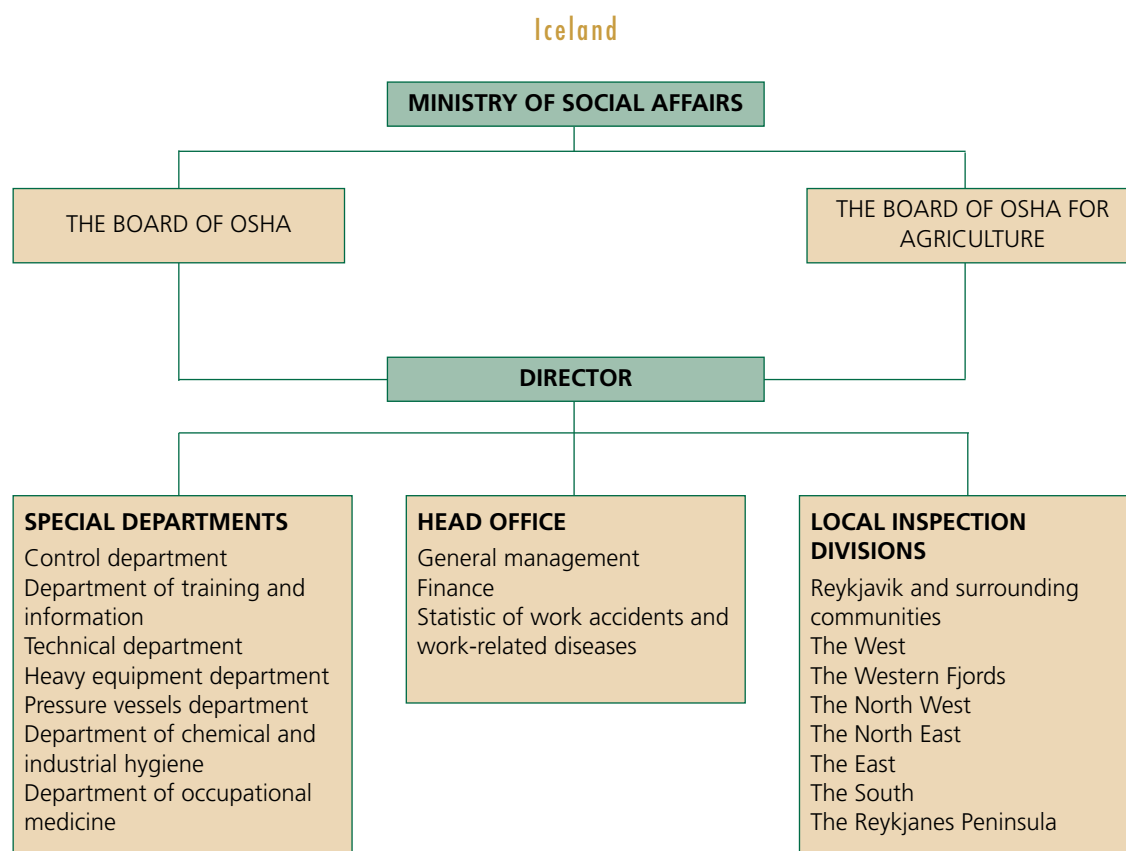
All employees must have workers' compensation insurance, which is paid by the employer. For sectors with a high risk of accidents it is mandatory that this is provided by the Swiss National Accident Insurance Fund (SUVA), which currently covers approximately 55% of all employees.

There is no national research organisation responsible for occupational health and safety but various university institutes conduct research into occupational health and safety related matters and are involved in the training of specialists. The most important of these are the Institute of Occupational Health Sciences of the University of Lausanne and Geneva (WHO Collaborating Centre in Occupational Health) and the Institute of Hygiene and Applied Physiology of the Swiss Federal Institute of Technology in Zürich, who jointly train occupational hygienists and physicians. There are several institutes of higher education which undertake research and education in occupational psychology, principally in Bern, Neuchatel, Geneva and Zürich (ETH).

The Swiss Society for Safety Specialists, Occupational Physicians and Occupational Hygienists (SVAAA) forms an umbrella organisation for the various professional bodies. The Swiss Society for Ergonomics and several special interest groups are also incorporated within the SVAAA. The occupational psychologists also have a professional organisation.

There are very few private occupational health and safety service providers, however the number is growing slowly. Most do not offer a full range of occupational health and safety services but are specialised in one or two areas.

