**PROJECT CO-FINANCED BY EUROPEAN UNION**

EUROPEAN UNION STRUCTURAL FUNDS
NATIONAL PROGRAMME "LABOUR MARKET STUDIES"
PROJECT "STUDIES OF THE MINISTRY OF WELFARE"
No VPD1/ESF/NVA/04/NP/3.1.5.1./0003

# WORK CONDITIONS AND RISKS IN LATVIA

Riga, 2007

RESEARCH GROUP

The Study "Work conditions and risks in Latvia" in the frames of the Project "Studies of the Ministry of Welfare" No VPD1/ESF/NVA/04/NP/3.1.5.1./0003 of the National Programme "Labour Market Studies" financed by European Structural Fund was carried out by a consortium comprising A/S "Inspecta Latvia" and the Institute of Occupational and Environmental Health of the Riga Stradins University, as well as group of other experts under guidance of Dr.habil.med. Maija Eglīte.

Maija Eglīte is the director of the Institute of Occupational and Environmental Health of the Riga Stradins University. She is a well known and recognised occupational health and safety specialist both in Latvia and world, an author of more than 300 publications and several books, an expert of several European Union occupational health and safety work groups, a member of editorial board of several scientific journals.

Leading researchers: Linda Matisāne - Head of Occupational Health and Safety Division of A/S Inspecta Latvia, Ivars Vanadziņš – researcher of the Institute of Occupational and Environmental Health of the Riga Stradins University.

Following specialists of A/S "Inspecta Latvia" and the Institute of Occupational and Environmental Health of the Riga Stradins University contributed to the Study: Rita Antoniviča, Mārīte Ārija Baķe, Artjoms Boriskins, Pēteris Druķis, Sandra Dumbrovska, Sabīne Grīnberga, Dace Jakimova, Solvita Leimane, Raimonda Mangule, Žanna Martinsone, Inese Mārtiņsone, Anita Piķe, Andris Pommers, Jeļena Reste, Ģirts Sprancis, Dagmāra Sprūdža, Pāvels Sudmalis. Translation was supported by Ineta Irbe and Vija Siliņa.

Quantitative surveys of employers, employees and general public were carried out by TNS Latvia Ltd. under the guidance of Project manager Signe Kaņējeva. Survey of specially protected and socially castaway groups, as well as of health and social care employees along with some other activities was carried out by PSI Darba medicīna Ltd. Quantitative survey of specially protected and socially castaway groups (pregnant women and parents after their parental leave) was carried out by Market Lab Ltd.

SUMMARY

Objective of the Study "Work conditions and risks in Latvia" was to create analytic basis in the field of occupational health and safety, which would ease rational and effective decision-making for elaboration of employment and social policy programmes and for ensuring sustainable development. During the Study following groups of people were surveyed: residents of Latvia, employers, occupational health and safety specialists, employees (especially of specially protected and socially castaway groups), health and social care employees. Besides, activities of the Study included analysis of available occupational health and safety data bases, analysis of existing studies, objective assessment of occupational health and safety situation (analysis of measurement results), which ensures that results of the Study could be considered during development of occupational health and safety programme. Results of the Study reveal insufficient compliance of workplaces with legal requirements regarding occupational health and safety, as well as legal labour relations. Besides, awareness and understanding of general public regarding such requirements is also dissatisfactory. Further on attention should be paid to simplification of legal requirements, development of alternative methods for informing and educating people, as well as recurrent definition of national indicators to assess efficacy of implemented measures related to occupational health and safety, as well as legal labour relations.

Keywords: occupational health and safety, legal labour relations, work environment

Client: Ministry of Welfare of Republic of Latvia
Edited by: Dr.Janīna Danusēviča
Composition by: Gundega Lojāne
Cover page designed by: Gundega Lojāne
Printed by: Zemgus LB Ltd

ISBN 978-9984-39-233-2

# TABLE OF CONTENTS

# LIST OF TABLES

# LIST OF FIGURES

# LIST OF ABBREVIATIONS

| | |
|---|---|
| AER | Occupational exposure limit value |
| AES | Nuclear power plant |
| CSP | Central Statistical Bureau |
| DSI | Work ability index |
| EM | Ministry of Economy |
| ES | European Union |
| FM | Ministry of Finance |
| LATAK | State Agency Latvian National Accreditation Bureau |
| LBAS | Free Trade Union Confederation of Latvia |
| LDDK | Employers' Confederation of Latvia |
| LM | Ministry of Welfare |
| LR | Republic of Latvia |
| MK | Cabinet of Ministers |
| NACE klasifikators | Classification of Economic Activities in the European Community |
| NVA | Employment State Agency |
| PVO | World Health Organisation |
| P.Stradiņa KUS | P.Stradins Clinical Hospital |
| RSU DVVI | Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital |
| SSK | International Classification of Diseases |
| VAS | State Joint Stock Company |
| VDI | State Labour Inspectorate |
| VID | State Revenue Service |
| VOVAA | State Agency for Compulsory Health Insurance |
| VSAA | State Social Insurance Agency |
| VSMTA | Health Statistics and Medical Technologies State Agency |

# DEFINITIONS AND INTERPRETATION OF USED TERMS

**Occupational diseases**

Diseases characteristic to certain categories of employees, which are caused by physical, chemical, hygienic, biological and psychological factors in the working environment. Source: Law On Compulsory Social Insurance in Respect of Accidents at Work and Occupational Diseases.

**Labour protection / occupational health and safety**

Safety and health of employees at work. Source: Labour Protection Law.

**Labour protection measures /occupational health and safety measures**

Legal, economic, social, technical and organizational preventive measures the objective of which is to establish a safe and harmless work environment, as well as prevent accidents at work and occupational diseases. Source: Labour Protection Law.

**Labour protection specialist / occupational health and safety specialist**

An employee who has the duty to organise and control labour protection measures and to perform internal supervision of the work environment, and who has been trained in accordance with the procedures specified by the Cabinet. Source: Labour Protection Law.

**Work equipment**

Any device (machine, mechanism), apparatus, tool or installation that is used at work. Source: Labour Protection Law.

**Employer** – a natural person, a legal person or a partnership with legal capacity, which employs at least one employee. Source: Labour Protection Law.

A person, who manages its entrepreneurship, professional practice or farmstead to gain income or benefit and employs one ore more persons for remuneration. Source: Central Statistical Bureau.

**Work ability index**

A rate, which shows work ability of a worker at present and in the nearest future, and his/her ability to do his/her work with respect to work demands and according to his/her physical health and mental capacity. Source: Finnish Institute of Occupational Health.

**Work environment**

The workplace with its physical, chemical, psychological, biological, physiological and other factors to which an employee is subject by carrying out his or her work. Source: Labour Protection Law.

**Internal supervision of the work environment**

Planning, organisation, implementation and management of the activities of an undertaking in such a way as to guarantee a safe and harmless work environment. Source: Labour Protection Law.

**Work environment risk / occupational risk**

The likelihood that harm to the safety or health of an employee is caused in a work environment, and probable severity level of such harm. Source: Labour Protection Law.

**Workplace**

A place, where an employee performs his or her work, as well as any other place within the scope of the undertaking, which is accessible to the employee in the course of his or her work or where the employee works in accordance with the permission or an order of the employer. Source: Labour Protection Law.

**Competent authority**

An authority, which is authorised to perform internal supervision of the work environment and whose competence on labour protection issues has been evaluated in accordance with procedures specified by the Cabinet. Source: Labour Protection Law.

**Competent specialist**

A specialist, who is competent to perform internal supervision of the work environment in an undertaking and whose competence has been evaluated in accordance with procedures specified by the Cabinet. Source: Labour Protection Law.

**Consultations**

An exchange of views and the establishment of a dialogue between representatives of employees and the employer in order to reach agreement. Source: Labour Protection Law.

**Accident at work / workplace accident**

Harm caused to the health of the insured person or death of the insured person, if the cause of such is an extraordinary incident, which has occurred within one working day (shift) during the performance of work duties, as well as while acting to save any person or property and to prevent a threat of danger to such. Source: Law On Compulsory Social Insurance in Respect of Accidents at Work and Occupational Diseases.

**Part-time employees**

Persons, who are employed (employees) for reduced working hours or usually work less than 40 hours a day, excluding persons, who consider themselves as being employed for full time working hours regardless of actual worked hours. Source: Central Statistical Bureau.

**Employee**

Any natural person, who is employed by an employer, also State civil servants and persons, who are employed during training or traineeships. Source: Labour Protection Law.

The Study "Work conditions and risks in Latvia" uses this definition in spite that for the statistical purposes the Central Statistical Bureau has another definition (see below).

Self-employed in entrepreneurship, professional practice or farmstead are also considered as being employed under at least one of following condition:

- Person works to gain income, even if the enterprise currently has no profit;
- Person devotes hi/her time to maintenance of entrepreneurship, professional practice or farmstead, even if nothing has been sold, no services have been provided and nothing has been produced;
- Person is in the process of starting his/her entrepreneurship, professional practice or farmstead such products form a significant source of living for the person or his/her family.

Persons under compulsory military service are not considered as being employed, but persons, who are at career service of National Armed Forces and receive remuneration, are considered as being employed.

Within the Study "Work conditions and risks in Latvia" these groups of people were not included in the group of employees.

Source: Central Statistical Bureau.

**Representatives of employees**

An employee trade union, in whose name acts a trade union authority or official authorised by the articles of association of the trade union, and authorised representatives of employees, the authority of which does not include those rights, which belong only to employee trade unions. Source: Labour Protection Law.

**Serious and direct danger**

Threats to the life and health of an employee, which may occur unexpectedly, in a short period of time and which irrevocably impact upon the health of the employee. Source: Labour Protection Law.

**Principal work**

Work, where a person usually works most hours within a week. Hours that are spent in other works are excluded, but overtime hours and hours spent for completion of work outside the workplace (for example, at home, if such an agreement exists between employer and employee) are included. In case a person works half-time in two workplaces, the principal work is work, where tax book is applied.

Source: Central Statistical Bureau.

**Self-employed**

A person, who manages his/her entrepreneurship, professional practice or farmstead to gain income or benefit and does not employ other persons. Source: Central Statistical Bureau.

**Full time employees**

Persons employed (by employers) for full-time working hours or usually work (employers, self-employed) at least 40 hours a week, as well as employees of work categories which are subject to reduced working hours (teachers, physicians etc.), but who consider themselves employed full-time.

Source: Central Statistical Bureau.

**Preventative measures**

Actions or measures that are carried out or planned in an enterprise for all stages of work in order to prevent or reduce work environment risk. Source: Labour Protection Law.

**Occupation or position**

Occupations of national economy listed in the Classification of Occupations of the Republic of Latvia. Source: Central Statistical Bureau.

**Enterprise/ undertaking**

An organisational unit in which an employer employs employees. Source: Labour Protection Law.

**Trusted representative**

A person elected by employees and who is trained in accordance with procedures specified by the Cabinet, and who represents the interests of employees regarding occupational health and safety. Source: Labour Protection Law.

**Type of economic activity**

Type of enterprise or individual activity, which is defined by produced output or provided services. Types of economic activity are specified in the Classification of Economic Activities in the European Community (*Nomenclature des activités économiques des communautés européennes – NACE*) (http://www.csb.lv/Satr/nace_saraksts.cfm).

**Regional division of Latvia**

Researchers of the Study met a following problem – occupational indicators are compiled according to two different regional divisions:

- Territorial units of the State Labour (Annual reports of the State Labour Inspectorate);
- Regions of Latvia – Riga, Vidzeme, Latgale, Kurzeme, Zemgale.

In the frames of the Study researchers applied regions related to territorial units of the State Labour Inspectorate as the most part of annual information regarding work environment, legal labour relations and dangerous equipment is summarised and analysed using this division. Besides, it should be noted that previous studies of occupational health and safety issues at smaller scale than national, have also used this regional division. Application of this division is essential for quantitative surveys and objective assessment of work environment. Besides, this approach would allow assessment of activity of the State Labour Inspectorate and facilitate easy use of the results of the Study "Work conditions and risks in Latvia" in the territorial units of the State Labour Inspectorate.

Altogether there are seven territorial units of the State Labour Inspectorate (Regional Labour Inspectorates):

- Riga Regional Labour Inspectorate supervises Riga un Jūrmala Cities and Riga District (with a centre located in Riga);
- Northern Vidzeme Regional Labour Inspectorate supervises Limbaži, Valmiera, Valka and Cēsis Districts (with a centre located in Valmiera);
- Eastern Vidzeme Regional Labour Inspectorate supervises Balvi, Alūksne, Madona and Gulbene Districts (with a centre located in Gulbene);
- Latgale Regional Labour Inspectorate supervises Rēzekne, Ludza, Preiļi, Krāslava and Daugavpils Districts (with a centre located in Daugavpils);
- Southern Regional Labour Inspectorate supervises Ogre, Aizkraukle and Jēkabpils Districts (with a centre located in Ogre);
- Zemgale Regional Labour Inspectorate supervises Bauska, Jelgava, Dobele un Tukums Districts (with a centre located in Jelgava);
- Kurzeme Regional Labour Inspectorate supervises Saldus, Kuldīga, Talsi, Ventspils and Liepāja Districts (with a centre located in Liepāja).

**International Classification of Diseases**

For comparison of morbidity and mortality data, development of the International List of Causes of Death started in the 19th century (for the first time adopted in 1893). Since 1946 this classification is known as the International Classification of Diseases and Causes of Death (ICD) and is revised once in ten years. Each revision has its own serial number. For example, ICD-10 means that causes of death and diseases are codified according to the 10th revision of the classification. Currently International Statistical Classification of Diseases and Related Health Problems ICD-10 endorsed by the Forty-third World Health Assembly is used in Latvia. This Classification is adopted in Latvia

without any changes (Order No 20 of 17 January 1996 of the Ministry of Welfare of the Republic of Latvia), therefore, comparison of data with other states is possible. The Classification is developed by the World Health Organisation, but Health Statistics and Medical Technologies State Agency is responsible for its adaptation (translation and modification) and implementation.

In Latvia occupational diseases are diagnosed, registered and analysed according to this Classification as well, therefore researchers of the Study used it fir the purposes of the Study.

**Classification of enterprises due to size**

In the frames of the Study Latvian enterprises were dividend into several groups according to their size:

- Micro companies with 1 to 10 employees (criterion – Section 9 of the Labour Protection Law, which provides that employer can carry out duties of an occupational health and safety specialist, when company employs no more than 10 people);
- Small companies with 11 to 49 employees (criterion – Section 9 of the Labour Protection Law, which provides that employer designates an occupational health and safety specialist, when company employs no less than 50, but more than 10 people);
- Medium companies with 50 to 249 employees (criterion – Section 9 of the Labour Protection Law, which provides that employer designates several occupational health and safety specialists or establishes an occupational health and safety unit, when company employs 50 or more people);
- Large companies with 250 and more employees.

# INTRODUCTION

On one hand, work makes our life reasonable, ensures our independency, opsitively affects mental and physical health and facilitates social welfare. On the other hand, work environment has a significant impact on biologiacal processess of a human body, and, thus, can directly affect saefty, health and work ablitity of an employee. Good work abolity forms basis not only for welfare of each individual, but also public in general (including employer). Therefore, employer should take measures to keep employees' work ability and facilitate its recovery. Poor work ability reduced both work quality and productivity, as well as increase risk of workplace accidents and emergencies, which could affect both employees and other people.