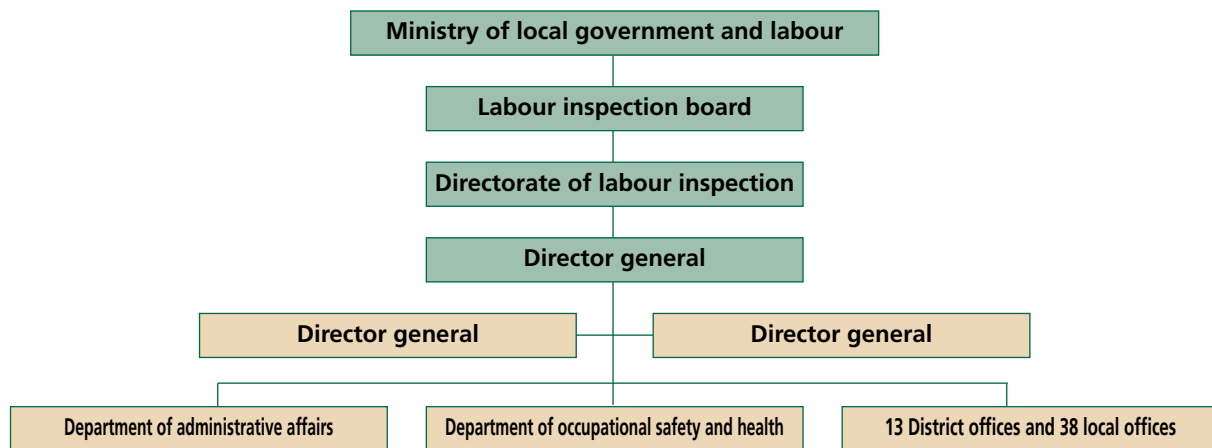
The involvement of the social partners has been confined to their participation in the EKAS, but a few of the unions offer health and safety training in specific issues.



Taking the small population of Iceland into account it is not surprising that in Iceland there is only one institution administering OSH-issues. The role of the Occupational Safety and Health Administration in Iceland (OSHA) is by law to deal with inspection, research, publication, training and information on OSH-matters. In order to accomplish this goal the Administration, which appertains to the Minister of Social Affairs, is organised into several departments, cf. the schema above.

Norway

Organisation of Norway's Labour Inspection



The Labour Inspection is a state agency under the Ministry of Local Government and Labour. The Labour Inspection has administrative, supervisory and information responsibility in respect of the following acts:

- Working Environment Act
- Guaranteed Wages Act
- Annual Holidays Act
- Wage obligations during Lay-offs Act
- National Holidays Act
- Domestic Help Act
- and sections of the Smoking Act.

The Labour Inspection consists of a directorate and 13 district offices with regional offices located throughout the country. The Directorate in Oslo directs the agency's overall strategy, plans and communication with its main partners. Local guidance, information and supervision of individual enterprises are undertaken by the district offices.

The Labour Inspection has about 530 employees whose job is to supervise that 240 000 enterprises comply with the requirements of the Working Environment Act.

6.2

LABOUR INSPECTION

Iceland

In the OSHA there are employed 65 employees which can be calculated into 57,5 full-time jobs. Of these 65 employees there are 28 labour inspectors, full-time, working in 8 divisions all over the country.

Liechtenstein

The implementation and supervision of the Labour Act and of the provisions concerning the prevention of occupational accidents and diseases of the Act of 28 November 1989 on the obligatory accident insurance is handled by a single person of the Office of National Economy. If needed internal and external experts are involved.

With a reference working population of 21 000 persons there are 5 inspectors per 100 000 workers.

Norway

At present, the Norwegian Labour Inspection employs approximately 530 people, whereof 150 in the directorate and 380 in 13 district offices. Some of the staff in the district offices is non-inspecting, such as clerical and administrative staff, this amounts to 146 persons (manual count – also includes part-time), whereof 13 district managers. This leaves 234 inspecting personnel.

In January 1997 there were 2 192 000 persons employed in Norway. This means that there are about 10.6 inspecting personnel per 100 000 workers.

Switzerland

The number of labour inspectors in Switzerland is:

Federal labour inspectors	23
Swiss national accident insurance establishment	195
Cantonal labour inspectorates*	105.5
Total	323.5

With a reference working population of 3 206.00 persons there are 10 inspectors per 100 000 workers

EFTA Country	Number of labour inspectors occupied with occupational safety and health (calculated on a full-time basis) per 100.000 workers
Iceland	No data
Liechtenstein	5
Norway	10.6
Switzerland	10

* This figure includes all personnel employed by the Cantons with either technical or administrative responsibility for labour inspection, however many of these inspectors have additional duties, for example, food hygiene inspection, environmental protection, etc.