Our rapidly changing living environment is closely related to changes in work environment – work becomes more intense and requires maximum attention and concentration, adaptation of work with mental and physical capacity of an individual, as well as dealing with different managerial issues. At the same time, traditional work environment risks still exist – noise, vibration, dust, chemical substances etc. Approximately 100,000 chemical substances, 50 physical factors, 200 biological factors, 20 ergonomic factors and the same number of factors related to physical loads are considered as occupational hazards. These factors are associated with many psychological ansd social problems – occupational diseases, workplace accidents, stress reactions, dissatisfaction with work, lack of welfare. Most of the problems can be prevented, thus, improving health and welfare of employees, work productivity and general economic indicators (WHO, 1995). Occupational risk factors occur in all economic sectors and can affect large numbers of employees. It is difficult to imagine an occupation with absolutely none occupational risk factor that could affect safety or health of an employed individual. The most significant occupational risks are:

- Chemical substances (e.g., varnish, paint, synthetic detergents),
- Physical factors (e.g., noise, vibration, microclimate, lighting),
- Dust (e.g., welding fumes, abrasive dust, wood dust),
- Biologic factors (e.g., organisms causing tick-borne encephalitis, viral hepatitis B and C, HIV/AIDS),
- Mechanic factors (e.g., work with equipment and with dangerous equipment, work at height, work in explosive atmosphere)
- Ergonomic factors (e.g., awkward posture, repetitive movements, lifting of heavy objects),
- Psychosocial factors (e.g., shortage of time, overtime work, work at night, bad relationship with superiors and colleagues, conflicts).

It is impossible to maintain working environment without any risk factor, therefore, reduction and control of risks is a responsibility of every employer. Selection and implementation of preventive measures should be evaluated considering magnitude of the occupational risk, financial resources of the enterprise and suitability of the relevant measures for the enterprise/institution. Adequate control and risk reduction to acceptable levels can be implemented only, if employers, their responsible specialists, as well as employees are aware of nature of the occupational risk and can forecast its probable effects. According to the Labour Protection Law, preventive measures mean activities or . measures that are planned or implemented in all work stages to prevent and reduce occupational risks. Objective of such measures is to establish a asfe and healthy work environment and to prevent workplace accidents and occupational diseases. For example, employer has to:

- Carry out occupational risk assessment;
- Dispatch employees to compulsory medial examinations;
- Perform instruction (training) of employees in occupational health and safety;

- Ensure protective clothing and individual protective equipment;
- Inform on occupational health and safety measures within the enterprise;
- Carry out vaccination of employees regarding occupational infection diseases, etc.

Workplace accidents are the most frequently mentioned consequences speaking about non-compliance with occupational health and safety requirements, because they are the most obvious ones, however, other effects are also possible. Most important consequences are:

- Workplace accidents,
- Work related diseases or exacerbations of other diseases,
- Loss of work ability,
- Costs in case of occupational disease or workplace accident, etc.

In Latvia no noteworthy and wholesome studies have been carried out, which could reveal occupational health and safety situation in Latvia and could help in decision making. Therefore, any changes and reforms within this field were based on requirements provided in European Union directives. However, it would be reasonable to consider existing situation, as well as historic, economic and social specifics, which differ a lot among countries, in spite the unified European Union requirements. It should be also noted that in Latvia no single national strategy in occupational health and safety has been approved, which would include priorities, objectives to be reached in future, justified solutions to existing problems and necessary changes in the field of occupational health and safety. Thus, objective of the Study "Work conditions and risks in Latvia" was to create analytic base in the field of occupational health and safety, which would ease rational and effective decision-making for elaboration of employment and social policy programmes and for ensuring sustainable development. This would, in its turn, promote drawing up of research based occupational health and safety policy programme, which could be then integrated into national employment and social programmes leading to balanced and sustainable development of the state through improved regional development, social dialogue, work conditions and sexual equity.

The Study "Work conditions and risks in Latvia" included following activities:

- Analysis of policy plans regarding occupational health and safety;
- Analysis of cooperation schemes of respective institutions, analysis of information circulation and overlapping functions, as well as assessment of interaction of different organisations;
- Analysis of existing similar studies and review of similar studies;
- Analysis of databases currently existing in Latvia;
- Survey of employers, their representatives and employees; analysis and summarisation of the obtained results;
- Objective assessment of working conditions and occupational risks;
- Calculation of work ability index and working conditions the field of health care; comparison of the results in dynamics;
- Elaboration of alternatives for occupational health and safety policy development.

The obtained results are summarised in the publication and its Topical Annexes, which are added to the publication in CD format. All Topical Annexes are listed in Annex 1 of publication.

# MAIN CONCLUSIONS AND RECOMMENDATIONS

# Conclusions

1. Results of the Study "Work conditions and risks in Latvia" reveal that following companies are at risk of non-compliance with legislation regarding occupational health and safety, as well as legal labour relations:
    - Small enterprises (1-10 employees and 11-49 employees);
    - Enterprises of private and non-governmental sectors;
    - Enterprises dealing with construction, metal processing, wood processing, agriculture and forestry;
    - Enterprises established after 1995 and, especially, after 2000;
    - Enterprises located within Riga Region (according to territorial units of the State Labour Inspectorate).
2. Results of the Study show that mayor problems with observance of legal requirements regarding occupational health and safety are in enterprises, where illegal "envelope salaries" are paid (especially, where it happens every month). Thus, the Study proved that enterprises ignoring one legal requirement are most often also non-compliant with others. Therefore, the State Labour Inspectorate should cooperate with the State Revenue Service, as well as other relevant supervisory institutions, to identify and survey enterprises under risk of illegal employment.
3. In Latvia new and modern occupational risks have replaced the old and conventional ones. The results of the survey confirm that different psycho-emotional factors (shortage of time, overtime work, long working hours etc.) and ergonomic factors (work with a computer, handling of heavy objects, awkward posture, and repetitive movements) are the most significant occupational risks. On the other hand, work environment measurements reveal that microclimate and dust (especially, abrasive dust and welding fumes) should be considered as very essential occupational problems.
4. Situation in Latvia regarding completion of occupational risk assessment and compliance of such an assessment with the requirements of existing legislation has slightly improved compared to that of 2002. However, it is still dissatisfactory, and cannot be recognised as being good in any group of enterprises.
5. Measurements of the work environment are not carried out frequently enough. As a result, in most cases occupational risk assessment cannot be considered as being objective. Results of the Study show that work environment measurement values exceed mandatory or recommended limit values in one third of cases. It could be explained by the fact that measurements are not carried out in all workplaces, but only in those indicated by the Client

(for example, employer, competent specialist or competent authority), and, thus, the most "dangerous" or "hazardous" workplaces are selected.

6. Both the results of this Study and experts' opinion indicate that there are relatively few workplace accidents, compared to other States within the European Union. However, it is rather an indicator of poor registration of workplace accidents than of a well-arranged and safe working environment. Not every workplace accident in Latvia is registered, but it is difficult to assess real registration levels.
7. Number of occupational diseases and patients revealed for the first time during a year, has been gradually increasing since 1993 until 2004. This is only partly related to current working environment. Many of currently revealed health problems are still associated with exposure to occupational risk factors during the latest 10-15 years. Supposedly, during the next 5 to 10 years number of occupational diseases will still continue to grow reaching 250 cases per 100,000 employees. Then stabilization and even a gradual, slight decrease are expected. Besides, breakdown of occupational diseases by types has changed. At present musculoskeletal diseases are most frequently diagnosed work related health disorders, building up approximately one half of all registered occupational diseases. This group of diseases requires special attention; therefore, it is necessary to build awareness of employers on ergonomic risks of work environment.
8. Results of the Study showed that, considering work environment and risks, social insurance against workplace accidents and occupational diseases is a big problem, because there is an increasing deficit in the Special Budget for workplace accidents (workplace accident fund). This fund comprises contributions of employers as a compulsory social insurance against workplace accidents. Planning of income and expenditure of the Special Budget for the next years is essential. On one hand, it should be noted that currently expenses are mainly covering the consequences (treatment and other medical expenses related to workplace accidents and occupational diseases) instead of preventive measures and rehabilitation (medical, social and professional rehabilitation that would allow returning of the employees to the labour market for another type of job). On the other hand, it has to be noted that decrease of expenses is not suspected, because of:
    - Rapid increase of occupational disease patients;
    - High proportion of unregistered workplace accidents;
    - Low number of people, who apply for benefits to the State Social Insurance Agency; it is expected that these numbers will rise along with awareness of people;
    - Breakdown of additional costs (expenses related to medicaments is rapidly increasing, while less resources are spent for medical and social rehabilitation).
9. According to the results of the Study, compliance of enterprises with legal requirements correlates with the extent of surveys carried out by the State Labour Inspectorate. Within the group of enterprises, where compliance with legal requirements was the lowest (relatively least number of enterprises where occupational risk assessment and compulsory health examinations have been carried out), number of enterprise surveys performed by the State Labour Inspectorate was also low. This indicates that control measures of public institutions promote compliance of enterprises with the legal requirements. Thus, it can be concluded that the State Labour Inspectorate is an essential tool to secure functioning of occupational health and safety system and to motivate enterprises to consider legal requirements. Therefore,

activities of the State Labour Inspectorate should be promoted, especially, by increasing number of preventive surveys in enterprises. Number of inspectors per 1000 employees in Latvia is similar to that of other countries within European Union; however, territorial distribution of inspectors varies significantly across regions (between 0.06 and 0.22 per 1000 employees). In this regard Riga Region is the most problematic one, which probably explains, why enterprises located within Riga Region, are surveyed less frequently and do not comply with legislation more often. These results indicate dissatisfactory strategic analysis and planning of activities of the State Labour Inspectorate, which calls for optimisation and improvement of the work of inspectors, possibly also by restructuring the Inspectorate and its operations (changes have taken place regarding the State Labour Inspectorate in 2006; however, it was impossible to assess the efficacy of such changes in the frames of the Study). Another essential obstacle for effective work of the State Labour Inspectorate is lack of an adequate information system (database).

10. The results of the Study indicate that there is a need to improve occupational health and safety legislation, as well as the system for interpretation of such legal requirements and building of public awareness. Too low numbers of employers, employees and self-employed are informed on legal requirements, as well as on their responsibilities and rights. Therefore, the Study paid much attention to elaboration of recommendations on necessary legislation amendments and improvement of public awareness.
11. In spite of many informative – explanatory publications that have been issued in Latvia during the latest 5-6 years, awareness of general public regarding provisions of the Labour Protection Law and regulations on occupational risk assessment, as well as other related issues, is dissatisfactory. This means that traditional means of information (printed materials, seminars, courses etc.) have not reached the target. Besides, many publications are not available in electronic format in the most popular websites dealing with occupational health and safety (for example, www.osha.lv, www.vdi.gov.lv), as well as some available materials are devoted to out-of-date legislation.

# Recommendations

## Recommendations on improvement of legislation

1. Existing studies indicate that legislation regarding occupational health and safety should be amended to ensure more successful tackling of existing problems (for specific suggestions see Alternative "Amendments necessary for improvement of occupational health and safety legislation").
2. Procedure of workplace accident investigation and registration should be eased (for specific suggestions see Alternative "Improvement of registration of workplace accidents and early diagnosis of occupational diseases, as well as early rehabilitation of patients with suffering from occupational diseases and workplace accidents").
3. Special Budget for workplace accidents should be balanced to ensure that compulsory insurance against workplace accidents and occupational diseases facilitates preventive

approach to occupational health and safety system in workplaces (for specific suggestions see Alternative "Changes in compulsory insurance against workplace accidents and occupational diseases".

## Recommendations on building public awareness

1. The Special Budget for workplace accidents managed by the State Social Insurance Agency is the only regular financial source for explanatory publications. Therefore, a constant proportion of the Special Budget should be allocated for preventive measures. In the frames of the new approach to occupational health and safety issues (measures should be related to risks and their prevention instead of fighting the consequences) promotion of preventive culture in the field of occupational health and safety at national scale is essential.
2. Further informative activities should target wider range of interested groups and focus on easier access to information, unconventional methods, as well as simple aids, which would make picking up and implementation of legal requirements less complicated. Higher educational programmes related to business management, personnel management and economy, where occupational health and safety issues should be included as a compulsory subject, should be identified. Besides, personnel of business support centres or other similar organisations should be trained to facilitate consulting of people starting their own business, etc.
3. More attention should be paid to rising awareness of youth, because, on one hand, number of young people employed during summers and probably exposed to occupational risks is increasing, and, on the other hand, number of employees working for less than a year and affected by workplace accidents in Latvia is high.

## Recommendation regarding information that should be regularly summarised and published right now

1. Current exchange of information and documents, as well as isolated (only of specific institutions) or limited accumulation of information, precludes inter-institutional data analysis (for example, it is impossible to calculate costs related to workplace accidents and occupational diseased within a specific sector; it is impossible to estimate, how many occupational disease patients have malign tumours; it is impossible to duly forecast increase of particular type of costs, etc.). Besides, support of research activities, which could carry out such an inter-institutional data analysis and ensure integration of studies and activities carried out in other states into a comprehensive guide to people, who develop and implement national policy regarding occupational health and safety, is poor. Thus, selection of priorities and measures that is carried out at national scale or using financial resources of the state budget is based on obscure and ambivalent data. To obtain the above-mentioned information, to improve management of the collected taxes, as well as to ease compensation and remuneration payments, it is highly recommended to establish a united database of workplace accident victims, occupational diseases patients and related costs (as far as it is possible, by merging databases at disposal of the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital, the State Labour Inspectorate and the State Social Insurance Agency, as

well as by adding data from the Register of Enterprises and Population Register). Such a database would reduce unnecessary circulation of documents between the above-mentioned institutions (thus, saving time used for reviewing the documents) and would allow analysis of costs per sectors, per disease/trauma groups etc. and ensure economic justification for setting of the priorities. Besides, data analysis would help to identify occupational health and safety issues, which call for extended, targeted and sound based studies. To ensure wholesome analysis of the obtained data, liabilities, functions and responsibilities should be defined for each institution regarding necessary analytic studies. Procedure for allocation of financial resources for such studies should be set as well.

## Recommendations on further research

1. Currently there is not any location, where all studies related to legal labour relations and occupational health and safety issues can be found. Besides, results of some studies have not been published at all (neither in the Internet, nor as printed copies), but can be only accessed by directly meeting the authors of the studies. This indicates that there is a need to establish a single information centre, which would ensure easy and quick Access to such information. These functions could be delegated to the National Institute of Occupational Heath and Safety to be established soon (as Agency under Riga Stradins University), which has already started compilation of a database of studies carried out in Latvia.
2. Regular studies of issues related to occupational health and safety, as well as legal labour relations, are highly recommended. Such studies should focus on employers and specialists with higher education in the field of occupational health and safety, because the European Foundation for the Improvement of Living and Working Conditions regularly carries out surveys of employees. Besides the above-mentioned large-scale studies, 3 to 5 smaller scale and more qualitative studies should be planned every year, which would help to understand results of the large-scale (mostly quantitative) studies and to develop a wholesome and scientifically grounded plan for eradication and prevention of the identified problems.
3. Establishment of an indicator system both at national and enterprise level, including annual analysis, is recommended.
4. Fundamental studies of specific fields should be continued (for example, occupational risks in wood processing, impact of heavy metals on health etc.), and different financial sources for financing such studies considered. This would maintain and replenish research staff, as well as help to find solutions for specific problems.

# 1. LITERATURE REVIEW

## 1.1. Legislation and policy planning documents

Occupational health and safety system in Latvia as such and all its elements have undergone major transformations over the recent years. These changes have taken a wide range of forms - elaboration of fundamentally different legislation and implementation of new requirements; introduction of novel education and training principles; information and awareness building among social partners (employers and employees) and general public; improving tripartite cooperation among social partners; and administrative capacity building and improvement of operational efficiency of the Sate Labour Inspectorate. At the same time, also Latvia's socio-economic situation has changed substantially, with subsequent alternations in institutional set-up of companies, legal tenure and labour relations, changed dominance of certain industrial sectors, and, certainly, had some bearing on working conditions and occupational risks. Changes in occupational health and safety legislation have re-shaped also the basic principles of occupational health and safety management systems at company level. Prevention principle is a fundamentally new approach for Latvia - it is based on occupational risk assessment and provides for workplace adjustments to the needs of each individual. Also new mechanisms for occupational health and safety management systems at company level have been institutionalised (competent specialists and competent authorities), and new requirements for training and information of employees have been introduced.

Setting up a fundamentally new legislation resulting into fundamentally new set of requirements, is a challenge in any sector. Occupational health and safety is not an exemption and implementation of the new system may take 10 to 15 years. Drafting new legislation must take into account significant number of various existing requirements and standards – from policy documents and requirements of international organisations (such as the World Health Organisation, the International Labour Organisation, EU) – to provisions and requirements of different national policy documents and legislation. Furthermore, also historic traditions in the sector development need to be taken into account, the same as the available human and financial resources among policy planners and government control institutions, and the existing situation in the occupational health and safety and in the sectors that are related to it. It should be noted that occupational health and safety is a heavily regulated and carefully planned sector worldwide – in order to provide employees with high safety and health protection standards at all workplaces. Health and safety of employees are prioritised as the main objective in policy planning documents of all levels. Integrating this objective into strategic documents and achieving pleasant and safe working environment outcomes promotes welfare at general and individual levels and reduces economic costs of social security, healthcare and rehabilitation.

One of the tasks under this Study was to evaluate most significant policy documents in this area and assess the degree to which the development priorities included in these documents have been achieved

in real life. This section presents a summary implementation assessment for specific tasks included in these policy documents.

Policy documents of all levels – international and EU level documents, as well as national planning and development documents have all shaped occupational heath and safety as a specific focus area. Therefore, this Study analysed the following groups of strategic planning documents:

- Strategic planning documents (international and national) mentioned in the programme for the Study;
- Additional planning and assessment documents identified during the Study.

The documents reviewed were grouped into four major categories:

- International (EU and international organisations) planning documents directly related to occupational health and occupational safety;
- International (EU and international organisations) planning documents not directly related to occupational health and occupational safety, but just to some aspects of occupational health and occupational safety;
- National planning documents directly related to occupational health and occupational safety;
- National planning documents not directly related to occupational health and occupational safety, but just to some aspects of occupational health and occupational safety.

Implementation of policy planning documents of all levels in this area in Latvia is still not satisfactory. However, the Study team would like to highlight that situation in Latvia is currently very dynamic and even during the Study period positive changes have taken place. Towards the finalisation stage of the Study the new „Occupational health and safety development principles 2007 – 2013" was completed and elaboration of the new "Occupational health and safety development programme 2007-2010" was initiated. These two documents take into account the existing occupational health and safety problems in Latvia (also the ones identified during this Study) and upon their approval and implementation, they will provide successful solutions to most of the problems identified during this Study.

Among the most significant highest level political planning documents the "Global strategy on Occupational Health and Safety" adopted by the International Labour Organisation in 2003, and the "Declaration on occupational health for all" adopted by the World Health Organisation in 1994 should be mentioned. These documents outline a basic set of requirements for national occupational health and safety systems worldwide. Latvia has implemented these strategic policy documents only to some degree – mainly because research and examination of new occupational risks and elaboration of new methods has not been ensured to a full degree. In other words, the national policy planners and government control institutions do not receive sufficient scientific support. Awareness building among employees and general public regarding impacts of workplace conditions on health and safety is still dissatisfactory. Health care of employees is not in balance with risk factors prevailing at workplaces. On a positive side, the new occupational health and safety education and training system should be mentioned – regardless some deficiencies it is functioning successfully. Also the current cooperation among employers, employees and policy planners in Latvia is successful and in future, it should progress further.

At the level of European Union the most significant document is the EU Strategy for Safety and Health at work 2002-2006, which should be seen in a context of an array of other documents, ranging from the European Employment Strategy to the European Strategies for Social Protection and Social Inclusion. In addition, of course it should be kept in mind that all these documents are largely rooted in the European Union Lisbon Strategy. Assessment of integration of these documents into Latvia's

occupational health and safety system reflects a certain array of concerns, regardless obvious progress in the area of legislation and successful removal of some of the problems. The most significant outstanding issues are inadequate effort to reduce incidences of workplace accidents and occupational diseases, timely identification of significant problems (support to research), as well as insufficient planning and implementation of comprehensive set of measures to improve workplace conditions. No targeted and comprehensive analysis of incidence rates of occupational diseases and workplace accidents has been carried out at the national level, though such analysis would allow improving identification of required measures. A positive change is elaboration and start of implementation of the above-mentioned national occupational health and safety policy and planning documents. Assessment of integration of the European Employment Strategy highlights certain deficiencies, the most significant of which are: inclusion of requirements for workplace conditions into the set of issues related to employment; policies regarding introduction of fundamentally new methods of work, which may have significant health and safety impacts; and occupational health and safety for self-employed. In general, measures carried out to improve workplace conditions have been chaotic. There has also been inadequate informative support to the so-called vulnerable workers to ensure safe and healthy work conditions, and insufficient effort to prolong working life among older groups of workers by ensuring particularly favourable conditions. In terms of social inclusion, employment of people with special needs has not received sufficient attention and areas of special concern include timely medical and professional rehabilitation and accessible environment. Social dialogues at company level and employees' representation are still very weak.

Regarding implementation assessment of the national policy planning documents it should be mentioned that a number of documents clearly prioritise the need to improve the quality of working life and to create safe and healthy working environment, among them: the National Development Plan 2007-2013; the National Lisbon Strategy Implementation Programme 2005-2008; as well as the Government Declaration. Prior these documents, in 2001 the Cabinet of Ministers took cognisance of the proposals developed by the Ministry of Welfare on measures required in the area of occupational health and safety for the period 2001-2006 and supported their implementation. It should be recognised that the correct priorities have been chosen and that in general terms their implementation has been successful. Occupational health and safety legislation system has been upgraded successfully, thereby ensuring a shift from the old Soviet system to the new one, which has its roots in the requirements of the European Union. Adopting the Labour Protection Law and related Cabinet regulations on internal monitoring and control of working environment has set the basis of occupational health and safety system. A number of major institutional and capacity building projects have been implemented, the most recent of which was completed and closed on March 30, 2007 "Further development of occupational health and safety system" – project No 2004/006-245-03-01 of the European Union 2004 Programme „Transitional support for administrative capacity building". Regardless these achievements the national occupational health and safety system still requires a number of improvements to meet requirements set both by international and national policy planning documents. Among them: successful implementation of workplace monitoring and control mechanisms; scientific research; in-depth scientific analysis of incidence rates of occupational diseases and workplace accidents; establishment and application of a set of monitoring indicators for the occupational health and safety system assessment; information and awareness building among employers, working population and general public on the issues of occupational health and safety; medical and professional rehabilitation of occupational disease patients and workplace accident victims; as well as meaningful social dialogues in companies. Some of the issues are being

successfully tackled, such as introduction of new occupational health and safety education and training system, and use of external services provided by competent institutions and specialists.

Detailed assessment of specific pieces of legislation and documents is included in the thematic Annex of this Study "Analysis of sector policy planning documents"; information on current legislation is provided in the Annex 2 "Occupational health and safety legislation". Problems and gaps pertinent to national legislation that have been identified during this Study are analysed in detail under the alternative "Amendments necessary for improvement of occupational health and safety legislation".

# 1.2. Nationally available data on occupational health and safety and on legal labour relations

There are two main types of data that can be used to analyse the national situation in the area of occupational health and safety and legal labour relations: routinely collected data and research. Use of these two types of data can accommodate both dynamic and regional (across countries) analysis. The routinely collected and summarised data requirements are set by legislation. Examples of routinely collected data (indicators) are the number of occupational diseases recognised for the first time, number of victims of workplace accidents, number of fatalities due to workplace accidents, economic costs of occupational diseases or workplace accidents, others.

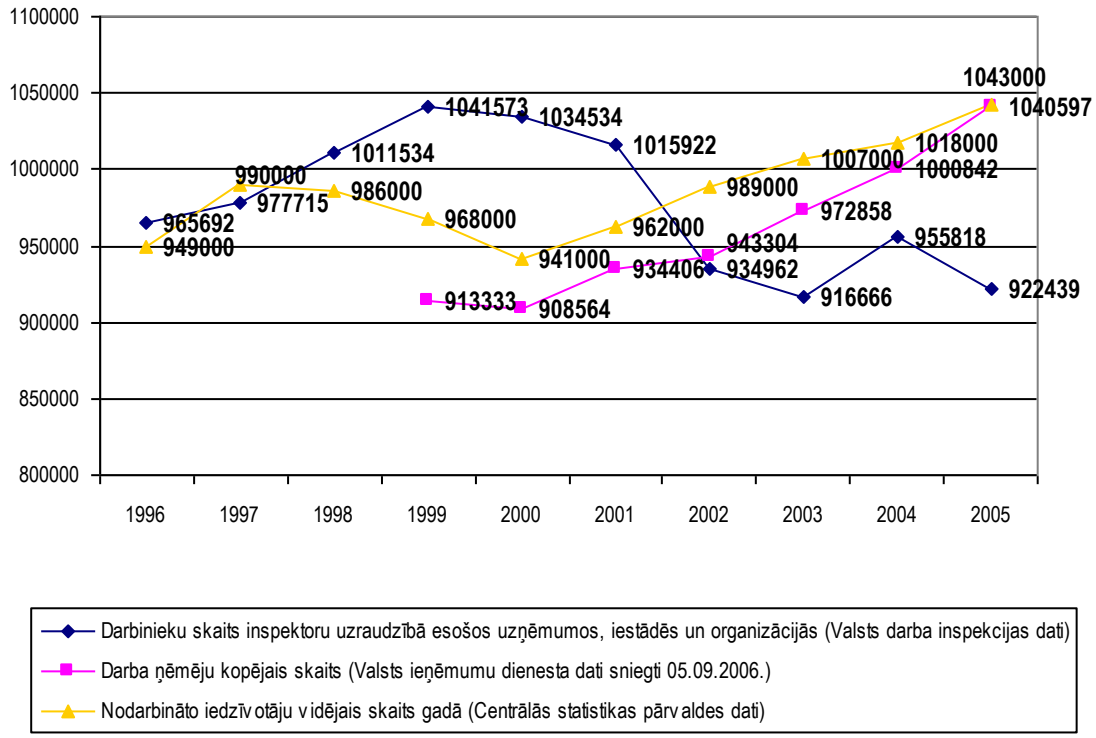
Latvia requires collection of just few indicators at national level. The Central Statistical Bureau prepares annual national statistic programmes within the frameworks of its annual budget and publishes information within this programme. For example, the 2006 National Programme of Statistical Information included the following indicators related to working environment (Cabinet Regulation No 961 "National Programme of Statistical Information 2006"):

- Workplace accidents – severe accidents (2006, *Eurostat* data, on basis on information provided by the State Labour Inspectorate):
    - Latvia – total;
    - Gender specific;
- Workplace accidents – fatalities (2006, *Eurostat* data, on basis on information provided by the State Labour Inspectorate):
    - Latvia – total;
    - Gender specific;
- Number of people involved in workplace accidents, among them also number of fatalities according to the European Statistics on Accidents at Work (ESAW) methodology – *Eurostat*, request of the International Labour Organisation, on basis on information provided by the State Labour Inspectorate:
    - Latvia - total;
    - Per sector – NACE code two digit level;
    - Gender specific.

- Number of registered cases of occupational diseases according to the methodology of the European Occupational Diseases Statistics – *Eurostat*, request of the International Labour Organisation, on basis of information provided by the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital:
    - Latvia - total;
- Number of registered cases of occupational diseases according to the methodology of the European Occupational Diseases Statistics (EODS), on basis of information on medical care of the people exposed to ionising radiation due to Chernobyl NPP accident at the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital and data provided by the Health Statistics and Medicinal Technologies State Agency:
    - Latvia - total;
- Labour market policy measures according to the classification of *Eurostat* LMP (cost per each measure - total and per type of expenditure) – upon request of *Eurostat* , on basis of data provided by the State Employment Agency, the Professional Career Counselling State Agency, the State Social Insurance Agency, the State Agency "Insolvency Administration":
    - Latvia - total;

In order to carry out temporal, regional, gender and sector analysis of occupational diseases and workplace accidents, numbers of incidences cannot be used directly – they have to be recalculated per 100,000 persons in employment. However, it proved to be difficult to obtain data on number of persons in employment in Latvia for the period between 1996 and 2005 segregated per gender, sector or districts. Employment data in Latvia can be sourced from three different institutions: the Central Statistical Bureau; the State Revenue Service and the State Labour Inspectorate. However, data provided by the three institutions was significantly different (see Figure 1).

**Figure 1. Number of employed people in Latvia – as per different sources of information.**




The Study group was greatly inconvenienced by the fact that no unified employment definitions are used in these three institutions. The Central Statistical Bureau uses the following terminology: worker (*strādājošais*), employee (*darbinieks*), employed (*nodarbinātais*) and workforce (*darbaspēks*), while the State Labour Inspectorate - employee (*darbinieks*). The Central Statistical Bureau gives estimates of annual average number of working population (information prepared on basis on selective surveys between 1996 and 2001 among population aged 15 and above, and selective surveys from 2002 and later – aged between 15 and 74). The State Labour Inspectorate provides information on number of employees in companies, institutions and organisations subject to its inspections. Therefore, their data does not include military service staff working under the Ministry of Defence and staff with special service ranks working for institutions under the Ministry of Interior. According to the State Labour Inspectorate, they receive data on employed people from the State Revenue Service. When the Study Team requested information from the State Revenue Service on total number of employed for the period between 1995 and 2005, the information obtained was substantially different from data of the State Labour Inspectorate, though in both cases the source is supposed to be the same (see Figure 1).

As it can be seen in the Figure 1 above, the numbers provided by the State Labour Inspectorate are higher for the period until 2001, but from 2002 the numbers of employed as provided by the Central Statistical Bureau and the State Revenue Service increase. It is difficult to comment these changes but they could be related with for example changes in methodology used by the Central Statistical Bureau to estimate number of primary employed people.

In consultation with the staff of the Labour Department of the Ministry of Welfare and the State Labour Inspectorate, it was decided to adopt the data provided by the State Revenue Service as the basis for further calculations. The State Revenue Service calculates number of employed on basis of

reports provided by employers. An additional bonus of the information provided by the State Revenue Service is that it was specifically prepared upon the request of the Study team and therefore it is segregated per sectors, districts and cities.