6.3 PREVENTIVE OCCUPATIONAL SAFETY AND HEALTH SERVICES

Iceland

There is no other institution in Iceland in addition to the OSHA undertaking OSH-preventive work. At the other hand there is one private company working in this branch, serving about 30 firms with advice and training for the employees.

Liechtenstein

No data is available.

Norway

The Secretariat for Occupational Safety and Health Services in Norway (The National Institute of Occupational Health-STAMI) estimates that between 1.1 and 1.2 million workers are covered by this service. In 1997 we had approximately 2.2 million people employed, thus the coverage is about 50%. The number of workers in Norway who are covered is directly related to the number of companies/organisations which operate in sectors which are, by law, required to employ the services of occupational safety and health services because they are perceived as being 'high risk'. The role of the occupational health services is to assist the companies in their systematic work with occupational safety and health, it is not supposed to function as an individual-oriented health service.

Switzerland

No concrete data is currently available. In many large enterprises OSH services have been provided for some time. However, because of the industrial structure of Switzerland, with many small and medium enterprises, it can be stated that the vast majority of employees have no access to health and safety services.

From 1.1.2000 all employers will be obligated to ensure the access of employees to health and safety services. In reality it is expected that the new regulations will take some time to have a broad effect.

6.4 TRAINING ON OCCUPATIONAL SAFETY AND HEALTH

Iceland

a) Training courses:

OSH-education takes place a.o. under the auspices of the Department of Training and Information (DTI) in close co-operation with the specialists of the Special Departments. This education is mainly in the form of courses lasting 1–3 days. There are several types of courses, different according to the target group:

- Courses mainly designed for safety representatives (both representatives of the employer and the employees) in workplaces where the number of employees are 10 or more; these courses are also open to all wage-earners and representatives of the workers' union, elected at the workplace.
- Courses designed for managers and foremen, both being highly responsible for OSH at the workplace. These courses last 2–3 days.
- Courses are also designed for companies and institutions at their request.

- Meetings on OSH are sometimes held at the workplace, both at the request of the company and at OSHA's initiative.
- The employees of the DTI often visit companies and institutions at their request and deliver lectures on OSH in the workplace.

Courses are also organised by other Special Departments: The Heavy Equipment Department held courses for drivers of moving machines, lift trucks, cranes etc. and the Department of Chemicals and Industrial Hygiene held courses for drivers of hazardous substances and goods.

The number of these courses and lectures were the following in the year 1997:

Courses, workplace meetings and lectures	Number of courses	Number of participants
Courses for safety representatives	23	393
Workplace meetings	4	85
Lectures in the workplace	15	449
Courses for drivers of moving machines, lift trucks, cranes etc.	72	1172
Courses for drivers of hazardous substances and goods (so-called ADR-courses)	10	508

b) Publication

The DTI stands for a variety of publications on OSH-issues in the form of books, pamphlets, instructions, guides, videos and regulations. It also issues a journal 3-4 times a year which is sent to all workplaces with 10 employees or more.

Liechtenstein

No data is available.

Norway

The Working Environment Act §29 requires all employers to ensure that all safety delegates and working environment committee members receive the training necessary to enable them to perform their duties in a satisfactory manner. Several institutions offer courses, which satisfy these demands.

OSH-training*	1996	1997	1998
Persons	7 700	11 937	16 000

*Source: FB Distance Education (Folkets Brevskole).

Switzerland

There is no central registry of occupational health and safety courses.

Many apprenticeships include training in relevant occupational health issues and employers may train employees in specific preventive practices. Additionally the Swiss National Accident Insurance Fund and some of the cantonal labour inspectorates offer courses on a multitude of specific themes.

The training of occupational health and safety professionals depends on the speciality. Post-graduate training courses are offered by the Swiss Federal Institute of Technology and the University of Lausanne for Occupational Hygienists and Occupational Physicians. The Federal Co-ordination Commission for Occupational Accidents (EKAS) and several other institutions offer courses for safety specialists and engineers. The minimum requirements for these professionals are legally defined by a regulation to the Accident Insurance Law. At present there are no legally defined training requirements for other specialists, for example, ergonomists or occupational health nurses.

European Agency for Safety and Health at Work

The State of Occupational Safety and Health (OSH) in the EFTA Countries

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