The Study found that various institutions possess various not interconnected data bases, and normally no electronic information exchange takes place among these institutions (for example, information on number of occupational diseases or on number of workplace accidents); further more, data of one institution can not be directly integrated into analysis of data at another institution. In order to ease data analysis processes at national level, it is advisable either to establish a connectivity among the databases at these institutions, or alternatively to establish a new single database. Such a single database to the extent feasible would integrate the existing databases at the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital, the State Labour Inspectorate and the State Social Insurance Agency. A single database could reduce the documentation flow among these institutions and consequently - reduce time consumed for screening and reviewing documents. It would allow analysing costs across various sectors, groups of occupational diseases / types of accidents, etc. The database could be used to prepare economic cost analysis when setting occupational health and safety priorities. Data entry would still be responsibility of each of the relevant institutions – data on workplace accidents would be entered by the State Labour Inspectorate, on costs – the State Social Insurance Agency. The Register of Enterprises could provide additional entries – information on changes in company names, location, etc. The Population Register of the Office of the Citizenship and Migration Affairs could be connected to the database in order to identify the deceased and/or emigrated occupational diseases patients. This would ensure that the database contains information on living occupational diseases patients; it would also allow identifying the most costly groups of occupational diseases. Such a database could improve administration of taxes, facilitate payments of benefits and compensations, identify companies whose operations create higher costs due to occupational diseases and workplace accidents, and to plan preventive inspections at such companies.

## 1.2.1. Databases

According to the initial list of tasks, the Study "Work conditions and risks in Latvia" was supposed to analyse several databases. However, during the Study it was found that several of the institutions do not possess specific databases – they source required information in form of overviews from other institutions and then include those overviews in their own reporting. An example of such institution is the Health Statistics and Medicinal Technologies State Agency, which does not have a specific database. Hence, in real terms for the purposes of occupational health and safety the following national databases are available:

- Latvian State Register of Occupational Disease Patients and People Exposed to Ionising Radiation due to Chernobyl NPP Accident – since January 1, 2007 changes in the examination procedures of occupational diseases have also altered registration of occupational diseases (for more details please refer to the thematic annex "Occupational diseases in Latvia 1993 – 2005" and thematic annexes on specific risk factors and sectors;
- The State Labour Inspectorate – data on workplace accidents (for more details please refer to the thematic annex "Workplace accidents" and thematic annexes on specific risk factors and sectors);
- The State Social Insurance Agency – data on costs of workplace accidents or occupational diseases (for more details please refer to the thematic annex "Compulsory social insurance for workplace accidents and occupational diseases").

Assessment of the existing databases and analysis of legislative acts that regulate operations of institutions tasked to summarise and publish data on occupational health and safety, allows to conclude that there is no single designated national institution directly responsible for collection, processing and analysis of data related to working conditions and occupational risks. For more details, please refer to the Annex "Analysis of databases". Specific institutions have been designated to deal with separate specific issues (for example, occupational diseases, costs of workplace accidents and occupational diseases). However, there is no single authority designated to review and analyse legal labour relations, and occupational health and safety situation nation-wide – even though that could facilitate identification of the most significant problems, setting priorities, and planning in-depth research. Possibly these functions could be performed by the Work Environment Institute to be established in 2008as an agency of the Riga P.Stradins University. Taking into account the future functions of this institute, which, among others, include also establishment of a unified information and research centre, such a decision would allow the most effective utilisation of the available information.

Another issue is that of terminology – experts in epidemiology and statistical analysis do not always use unified definitions, as it is, for example, in case of "incidence of occupational disease":

- Some experts interpret the term "incidence of occupational disease" as a number of occupational disease patients. However, in Latvia quite often one occupational disease patient may have several occupational diseases caused by different occupational risks. For example, a carpenter may suffer from loss of hearing due to noise exposure and a respiratory disease due to dust exposure. For these reasons such a definition is not fully applicable;
- Other experts interpret the terms "incidence of occupational disease" as each and every diagnosis related to adverse impacts of occupational risks. However, opponents of such approach point out that often it is difficult to differentiate a new occupational disease from further complications of a preceding occupational disease in a given patient. For example, hardwood dust may cause chronic rhinitis and sinusitis, as well as cancer of paranasal sinuses.

A number of institutions (for example the State Labour Inspectorate and the Health Statistics and Medicinal Technologies State Agency) analyse and publish or interpret data collected by other institutions in their publications or reports. For example, according to the Central Statistical Bureau, the annual report "Public health analysis in Latvia" prepared by the Health Statistics and Medicinal Technologies State Agency is the only available source of statistical data on the topics related to working environment and legal labour relations in Latvia. Data on public health impacts of working environment is included in the sub-section "Social agents or social environment" of the section "Public health impacts of the environment" of this report.

The terminology used by the Health Statistics and Medicinal Technologies State Agency in their annual public health reports does not follow the terminology definitions provided in Latvian legislation (for example, regular prophylactic health examinations, working environment policy, others). Besides, the terminology used does not have the same meaning each time; outline of the report is not maintained the same over years, the same as the sources of information are not maintained the same; no definitions of terminology used are provided. All these obstacles in fact make it impossible to analyse dynamics (temporal analysis). For more detail, please refer to the Topical Annex "Analysis of databases" (in Latvian). The most recent reports contain not more than one or a half page of texts dealing with occupational safety and occupational health. However, this is clearly in misbalance with the data of the World Health Organisation – that working population spends approximately one third of their adult lifetime at work (source: World Health Organisation Strategy "Occupational Health for

all", therefore occupational risks may have significant health impacts on working population. General assessment of these reports indicates that occupational health and occupational safety are not being perceived as an integral part of public health or environmental health. For example, the reports do not use widely recognised occupational health indicators, such as number of occupational disease cases recognised for the first time per 100,000 persons in employment (incidence rate); or number of fatal workplace accident per 100,000 persons in employment. It is important to note that the Ministry of Welfare within its social policy studies have designed a set of environmental health indicators; one group of indicators was designed specifically for working environment (the Study was carried out by the "Latvian, Estonian & Lithuanian Environment" Ltd upon request of the Ministry of Welfare). These indicators are easy to apply and their use can enable temporal analysis of the working environment in a longer term. Results of this Study and the full list of indicators are included in the "Results of social policy studies by the Ministry of Welfare in 2000". In 2005, the Public Health Agency reviewed the indicators in order to ensure compliance with the Environmental and Health Information System (ENHIS) indicators. Since 2006, data collection on workplace accidents and occupational diseases in Latvia has to follow *Eurostat* methodologies and it may significantly improve quality of the annual reports.

The annual report "Public health analysis in Latvia" is very significant tool to reflect occupational health and occupational safety as an integral part of public health. Therefore, it is recommended to supplement the report with an additional section - "Working environment" and set a certain outline and sources of information. It is advisable to set up a specific working group for the process of designing this additional section. Such a working group could include staff of the Department of Labour Protection Policy of the Ministry of Welfare, the State Labour Inspectorate, doctors of the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital, Latvian Institute of Occupational and Environmental Health by the RSU, representatives of employers. After that, the specialists of the Health Statistics and Medicinal Technologies State Agency will be able to compile a high quality annual report on their own, and such report will include reliable and comparable data on working environment, occupational health and safety of persons in employment, as well as include a more elaborated section "Working environment". The Health Statistics and Medicinal Technologies State Agency is responsible for retrieval, processing and analysis of health care information and statistical data, and statistical information on public health and health care. It is also recommended to summarise in the annual public health reports all relevant information collected by other institutions working with public health statistics and whose data can be used to characterise safety and health of persons in employment form the viewpoint of public health. As potential examples, the following institutions can be mentioned:

- Incidence of and mortality from mesothelioma (it characterises use and impact of asbestos – the asbestos fibres are cancerogenic and can cause mesothelioma and lung cancer) – data are gathered by the Latvian Cancer Register;
- Incidence of tick-born encephalitis, if the infection with the virus took place at the workplace or during performing work related duties – data on incidence of tick-born encephalitis is collected by the Public Health Agency, the Agency also collects information on potential source of infection from patient anamnesis.

To avoid using unreliable data or analysing indirect data, the Study Team in its further analysis used data from the primary source. To illustrate the need to use the primary source, let us look at the analysis of occupational diseases! Up until January 1 2006, the incidence of occupational diseases was analysed by the State Labour Inspectorate on basis of special reports on occupational disease incidence

provided by the Medical Commission of the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital. As such, these reports do not cover all companies (places of work). Hence, the information contained in the reports of the State Labour Inspectorate does fully reflect the situation and it is not comparable with information available at the Latvian State Register of Occupational Disease Patients and People Exposed to Ionising Radiation due to Chernobyl NPP Accident. It is for these reasons that the Study Team decided to use data from the Latvian State Register of Occupational Disease Patients and People Exposed to Ionising Radiation due to Chernobyl NPP Accident in analysing incidences of occupational diseases.

**Data of the Latvian State Register of Occupational Disease Patients and People Exposed to Ionising Radiation due to Chernobyl NPP Accident.** As already mentioned, data on occupational diseases is available at the Latvian State Register of Occupational Disease Patients and People Exposed to Ionising Radiation due to Chernobyl NPP Accident. At the time of this Study, the Register operated under P.Stradins Clinical Hospital. It is important to note that direct public access to analytic data from the Register is not possible. Such information is only reflected in official publications, such as annual reports of the State Labour Inspectorate and the annual "Public health analysis in Latvia" reports of the Health Statistics and Medicinal Technologies State Agency. Data from the Register can be accessed upon individual requests, but no deliverance criteria have been set for such requests (for example, costs, duration of deliverance of results, types of possible analysis, types of available and not available data, etc.). Besides, the Centre of Occupational and Radiation Medicine does not carry out regular situation analysis of occupational diseases – the main functions of the Centre focus on establishing linkages between the diagnosis and occupation, not situation analysis. The Study identified a number of outstanding issues in the operations of the Register, which prevent full and effective registration and processing of data in the Register:

- Working with databases is complicated, it requires special training and resources;
- Working with databases is time consuming, but data entry and analysis has been designated just to one person on a part time basis. On projects basis other staff members, who have been trained to use the databases of the Centre, are also used;
- The budget of the Register has reduced between 1999 and 2005.

It is expected that the situation will change significantly within the coming few years, but it is not certain whether any improvements will take place already during 2007, when the Register's affiliation was changed. According to the Cabinet Regulation No 263 "Procedure for establishment, supplement and maintenance of a register of patients having specific diseases" (adopted in 04.04.2006, in force since 08.04.2006) the Health Statistics and Medicinal Technologies State Agency took over the Register from the Centre of Occupational and Radiation Medicine. In future the Medical Commission of the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital will continue to diagnose occupational diseases while the Centre – will maintain the occupational disease patients data base. Certain technical difficulties may arise during the actual transfer of the Register and it is not possible to predict how this will affect registration of incidences of occupational diseases recognised for the first time. Analysis of data is presented in the results sections of this report - the thematic Annex "Occupational diseases in Latvia 1993 – 2005", as well as Topical Annexes for sectors, for example "Work conditions and risks in construction sector in Latvia", and Topical Annexes on occupational risks, for example "Noise".

**Data of the State Labour Inspectorate.** The Study „Work conditions and risks in Latvia" analysed the information system of the State Labour Inspectorate, which consists of internal access database. The database may provide significant information characterising situation nationwide in the area of

occupational health and safety, legal labour relations, and technical monitoring and control of dangerous equipment and market supervision. Data between 1997 and 2002 has been archived, hence it is not available on-line and it was not analysed during this Study. The information system at the State Labour Inspectorate follows the following structure:

- Inspections (surveys);
- Occupational diseases;
- Dangerous equipment;
- Physical persons;
- Workplace accidents;
- Companies.

The sections on dangerous equipment, physical persons, and companies can be accessed from all Latvia; that is, each regional labour inspectorate can access data on companies, employees and dangerous equipment in all other regional units. Data on inspections, occupational diseases and workplace accidents can only be accessed within the respective region (more details available in the Annex "State Labour Inspectorate").

Analysing the database of the State Labour Inspectorate, a number of significant problems related to data entry and data processing were identified. For example, during data entry on inspections (which is classified as a preventive function) the inspector has to enter data on company assessment using following criteria:

- Safety critical level of the company;
- Risk of safety failure of the company;
- Health hazards at the company;
- Prevailing health risk of the company;
- Welfare of the company;
- Reliability of the company management;
- Public safety.

Each inspector is then supposed to rate the inspected company against each of the criteria using special methodology. For each of the criteria the company can be rated from being "dangerous" to "satisfactory" and theoretically this grading should serve inspectors as a basis for planning their preventive inspections. However, the major problem with entering data on preventive inspections is the need to subjectively grade companies against the seven factors (criteria). Even though the inspectors can use a special methodology in grading the companies, the methodology is not very explicit. As a result, the inspectors prefer avoiding preventive inspections, but rather use all other possibilities offered by the database. Therefore, the database does not facilitate one of the major functions of inspectors – preventive work. Similarly, problems have also been observed in entering data on dangerous equipment (dangerous equipment is classified according to the Cabinet Regulation No 384 "Regulations on dangerous equipment" (adopted on 07.11.2000)):

- As a result of insufficient staff capacities, lack of computers and appropriate qualifications, information on dangerous equipment is not entered into the database. The registration clerks of the State Labour Inspectorate maintain their own separate system for dangerous equipment, thus, this section of the database is not functioning and it is not being used.
- Electronic and paper reports on inspections of dangerous equipment, which are submitted by notified companies to the State Labour Inspectorate (already for more than 6 years), are not

linked with the database and therefore the database entries on inspections of dangerous equipment are not updated.

The database section on companies contains fields on company requisites, sector (NACE code), contact information, number of employees (gender specific), date of inspection, as well as any other information found to be relevant by the responsible staff of the Inspectorate (for example, who carries out tasks of occupational health and safety specialist), as well as the name of the inspector in charge of the particular company. Theoretically, this section of the database should serve inspectors on daily basis. By identifying any particular company in the database, it should be possible to see occupational health and safety as well as legal labour relations profile of the company – as per day of viewing the database and any earlier developments. Currently it is not possible – the database contains only basic information on companies and even that information sometimes contains mistakes. The Strategies and Analysis Division of the State Labour Inspectorate carries out data processing and analysis, it also ensures public access to this information by preparing annual reports of the State Labour Inspectorate. Such reports are available since 1995:

- Annual reports for 1995 - 1999 are available only in hard copies at the archive of the State Labour Inspectorate and the Latvia National Library;
- Annual reports for 2000 - 2005 are available electronically from the website of the State Labour Inspectorate (http://www.vdi.lv/publikac/statist_lv.shtml).

Currently annual reports of the State Labour Inspectorate are prepared according to the Cabinet instruction No3 "On preparation of annual reports", but their outline and contents differ from year to year (only the 2003 and 2004 reports had the same outline). The annual reports contain summary of the main operational indicators of the State Labour Inspectorate, overview of expenditures, and annexes:

- Annex 1: the activities of the State Labour Inspectorate;
- Annex 2: Overview of the workplace accidents;
- Annex 3: Overview of the recognised incidences of occupational diseases and their causes.

Only the information that has been prepared after 1999 is publicly available (from the website). Information for the period between 1995 and 1999 is only available upon request and the request procedure is complicated and long. The information offered in those reports is not presented clearly – in order to obtain information on a specific indicator one has to read the whole descriptive part of the respective report and to list all the annexed tables because the reports do not use a unified search system to allow finding required positions across years. It is necessary to improve significantly information presented in the annual reports prepared by the State Labour Inspectorate:

- The use of terminology is not consistent. For example, in several of the reports the number of workplace accident victims equals the number of workplace accidents. In reality these numbers cannot be the same per definition – a workplace accident must include as a minimum of one victim, but there can be more victims in a given accident. A similar example is that of occupational diseases. It is not clear from the reports, whether an incidence of occupational disease, occupational disease, and occupational disease patient have all the same meaning or not;
- Data on current and previous reporting periods is not consistent – each report contains data on current year and on previous years. Sometimes data on previous years is not the same as data in the respective earlier report – for more details please refer to the thematic Annex "Workplace accidents";

- Analysis of incidences of occupational diseases reflects significant inaccuracies in interpretation of data (for more details please refer to the thematic Annex "Occupational diseases in Latvia, 1993 – 2005").

Retrieval of data not included in the annual reports is very slow, because data cannot be simply summarised using the database tools. Such data is stored in paper format at each regional unit separately; hence, it is necessary to make requests from regional units even in cases when law requires such data summaries. Examples of such data are working with asbestos, registered accidents when the victim has been in contact with blood or with infected or possibly infected other liquids or objects and after the contact a risk of infection has been identified but no immediate loss of work ability occurred.

**Data from the State Social Insurance Agency.** According to the Law on Compulsory Social Insurance in Respect of Accidents at Work and Occupational Diseases (adopted in 02.11.1995), the State Social Insurance Agency administrates payments of insurance compensations to the workers who have been victims of workplace accidents or who according to the decision of a special medical committee have been recognised to suffer from an occupational disease. Data on payments and reasons (for example, costs of acquisition of artificial limbs; escort; travel costs to visit medical establishments; purchase and repairs of technical accessories; medical costs; medical care; medical and professional rehabilitation) are available from the Health Care and Rehabilitation Section of the State Social Insurance Agency (70a Lāčplēša street, Riga) for the period starting from 01.01.1997, when the Law came into effect.

According to the statues of the State Social Insurance Agency (Cabinet Regulation No 733 "Statute of the State Social Insurance Agency" – adopted on 16.12.2003) the State Social Insurance Agency is directly responsible for analysis of costs of workplace accidents and occupational diseases. Further more, based on the analysis and on proposals submitted by government institutions and social partners the Agency has to elaborate, approve and implement occupational diseases' and workplace accidents' prevention plan (Clause 15 of the Statues). However, materials on such analysis currently are not publicly available (for example – what causes higher costs – occupational diseases or workplace accidents; which sectors are high risk sectors according to the expenditures of the Special budget for workplace accidents).

It would be appropriate to prepare such analysis on annual basis – it would ease setting short- and long-term priorities in the area of occupational health and safety.

According to the information from the State Social Insurance Agency, the following two basic groups of data are available:

1. Damage compensations / benefits for:
    - Insurance compensation to dependants for loss of breadwinner due to a workplace accident or occupational disease;
    - Funeral benefit in the case of death of the insured person due to a workplace accident or occupational disease;
    - Insurance compensation for loss of work ability if the damage occurred after 01.01.1997;
    - Insurance compensation for loss of work ability if the damage occurred before 01.01.1997.
2. Additional compensations / benefits for:
    - Medical treatment (inpatient or outpatient),
    - Medical and social rehabilitation (inpatient or outpatient),

- Patients' contributions (inpatient or outpatient),
- Medicaments and medicines,
- Prostheses and technical aids,
- Transportation costs,
- Professional rehabilitation, etc.

Data on damage compensations / benefits was analysed for the period from 2001 to 2005. Data on earlier compensations / benefits (between 1997 when the Law on Compulsory Social Insurance in Respect of Accidents at Work and Occupational Diseases came into effect and 2001) is not publicly available. According to the information from the State Social Insurance Agency:

- Data on 1997 is not statistically reliable because during the 1997 the State Social Insurance Agency was reorganised;
- Data on 2000 is incomplete due to shift to new IT system during 2000;
- Data on 2001 is not complete.

Publicly available data form the State Social Insurance Agency can be accessed from its website (www.vsaa.lv) – both in absolute numbers and in forms of graphs allowing analysis of the following:

- Special budget on workplace accidents – total revenues and expenditures; balance;
- Total number of persons who have social insurance (thousands, 1996-2005);
- Insurance compensations for loss of work ability if the damage occurred after 01.01.1997; 2002-2005;
- Insurance compensations for loss of work ability if the damage occurred before 01.01.1997; 2002 - 2005;
- Insurance compensations to dependants for loss of breadwinner due to a workplace accident or occupational disease, 2002 - 2005;
- Funeral benefits in the case of death of the insured person due to a workplace accident or occupational disease, per month, 2001 - 2005.

The Workplace Accidents and Occupational Diseases Insurance Fund insures against workplace accidents and occupational diseases according to the Law on Compulsory Social Insurance in Respect of Accidents at Work and Occupational Diseases (adopted on 02.11.1995).

### 1.2.2 Research and studies carried out in Latvia and other countries with similar development trends

The Study "Work conditions and risk in Latvia" has observed that no significant and extensive studies and research on occupational health, occupational safety and employment legal relationships have been carried out in Latvia. However, such studies could potentially serve as a basis for well-grounded and appropriate decision-making. Changes and reforms in occupational health and safety system in Latvia have mostly been based on requirements of European Union Directives.

Studies carried out in Latvia between 1991 and 2005 can be divided into two major groups – studies and research carried out specifically in Latvia, and studies and research carried out within frameworks of larger regional studies. Even though a number of studies have been carried out in Latvia, most of them do not allow seeing dynamics of situation development. Different studies have covered different respondent groups; companies of different sizes or from different sectors and survey questions have been formulated differently. It is for these reasons that results of the studies carried out in Latvia do not allow to assess whether the situation in Latvia has changed over the last 15 years in the area of

occupational health and safety and legal labour relations or not. On top of that, a number of very similar studies have been carried out in Latvia over the course of a short period (or simultaneously) focusing on identical respondent groups and asking them similar questions. For example, the Opinion poll on activities of the State Labour Inspectorate studied opinions of employers and population on the State Labour Inspectorate, on occupational risks, information and awareness, legal labour relations, etc. was carried out in 2005 and in a repetitive study in 2006. Surveys of employers, employees and population within the Study "Work conditions and risks in Latvia" were carried out in 2006. Survey of economically active population was carried out within the fourth European survey of working conditions of the European Foundation for the Improvement of Living and Working Conditions. These facts indicate that research is not being planned at national level even though it can be an important tool in policy planning processes.

Even more, the results of these studies are not easily accessible. Neither libraries, nor institutions, which should use study results in their daily work (such as Ministry of Welfare, the State Labour Inspectorate, the Institute of Occupational and Environmental Health of Riga Stradins University), presently can ensure access to all studies carried out in Latvia in the areas of occupational health, occupational safety and legal labour relations. Only some of the studies are available on the Internet, and not from a single website, but from sites of various institutions (for example, Latvian Focal point of the European Agency for Safety and Health at work www.osha.lv; the Ministry of Welfare www.lm.gov.lv; the State Labour Inspectorate www.vdi.lv). Possibly, a database of research and studies carried out could be set-up within the National Institute of Occupational Heath and Safety to be established soon as an agency under Riga Stradins University, which could potentially become a unified information and research centre. At the same time to increase accessibility and maximise publicity of such studies and research it is recommended to place all reports or final results of reports in more frequently visited websites of relevant institutions, such as the Ministry of Welfare www.lm.gov.lv and Latvian Focal point of the European Agency for Safety and Health at work www.osha.lv)

Often research or studies have been carried out, but their results (reports or summaries) are not available. This prevents formulating general conclusions and proposals. As examples, here should be mentioned research and studies carried out in Latvia only and funded from, for example, Latvian Council of Science. Such studies are most often carried out by Latvian institutes and higher educational establishments; they are in form of applied research and therefore directly reflect conditions of working environment in Latvia (for example, studies in wood processing, logging). Nevertheless, results are only available from the archives of Latvian Council of Science, or by contacting the authors, or by finding some publications (submissions to conferences, panel presentations, international publications). This prevents applying the results and conclusions in policy planning and decision-making.

All the research and studies identified during this Study are summarised in the thematic Annex "Analysis of completed studies and overview of similar studies". Results of available studies and research to the extent feasible has been integrated in the thematic annexes in order to enable a possibility to see the dynamics of situation development in Latvia Summary of the most significant research and studies is presented in Table 1.

**Table 1. The most significant studies in the field of occupational health and safety and on legal labour relations carried out in Latvia.**

| No | Name | Participating countries | Execution time | Performers | Description of the study | Description of the studied population | Link with other studies | Available results | Main conclusions | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Studies ordered by the European Foundation for the Improvement of Living and Working Conditions** | | | | | | | | | | |
| 1. | 4th European survey of working conditions | 25 European Union member states, and Bulgaria<br>Romania<br>Croatia<br>Turkey,<br>Switzerland, Norway | 09.2005.-10.2005. (planned – no exact information available) | European Foundation for the Improvement of Living and Working Conditions | Typical population of active people (self-employed or employees at least 15 years old as by the survey);<br>Personal tête-à-tête interviews | 1000 respondents per country (600 – in 5 smallest EU countries-Estonia, Cyprus, Slovenia, Malta, Luxemburg) | Studies:<br>1990;<br>1995;<br>2000-2002 (33500)<br>Section 3.1., year 2000 – 15 EU Member states (21500)<br>Section 3.2, year 2001-2002 EU candidate countries (12000);<br>2005 (this Study) | Physical working environment, labour management, working time, information and discussions, discrimination and violence, work and health, income and payment system, work and life beyond it | - | First results published at the end of 2006; therefore, results were not considered in the Study "Work conditions and risks in Latvia" |
| | | **Latvia** | | Latvijas fakti Ltd | | 1003 | | | | |
| 2. | Working conditions in EU candidate countries | Bulgaria<br>Cyprus<br>Estonia<br>Lithuania<br>Latvia<br>Hungary<br>Malta<br>Poland<br>Romania<br>Slovenia<br>Slovakia<br>The Czech Republic<br>Turkey | 15.04.2001.-04.06.2001. (Turkey, 12.06.2002. – 03.07.2002.) | European Foundation for the Improvement of Living and Working Conditions | Typical population of active people (self-employed or employees at least 15 years old as by the survey);<br>Personal tête-à-tête interviews | 1000 respondents per candidate country, Except Malta and Cyprus (500 respondents) | Studies:<br>1990;<br>1995;<br>2000-2002 (33500)<br>Section 3.1., year 2000 – 15 EU Member states (21500)<br>Section 3.2, year 2001-2002 EU candidate countries (12000);<br>2005 | Physical working environment, labour management, working time, information and discussions, discrimination and violence, work and health, income and payment system, work and life beyond it | The most significant differences between EU member states and candidate countries were mentioned:<br>- Low number of open-ended contracts;<br>- High number of temporary employees;<br>- Work speed highly dependant on colleagues;<br>- Long working hours, frequently also in the night and holidays | Considering that this study was repeated in 2005, these questions were not included in the questionnaires of "Labour market study" |
| | | Latvia | 24.05.2001.-11.06.2001. | AS "EMOR" | | 1006 | | | | |

| No | Name | Participating countries | Execution time | Performers | Description of the study | Description of the studied population | Link with other studies | Available results | Main conclusions | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| 3. | European survey on working time and work-life balance | Stage 1 - 15 European Union Member States<br>Phase 2-<br>Cyprus<br>The Czech Republic<br>Hungary<br>Poland | Stage 1 – 09.2004.-11.2004.<br>Stage 2 – 05.2005.-06.2005. | European Foundation for the Improvement of Living and Working Conditions | Interviews of both managerial staff (*highest ranking manager for human resources*) and employees representatives in the same company (criterion for companies – more than 10 employees) | In total:<br>Employers and their representatives – 21 031 (including companies having employees representatives – 10 451)<br>Representatives of employees – 5232 | - | Regular working hours, reduced working hours, overtime work, flexible working hours, shift work, pre-term retirement, parental leaves | Data regarding Latvia (separately) are still not available by the beginning of 2006 | These questions were not repeated on purpose (interviews carried out in 2005, results of the study published in the first half of 2006) |
| | | Latvia | | TNS Latvia Ltd | | Employers and their representatives – 542 (including companies having employees representatives – 218)<br>Representatives of employees - 112 | | | | |
| **Studies ordered by the State Labour Inspectorate** | | | | | | | | | | |
| 4. | Opinion poll on the activities of | Latvia | 12.05.2006.-17.07.2006. | Marketing and Public Opinion Research Centre SKDS | Opinion of employers and residents on | 519 employers, 1005 residents | Repeated study (previous study was performed in 2005) | Legal labour relations, occupational risks, opinion on activities of the State | Results of this Study do not differ a lot from those of 2005 | |

| No | Name | Participating countries | Execution time | Performers | Description of the study | Description of the studied population | Link with other studies | Available results | Main conclusions | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| 5. | the State Labour Inspectorate | | 01.06.2005.-31.07.2005. | (ordered by the State Labour Inspectorate) | the State Labour Inspectorate, occupational risks, awareness, labour relations etc. | 509 employers, 1006 residents | The first study | Labour Inspectorate, compliance with occupational health and safety legal requirements | 1. Awareness on legal labour relations and on occupational health and safety is still dissatisfactory and differs per question;<br>2. Only 86% of employed have concluded employment contracts, in spite that employers indicate 93%;<br>3. 38% of employers and 50% of employees, who are exposed to occupational risks, do not undergo medical examinations;<br>4. Only 50% of residents would ask for fulfilment of occupational safety requirements. | During the Study "Work conditions and risks in Latvia" these questions were not repeated on purpose |
| **Studies in the frame Phare project** | | | | | | | | | | |
| 6. | Readiness of Latvian companies to implement the new occupational health and safety legislation | Latvia | 25.11.2002.-16.12.2002. | AS "IBNA" | Opinion of employers regarding Latvian occupational health and safety legislation | 363 managers or their representatives of Latvian companies (medium and large companies) | Performed in the frames of PHARE project No Phare LE 9911/0001/01/SRV-2 | Implementation of occupational health and safety requirements, information sources, the most typical problems | 1. Companies need much more information, explanatory materials and guidelines on legal requirements<br>2. Knowledge on requirements of Labour Protection Law is low in companies<br>3. Internal supervision of working environment is carried out in too few companies; there are difficulties to recognise supplementary measures that should be carried out in the field of occupational health and safety<br>4. Understanding of activities of competent authorities and competent specialists is scarce | Selection of respondents unclear |
| 7. | Opinion of employers on the Labour Law | Latvia | 26.11.2002.-16.12.2002. | AS "IBNA" | Opinion and understanding of employers regarding Labour Law | 69 managers of Latvian companies, employers | Performed in the frames PHARE project No Phare LE 9911/0001/01/SRV-2 | Problems and understanding related to implementation of Labour Law requirements | 1. Employers are well aware of the Labour Law requirements;<br>2. Almost 80% of employers think that requirements of the Labour Law and their implementation are unclear.<br>3. 25% of employers have little knowledge on requirements regarding management of working time. | Selection of respondents unclear. Medium and large companies were mainly included. |
| **Working Life Barometer in the Baltic Countries** | | | | | | | | | | |

| No | Name | Participating countries | Execution time | Performers | Description of the study | Description of the studied population | Link with other studies | Available results | Main conclusions | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| 8. | **Working Life Barometer in the Baltic Countries** | Lithuania<br>Estonia<br>Latvia | January, February 2002 | Ministry of Labour of Finland<br>Latvijas fakti Ltd Description of Latvia prepared by Jevgenija Sviridenkova | Typical population of active people (self-employed or employees 16 to 64 years old as by the survey);<br>personal tete-a-tete interviews | Lithuania – 909<br>Estonia - 900<br>904 | Studies:<br>1999;<br>2002 (current study);<br>In Finland – every year since 1992;<br>In Estonia - 1997 (comparison among St.Petersburg, Tallinn, Helsinki) | Uniting in trade unions and movement of trade unions;<br>Wage and livelihood;<br>Working time and contracts;<br>Stressing factors and conflicts;<br>Potential of employees to influence their work;<br>Job satisfaction;<br>Distance working and work-related information technologies;<br>Work-related training;<br>Development of work organisations. | 1. Number of trade-union members is decreasing;<br>2. Importance of collective agreements is increasing;<br>3. Latvian employees work for longer hours (men 45.9 hours a week, women-42.5);<br>4. Work intensity of women stays the same, but of men – is increasing;<br>5. Physical and mental stress is increasing;<br>6. Occupational safety is improving;<br>7. Number of conflicts is significantly increasing;<br>8. Job satisfaction is slightly decreasing. | Will not be continued, as Latvia became an EU member state |
| 9. | **Working Life Barometer in the Baltic Countries** | Lithuania<br>Estonia<br>Latvia | October – December 1998 | Ministry of Labour of Finland<br>Latvijas fakti Ltd Description of Latvia prepared by Juta Pupure | Typical population of active people (self-employed or employees 16 to 64 years old as by the survey);<br>Personal tête-à-tête interviews | Lithuania – 901<br>Estonia - 911<br>921 | See cells related to Working Life Barometer in the Baltic Countries, 2002 | See cells related to Working Life Barometer in the Baltic Countries, 2002 | See cell related to Working Life Barometer in the Baltic Countries, 2002 | Report of the study is available only by directly contacting authors of the study |

# 2. METHODOLOGY OF THE STUDY

## 2.1. Justification of selected methods

The Study "Work conditions and risks in Latvia" comprises several activities and various working methods (this Chapter describes only the most significant methods). Combination of methods ensured obtaining of both objective information and subjective opinion of different interested parties regarding occupational health and safety situation and legal labour relations in Latvia. Thus, the obtained results give a more realistic view on situation in Latvia in 2005-2006, as well as changes that have taken place during the latest ten years.

Following activities, methodology of which is described in this Chapter, were carried out during the Study:

1. Analysis of legislation and policy plans of European Union and the Republic of Latvia;
2. Analysis of cooperation schemes of respective institutions, analysis of information circulation and overlapping functions, as well as assessment of interaction of different organisations;
3. Analysis of existing studies and review of similar studies;
4. Analysis of databases currently existing in Latvia;
5. Survey of employers, employees, general public, occupational health and safety specialists, as well as specially protected and socially castaway groups of individuals; analysis and summarisation of the obtained results;
6. Objective assessment of working conditions and occupational risks;
7. Calculation of work ability index and working conditions the field of health care; comparison of the results in dynamics;
8. Elaboration of alternatives for occupational health and safety policy development.

## 2.2. Summary of the surveys

Several surveys were carried out in the frames of the Study "Work conditions and risks in Latvia": survey of permanent residents of Latvia, employers and their representatives (occupational health and safety specialists), employees, as well as specially protected and socially castaway groups of individuals. Questions were related to working conditions and occupational risks within enterprises (see Table 2).

**Table 2. Summary of carried out surveys.**

| No | Name of the survey | Method of the survey | Number of surveyed respondents | Field work | Notes |
|---|---|---|---|---|---|
| 1. | Survey of employers and their representatives | *Computer Assisted Telephone Interviews (CATI),* Specialized *ad hoc* interview | 1058 | 20.02.2006. - 07.04.2006. | |
| 2. | Survey of employees | *Computer Assisted Personal Interviews (CAPI)* at the place of residence of the respondent, specialized *ad hoc* interview | 2455 employees, 65 self-employed In total - 2520 | 24.04.2006. - 06.08.2006. | During development of questionnaires problems arose with definition of the target group (all employees, employees and self-employed, „pseudo" self-employed), which substantially delayed conceptual decision-making regarding the survey. In fact 2 separate surveys were carried out in this group – survey of employees and survey of self-employed. |
| 3. | Survey of permanent residents of Latvia | *Computer Assisted Personal Interviews (CAPI)* at the place of residence of the respondent and in the frames of *Omnibus surveys* | 1015 | 22.03.2006.- 11.04.2006. | |
| 4. | Survey of specialists having or still continuing higher professional education in the field of occupational health and safety | Electronically distributed *self-addressed* interviews | 86 | 19.04.2006.- 15.07.2006. | |
| 5. | Survey of temporary workers | - | - | - | During preparatory phase only one enterprise dealing with temporary workers in Latvia was recognised (SIA „PDA group" – Temporary Workers Agency). The State Employment Agency, identified at the moment of preparation of the Study's action programme, does not deal with temporary workers in sense that is meant in the terms of reference. Prognosticated group of respondents comprising 50 |

| No | Name of the survey | Method of the survey | Number of surveyed respondents | Field work | Notes |
|---|---|---|---|---|---|
| | | | | | people is too small for making statistically reliable conclusions.<br>Publication of the European Foundation for the Improvement of Living and Working Conditions on people employed for temporary work in EU States (including Latvia, a review prepared by Raita Karnīte) was identified. This publication affirms the problems identified by the researchers of this Study. Therefore, no survey regarding this group was carried out. |
| 6. | Survey of representatives of specially protected and socially castaway groups: | | | | |
| | Pregnant women and parents after their leave for child care | *Computer Assisted Personal Interviews (CAPI)* at the place of residence of the respondent and in public areas | 600 (402 of them were employed before giving birth to the youngest child) | 28.02.2006.-28.04.2006. | This survey was carried out in co-operation with the quantitative study "Survey of families with small children" of the study "Aspects of gender equality on the labour market". Therefore, respondents (women employed before pregnancy) were asked only very specific questions on attitude of their employers during pregnancy.<br>Pregnant women were not surveyed, as it was mention in the programme. |
| | Disabled people | *Computer Assisted Personal Interviews (CAPI)* at the place of residence of the respondent, in public areas etc. | 201 – disabled due to occupational factors,<br>205 – disabled due to other reasons.<br>In total - 406 | 12.06.2006.-01.08.2006. | |

A special sub-survey was developed for each group of respondents; however, all questionnaires contained an identical general part. This allowed to analyse occupational risks, working conditions, legal labour relations, awareness and other topics per each group and to compare the results. Besides, each group had to answer specific questions, for example, employers and their representatives were

asked about training in occupational health and safety (in total 160 hours), but persons with special needs – on their chances on labour market, working conditions, etc.

Following questions were included in the surveys – awareness on working conditions and occupational risks, special aspects of working conditions and occupational risks, working conditions within the respective enterprise, including working time (overtime work, time for work and time for relaxation, reduced working hours), compliance with legal labour relations in the enterprise, conclusion of employment contracts, compliance with occupational health and safety legislation within the enterprise on site training and instructions, use of individual protective equipment), probable obstacles, problems causing non-compliance with occupational health and safety requirements (economic and legislative problems, lack of knowledge or information), attitude towards occupational safety and its importance within the enterprise, employment contract options available in the labour market (e.g., reduced working hours), representatives of employees regarding occupational health and safety issues (e.g., trusted representatives and/ or membership in trade unions) and obstacles etc.

Selection of the questions for the questionnaires of the Study "Work conditions and risks in Latvia" was based on following principles:

- **Possibility to analyses the data in dynamics** starting from 2001, when current versions of the Labour Law and Labour Protection Law were adopted. Before drawing up questionnaires, other studies on occupational health, occupational safety and legal labour relations available in Latvia were reviewed. The reason was to make data comparable, so they could be analysed in dynamics. The most important studies used for drawing up a questionnaire are:
    - Readiness of Latvian enterprises for implementation of the new requirements regarding occupational health and safety – opinion of employers on Latvian legislation regarding occupational health and safety, 2002;
    - Opinion of employers regarding Labour Law – Opinion and understanding of employers regarding Labour Law, 2002;
    - Opinion poll on activities of the State Labour Inspectorate – opinion of employers and general public on the State Labour Inspectorate, occupational risks, awareness, labour relations etc.;
    - European survey on working time and work-life balance in EU Member States – interviews of representatives of employers and employees within the same enterprise, 2005;
    - Working Life Barometer in the Baltic Countries – 1998, 2002;
    - Working conditions in EU candidate countries, 2001.
- **Possibility to compare situation in Latvia with that of other countries** (especially countries with similar trends of development). To ensure that obtained data are comparable with data of other countries, during the first stage of drawing up the questionnaires a review of studies available in other countries with similar trends of development and depicting occupational health and safety issues, as well as legal labour relations, was carried out. The most important study used for drawing up questionnaires is:
    - Working Environment Survey – survey of employers (Telephone Interviews) and of employees (Omnibus survey) on occupational health and safety situation and occupational risk factors etc. in enterprises of Estonia, 2000.

- **Non-recurrence of questions** regarding occupational health, occupational safety and legal labour relations. Many questions, which have been already asked during the studies carried out within the last year, were deleted from the draft questionnaire. The purpose was to ensure that the same questions are not asked to the same groups of respondends within a short period, assuming that situation regarding occupational health, occupational safety and legal labour relations has not changed in such a short period. At the same time, some of questions were repeated to ensure necessary intersection of questions, for example, to confirm hypothesis that people working without signing an employment contract are more exposed to occupational risks than employees having an employment contract. The most important studies used for drawing up a questionnaire are:
    - Working conditions in EU candidate countries, 2001 (the study was repeated in Lativa in 2005 by the Centre of Market and Sociologic Studies "Latvijas fakti", Ltd.;
    - Opinion poll on activities of the State Labour Inspectorate – opinion of employers and general public on the State Labour Inspectorate, occupational risks, awareness, labour relations etc., 2005;
    - European survey on working time and work-life balance in EU Member States – interviews of representatives of employers and employees within the same enterprise, 2005.
- **Provisions of the Client (Ministry of Welfare of the Republic of Latvia)**. During coordination of the questionnaires with the Client the Labour Department wished to pay more attention to yet unstudied aspects of occupational health, occupational safety and legal labour relations, rather than analyse alreading existing data. It was pointed out that all most significant risk categories and their prevalence rather than opinion regarding those risks shall be clarified. Therefore, during coordination process the wording of questions was changed to meet considerations of the Ministry of Welfare regarding existing situation in the field of occupational health and safety and legal labour relations and to avoid overlapping of the questions with those already asked in the frames of other studies. This actually precluded the possibility to analyse dynamics of the data and to compare situation in Latvia with that of other countries with a similar trend of development. Besides, it should be noted that during drawing up questionnaires no close reference (neither qualitative, nor quantitative) to the elaborated and approved programme was observed.
- Possibility to compare opinion of diffrent groups of respondents. Wording of the questions was selected to ensure that different respondent groups could be asked the same question, and, thus, opinion of the groups (e.g., employers, employees, specialists having higher education in the field of occupational health and safety) compared.

The obtained results were analysed from several aspects:

- From the employers/ employees point of view;
- Per sector;
- Per size of an enterprise (number of employees);
- Per operating duration of an enterprise;
- Per type of ownership;
- Per sex of a respondent;
- Per ethnic background of a respondent;

- Per region (according to territorial units of the State Labour Inspectorate – Kurzeme, Zemgale, Southern, Northernvidzeme, Easternvidzeme, Latgale and Riga Regions);
- Per Districts;
- Per 1st level municipalities (e.g., large towns) as far as it was possible, etc.

More detailed information on surveys (size of a selection, forming of a selection, general population, data weighing, etc), as well as questionnaires, is available in the thematic Annex "Summary of surveys", bet results and their analysis are included in other thematic Annexes. Besides, copies of charts and tables with survey results are available in the Ministry of Welfare.

# 2.3. Objective assessment of working environment

Adopting the Labour Protection Law, occupational risk assessment was recognised as being one of the corner stones of occupational health and safety system. During occupational risk assessment special attention shall be paid to measurements, which give an objective picture of various occupational risks, for example, concentration of chemical substances, dust and asbestos fibres in the air, levels of noise, vibration and lighting, microclimate, etc. Measurements shall be carried out not only to assess probable impact of occupational risks on employees health, but also to identify necessary occupational health and safety measures and to define their priority, including choosing appropriate personal protective equipment and defining range of employees exposed to respective occupational risk, as well as necessity and scope of compulsory medical examinations.

In the frames of the Study a database of measurements carried out by Hygiene and Occupational Diseases Laboratory of the Institute of Occupational and Environmental Health of the Riga Stradins University was established and analysed. Besides, additional measurements were performed.

Following criteria for inclusion of an enterprise and respective measurements in the database were applied:

- All enterprises, which have applied for carrying out occupational environment measurements in the Hygiene and Occupational Diseases Laboratory of the Institute of Occupational and Environmental Health of the Riga Stradins University or laboratory of AS "Inspecta Latvia" (the former AS "IBNA") between 1 January 1995 and 31 December 2005;
- All enterprises, where the above-mentioned laboratories have measured work environment, if testing reviews were developed and issued.

Following criteria for non-inclusion of an enterprise and respective measurements in the database were applied:

- Measurements are carried out by any of the above-mentioned laboratories, but the examined object/ environment does not belong to working environment (e.g., testing of cosmetics or products made of welded metal and steel (or similar metals));
- No data on the specific workplace or no detailed description of the working process, where measurements are carried out, are available;

- No limit value of the risk can be found in Latvian legislation or in international documents (e.g., ISO Standard).

Altogether 6871 workplaces were included in the database. In average measurements were carried out in 7 workplaces (1 to 23) per each included enterprise. Database comprises measurements of 11 physical risk factors carried out in 13956 workplaces (166 to 2354 per each parameter). Following risk factors were most frequently measured:

- Noise level was measured in 4420 workplaces (4 different parameters: 8h mean equivalent noise level – in 711 workplaces, maximum noise level – in 1402 workplaces, peak sound pressure – in 655 workplaces, equivalent noise level – in 1652 workplaces); see detailed results in the thematic Annex "Noise";
- Whole-body vibration – measurements carried out in 310 workplaces (hand-arm vibration measurements of only 48 workplaces were included in the database); see detailed results in the thematic Annex "Vibration";
- Microclimate, including ventilation assessment – in 6706 workplaces (4 different parameters: relative air humidity – in 2215 workplaces, air temperature – in 2256 workplaces, air velocity – in 2235 workplaces, ventilation in 166 premises); see detailed results in the thematic Annex "Microclimate (relative air humidity, air temperature, air velocity)";
- Lighting – in 2354 workplaces; see detailed results in the thematic Annex "Lighting".

The database comprises wide-ranging information on chemical substances – altogether 93 chemical substances are included in the database, measurements of which were carried out in 4525 workplaces. However, number of studied workplaces (for simplification hereinafter – number of measurements) per each chemical substance differs a lot – from 1-2 measurements (workplaces) to several hundreds of measurements. Thus, for some chemical substances the number of measurements is sufficient to assess the objective situation, but for others – insufficient. See details in the thematic Annexes "Organic solvents", "Dust", "Asbestos", "Welding fumes, manganese and chromium in welding and gas cutting".

Between 22 March 2006 and 9 May 2006 following activities were carried out in the frames of the Study "Work conditions and risks in Latvia": survey of 17 enterprises, air quality analysis in 12 enterprises (125 workplaces dealing with varnishing of wood or furniture, arranging, degreasing, painting, varnishing and sorting of metal products, printing), as well as workplaces related to arrangements of construction materials and construction and repair works. Besides, hand-arm vibration measurements were performed in 10 enterprises (53 workplaces).

For details see Annex "Objective assessment of working conditions and occupational risk factors – laboratory measurements within work environment".

# 2.4. Assessment and analysis of work ability

In the frames of the Study "Work conditions and risks in Latvia" assessment of work ability index of health care and social care workers of Latvia was repeated. Besides, the obtained results were analysed

and compared with the results of the studies carried out in 1997 and 2000. Health care and social care system was chosen, because employees of this field are the only ones, who have undergone a noteworthy work ability index assessment, and, thus, comparing of data with the previous studies was possible.

In 1997 employees of health and social care were selected for work ability index assessment due to several reasons: there is comparatively high number of occupational diseases and workplace accidents in this group, occupational health and safety problems within this group have been widely studied all around the world, including studies regarding work ability index. This Study gave an opportunity to analyse dynamics of impact of work conditions and risks of a specific field on work ability index, as well as analyse many other factors (the questionnaire regarding work ability index included questions on awareness of employees on work conditions, occupational risks, actual preventive measures and other issues related to occupational health and safety).

Assessment of work ability index was elaborated as a research method by a multi-disciplinary group of experts of the Finnish Institute of Occupational Health. Work ability index is an instrument used in occupational health monitoring to assess capacity of a worker to do the work. It is one of the methods applied during survey of workplaces, assessment of health status and research on work ability. For assessment of work ability index an employee answers series of questions combined in a special questionnaire. These questions are designed for evaluation of health, mental and physical work ability and mental resources of a worker, as well as prognosis of work ability in future.

Work ability index includes seven aspects:

- Current work ability compared with the lifetime best,
- Work ability in relation to the demands of the job,
- Number of current diseases diagnosed by physician,
- Estimated work impairment due to diseases,
- Sick leave during the past year (12 months),
- Own prognosis of work ability two years from now,
- Mental resources.

Considering there aspects and provided instructions, work ability index was calculated and work ability of an individual assessed (for details see Annex "Work ability index of people employed in health care and social care").

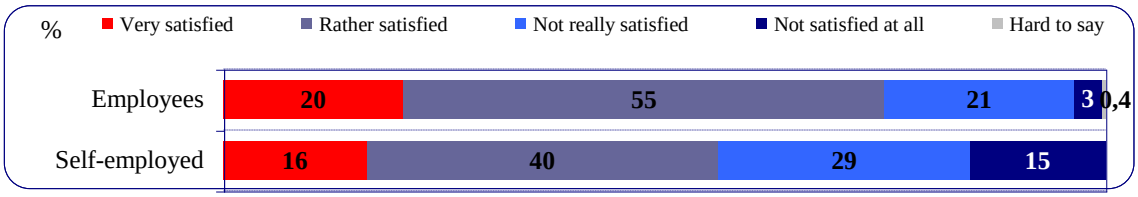
# 3. RESULTS OF THE STUDY

# 3.1. Job satisfaction and satisfaction with work conditions

## 3.1.1. Job satisfaction

Job satisfaction contributes to more productive and efficient performance. Results of the Study "Work Conditions and Risks in Latvia" demonstrate that employees have generally higher job satisfaction than self-employed (see Figure 2). More or less satisfied with their current jobs are 75.0% of employees and 56.1% of self-employed.

**Figure 2. Job satisfaction among employees and self-employed.**




Note: Data obtained during survey of employees and self-employed, employees n=2455, self-employed n=65.

Among employees, higher rates of dissatisfaction are in manufacturing (37.1%), manufacture of basic metals, fabricated metal products, machinery and equipment (33.7%), manufacture of wood, products of wood and cork and of furniture (30.2%). It is not really possible to analyse job satisfaction of self-employed across all sectors, because not all sectors have self-employed workers. However, it is important to highlight, that more than a half of self-employed workers in agriculture, hunting and forestry are not satisfied with their current job (53.3%). Among employees, women indicate a slightly higher job satisfaction (73.4%) than men (76.3%), while among self-employed workers the opposite is the case (men – 59.5%, women – 52.5%). Highest rates of satisfied workers occur among the youngest workers, while among other age groups no significant differences have been observed (18-24 years – 81.4%, 25-34 years – 74.2%, 35-44 years – 78.2%, 45-54 years – 70.7%, 55-74 years – 73.6%). There are significant differences in job satisfaction among respondents with different ethnical backgrounds - ethnic Latvians having substantially higher job satisfaction (79.2%) than Russians (68.3%) or other ethnic groups (70.2%).

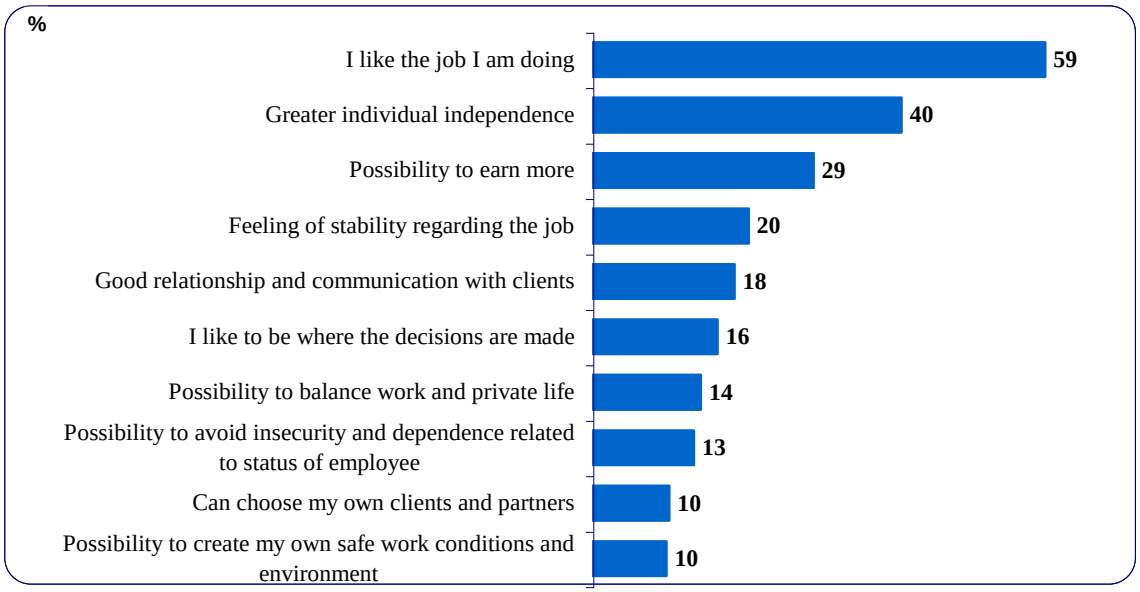
The reasons, why people are satisfied with their current jobs, differ between employees and self-employed (see Figures 3 and 4). Among self-employed the most often mentioned reasons are "*I like the work that I do*", "*being more independent*", and "*possibilities to earn more*". These can be regarded as the main reasons, why people opt for self-employment. Among employees the most often mentioned reasons are "*job security and stability, stable salary*", "*interesting, creative, dynamic and*

*diverse job*", "*social guarantees*", "*good salary*", "*pleasant social contacts with colleagues*". These can be regarded as the main factors contributing to job satisfaction and satisfaction with employer among employees; therefore to retain their staff, employers should pay particular attention to these factors.

**Figure 3. Factors contributing to high job satisfaction among employees.**


Note: Data obtained during survey of employees, basis – employees satisfied with their current job, n=1841.

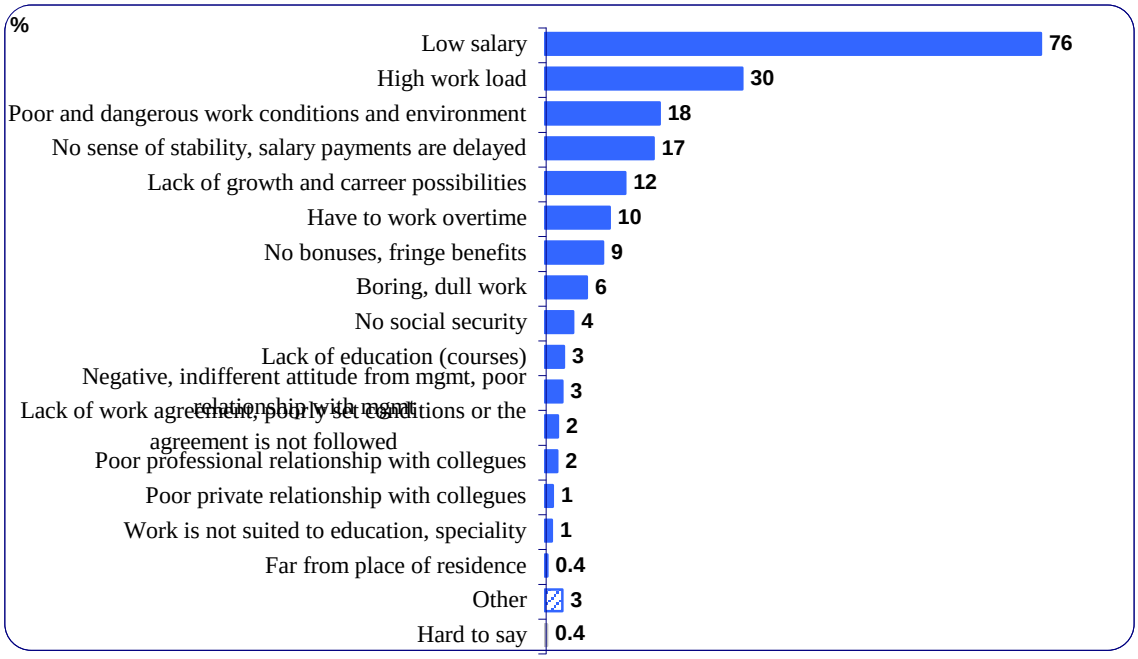
**Figure 4. Factors contributing to high job satisfaction among self-employed.**




Note: Data obtained during survey of self-employed, basis – self-employed workers satisfied with their current job, n=38. Due to small number of respondents the data reflects simply main trends, not statistically significant conclusions.

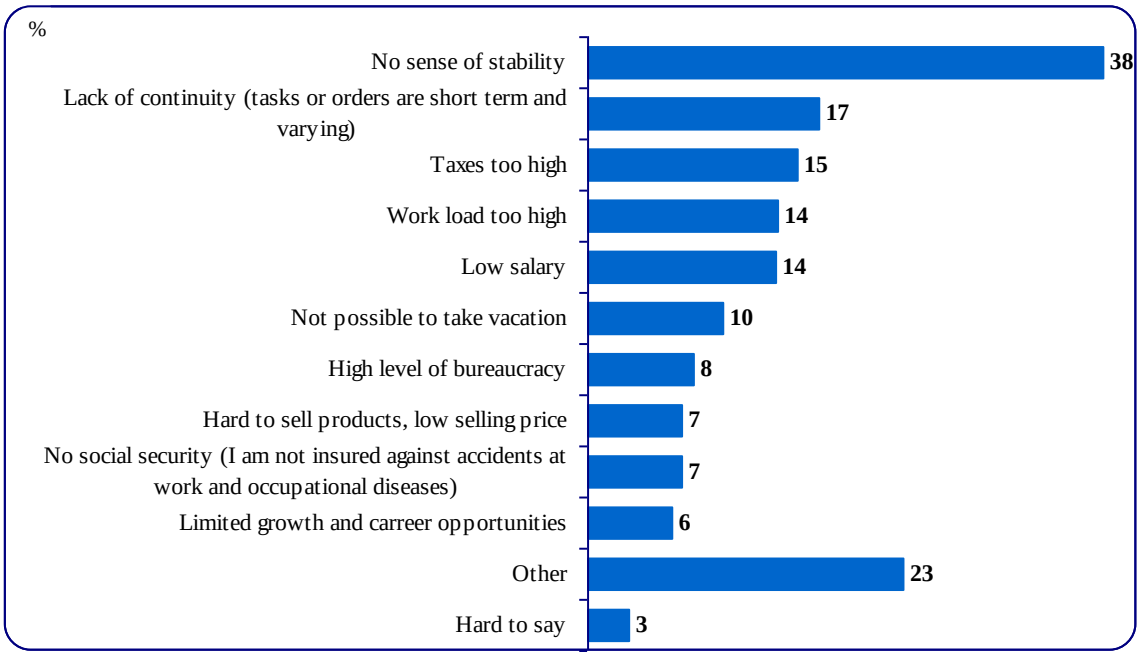
Analysis of factors contributing to low job satisfaction also reflects differences between employees and self-employed (see Figures 5 and 6). For example, among self-employed the most often mentioned reason is "*lack of stability and sense of security*", which has been mentioned twice as often as other frequently mentioned reasons ("*lack of permanent employment (casual jobs, commissioned work)*", "*too high taxes*", "*high workload*", "*low salary*"). Employees most frequently mention "*low salary*" (76.2%), while other often mentioned reasons are "*high workload*", "*bad and insecure working conditions, problems with working environment*", "*lack of stability and sense of security, salary is not paid on time*".

**Figure 5. Factors contributing to low job satisfaction among employees.**




Note: Data obtained during survey of employees, basis – workers not satisfied with current job, n=605.

**Figure 6. Factors contributing to low job satisfaction among self-employed.**

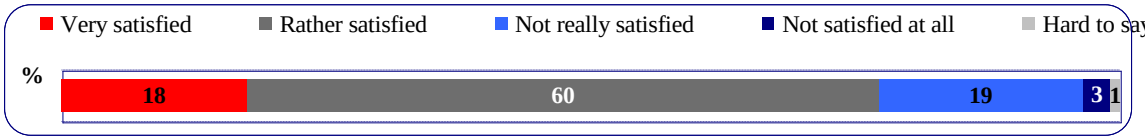



Note: Data obtained during survey of self-employed, basis – workers not satisfied with current job, n=27. Due to small number of respondents the data reflects simply main trends, not statistically significant conclusions.

## 3.1.2. Satisfaction with working conditions and working environment

Approximately the same number of employees is satisfied with their work conditions and working environment specifically from a perspective of occupational health and safety (77.2%), as number of employees, who are satisfied with their current jobs (see Figure 7).

**Figure 7. Satisfaction with working conditions and environment among employees from a perspective of occupational health and safety.**



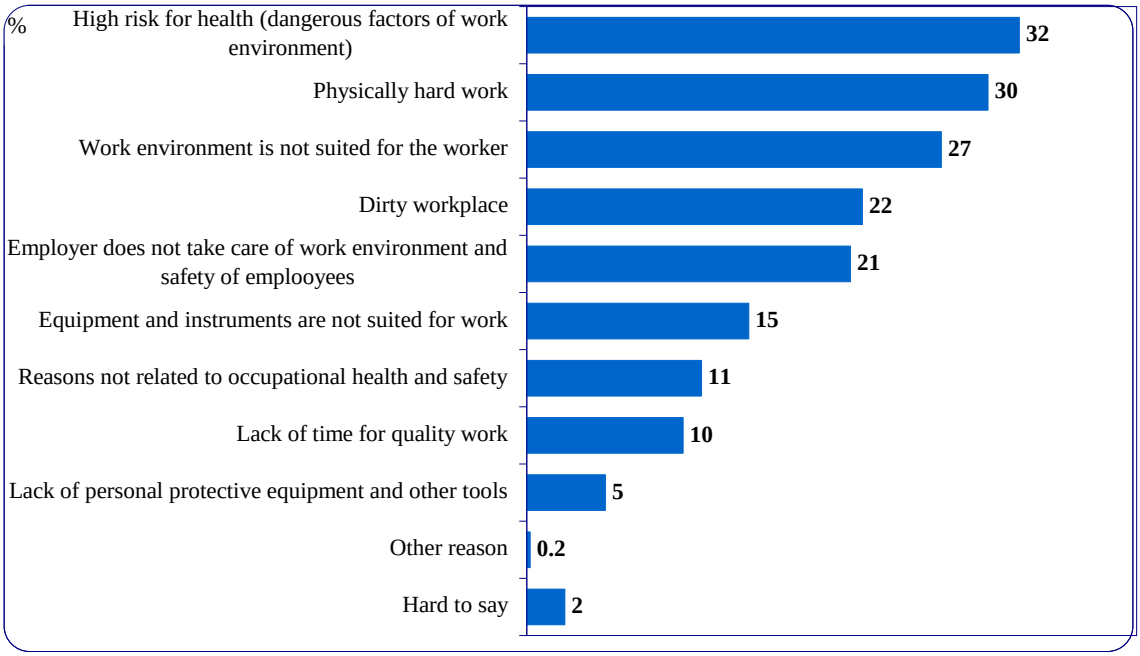

Note: Data obtained during survey of employees, n=2455.

Among employees the highest rates of dissatisfied workers occur in manufacture of basic metals, fabricated metal products, machinery and equipment (39.2%), manufacturing (31.3%), manufacture of wood, products of wood and cork and furniture (31.1%), agriculture, hunting and forestry (31.3%). The satisfaction rate among women (78.2%) is quite comparable to that of men (76.0%). Also satisfaction rates among different age groups are quite similar (76.4% to 78.3%); comparable satisfaction rates appear also among respondents with different ethnical backgrounds (76.0% to 77.9%). Satisfaction with working conditions and working environment does not vary significantly among different sized companies (75.0% to 78.5%); however, higher rates of satisfaction occur among

public sector workers (80.4%) than in private sector (76.0%) or in non-governmental organisations (71.2%). Workers with higher salaries have also higher satisfaction rates (below 90 Ls – 72.4%, 91-150 Ls – 73.2%, 151-250 Ls – 77.8%, above 251 Ls – 83.0%). Satisfaction rates are affected negatively, if salaries are paid bypassing official taxes (illegal „envelope salaries") (79.4% - remuneration is never paid as illegal "envelope salaries", 73.8% - sometimes, 62.7% - always). This trend indicates that social guarantees and stability of remuneration contributes significantly towards satisfaction with working conditions and working environment; possibly, this trend also confirms that companies that tend to pay illegal "envelope salaries" (in other words, do not comply with tax regulations) also do not comply with occupational health and safety regulations and, therefore, working environment in those companies is not as safe as in other companies (the Study "Work conditions and risks in Latvia" indicates that among the companies where illegal "envelope salaries" are paid, workplace accidents are less often investigated in accordance with regulations, also compulsory health examinations and training in first aid are carried out less frequently).

Among the main reasons why employees are not satisfied with their working conditions and environment are: "many health risks (occupational risk factors)", "physically heavy work", "working environment does not suit the needs of workers", "dirty working environment", "the employer does not take care about working environment and occupational safety and health", others (see Figure 8).

**Figure 8. Factors contributing to low satisfaction with working conditions and environment.**



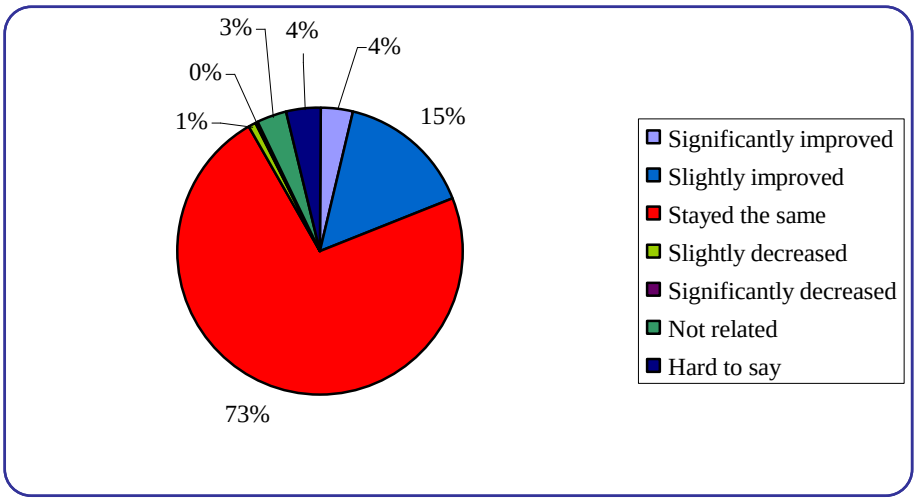

Note: Data obtained during survey of employees, basis – workers not satisfied with working conditions and environment, n=541; factors influencing the occupational health and safety have been mentioned.

## 3.1.3. Opinion of employees on changes in occupational health and safety conditions

The Labour Protection Law came into force already in January 1, 2002, but subordinated legislation came into force later. The new legislation was expected to improve significantly occupational health and safety situation in Latvia – primarily due to a major shift in approach towards occupational health and safety. Formerly all efforts were aimed at mitigating the effects (additional payments / additional days of paid holidays / free milk as a prophylactic, others measures for work under unhealthy working conditions). The current system places the main emphasis on assessment, reduction or removal of occupational risk factors.

Desk studies of available data (results of earlier research and data bases) indicate that it is not possible to analyse trends (temporal changes) in occupational health and safety conditions in Latvian companies. Therefore, the survey of employees included also a question on how the occupational health and safety conditions have changed recently in their workplace, and 18.9% of all respondents indicated that occupational health and safety conditions at their work place have improved during the last year (for more details, see Figure 9).

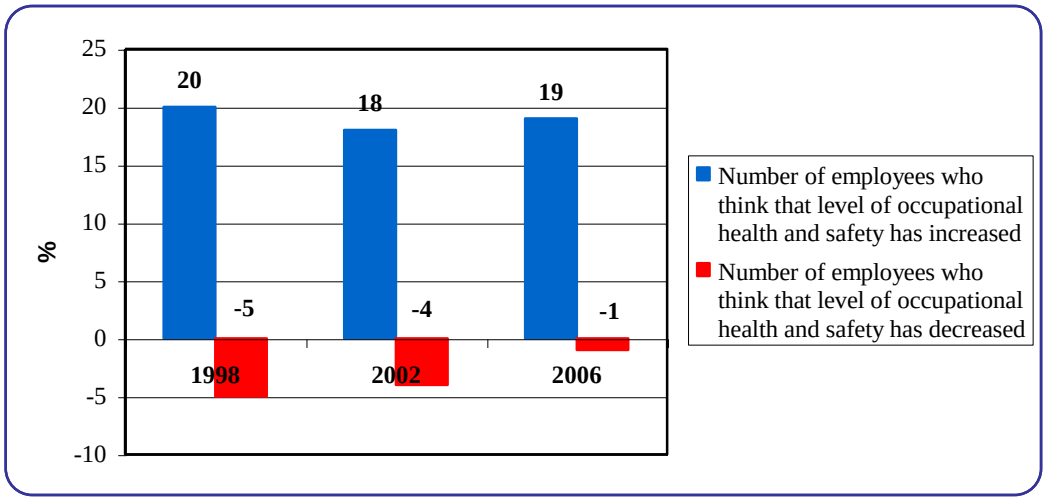
**Figure 9. Changes in occupational health and safety conditions in companies over the last year.**




Note: Data obtained during survey of employees, n=2455.

On a positive note it should be highlighted that only 1.4% of all respondents indicated that the occupational health and safety conditions in their workplace have deteriorated. Comparison of the Study "Work conditions and risks in Latvia" with the results of earlier studies form 1998 and 2002 – "Barometer of working conditions in Baltic countries" (job satisfaction assessments) – allows to conclude that the current rate of improvements in conditions of occupational health and safety is approximately the same as in 1998 and 2002, but the number of respondents, who indicated deterioration in occupational health and safety conditions, has reduced (see Figure 10). In general terms, this indicates that the rate of improvements in occupational health and safety conditions is comparatively as high now (after the adoption of new legislation) as earlier (before the adoption of new legislation).

**Figure 10. Changes in occupational health and safety conditions.**




Note: Data obtained during survey of employees, n=2455.

# 3.2 Enforcement of legislation

## 3.2.1 Compliance with occupational health and safety regulations

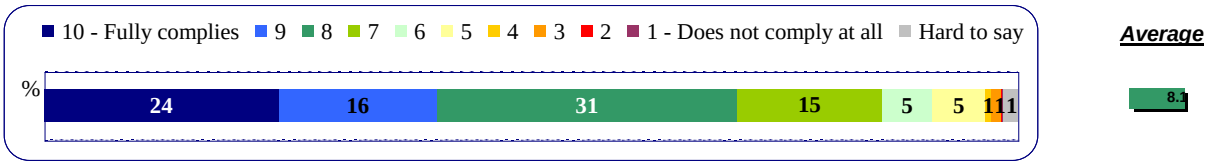
The Labour Protection Law was adopted in June 6, 2001; it aims to guarantee and improve occupational safety and occupational health, and defines duties and tasks of employers, employees and their representatives, and government institutions, as well as interactions between these parties in the area of occupational health and safety. The Cabinet of Ministers has issued several regulations on occupational safety and occupational health. It is impossible to create a risk-free working environment, however, minimisation, control and monitoring of risk factors is a duty of each employer, hence, it is necessary to comply with occupational health and safety requirements at all levels – from each individual employee to managerial staff and employers.

To assess the degree of compliance with occupational health and safety regulations in Latvia, the Study included surveys that analyse various related issues. Initially employers, employees and occupational health and safety specialists were asked to give their own assessment – to what extent their workplaces comply with occupational health and safety requirements. The results indicate that majority of respondents regard that workplace environment complies with occupational health and safety requirements (average ratings are 8 out of 10 and more). However, further analysis of data reflects that neither employers, nor employees, nor self-employed are aware about specific requirements of the Labour Protection Law or other occupational health and safety requirements.

**Opinion of the employers.** During the survey of employers carried out within the Study "Work Conditions and Risks in Latvia", employers were asked to self-assess the degree of compliance of their company with the requirements of the Labour Protection Law – using a 10 point scale, where 10 is "full compliance" and 1 – "no compliance at all". Then averages were calculated for the respondents,

who were able to give a certain quantified grade, to compare situation across sectors and regions. In future, when carrying out repetitive studies, it will enable to see dynamics (temporal changes). The distribution of answers and average national is reflected in Figure 11.

**Figure 11. Employers' self-assessment of the compliance of working environment with the requirements of the Labour Protection Law.**




Note: Data obtained during survey of employers, n=1058, in case of the average – only respondents, who gave a certain quantified grade, n=1047.

At a first glance answers to this question present a very optimistic picture for Latvia, because 82.6% of all respondents gave 7 to 10 points. A more in-depth assessment indicates that real situation concerning working environment in Latvia is much worse. For example, 49.7% of employers, who think that working environment in their companies comply with the requirements of the Labour Protection Law (corresponding to 9 or 10 points in our scale), have also indicated that occupational risk assessment in their enterprise has not been carried out. This indicates low awareness about requirements of the Labour Protection Law - the requirement to carry out occupational risk assessment is included in Section 8 of the Law, and occupational health and safety management system in each enterprise has to be based on occupational risk assessment. Another example: 44.0% of employers, who think that working environment in their companies comply with the requirements of the Labour Protection Law, have also indicated that compulsory health examinations have not been carried out - these are required in Section 15 of the Law. The approach used in analysing the survey results that takes into account employers' self-assessment of the compliance of their companies with the requirements of the Labour Protection Law, such approach allows to differentiate, whether working environment indeed complies with requirements of legislation, or, rather, employers are not fully aware about the requirements (that is – employers are not informed or do not understand the requirements of the Law). The conclusion about low awareness levels among employers is also confirmed, when comparing their opinions with those of occupational health and safety specialists. These are people with one or two year higher professional education specifically in the area of occupational health and safety and who have a degree in occupational health and safety, hence they can be considered to be a well informed group of respondents. Results of this group are significantly different. Only 18.6% of respondents assessed the degree of compliance of work place environment with the requirements of the Labour Protection Law with 7 to 10 points. This is more than 4 times less than among employers.

Similar survey has been carried out in Estonia in 2000. According to the results of that survey 33% of respondents estimated the degree of compliance of the working environment with 9 or 10 points, 46% - with 7 or 8 points, 18% - with 5 or 6 points. In general this shows a worse picture than that for Latvia. However, it is important to note, that after 2000 the legislation has changed significantly, therefore, it is not really feasible to compare the situation between our countries.

To compare situation across various sectors, different sizes of companies and against other parameters, average scores were calculated. The average national score obtained through the survey of employers is 8.1, while among occupational health and safety specialists – 5.6. There are significant differences among various sectors, with the highest self-assessment among employers in health and social work (8.8) and the lowest - manufacture of basic metals, fabricated metal products, machinery and equipment (7.3) – see also the Table 3.

**Table 3. Employers' self-assessment of compliance of their companies with the requirements of the Labour Protection Law, per sector.**

| Sector | Average score |
|---|---|
| Health and social work | 8.8 |
| Fishing | 8.4 |
| Other sectors (a number of sectors which are considered to be low risk sectors) | 8.3 |
| Manufacturing | 8.0 |
| Manufacture of food and beverages | 7.9 |
| Electricity, gas and water supply | 7.9 |
| Education | 7.9 |
| Construction | 7.8 |
| Agriculture, hunting and forestry | 7.8 |
| Mining and quarrying | 7.4 |
| Manufacture of wood, products of wood and cork, manufacture of furniture | 7.4 |
| Manufacture of basic metals, fabricated metal products, machinery and equipment | 7.3 |

Note: Data obtained during survey of employers, basis – respondents who gave a certain quantified value, n=1047.

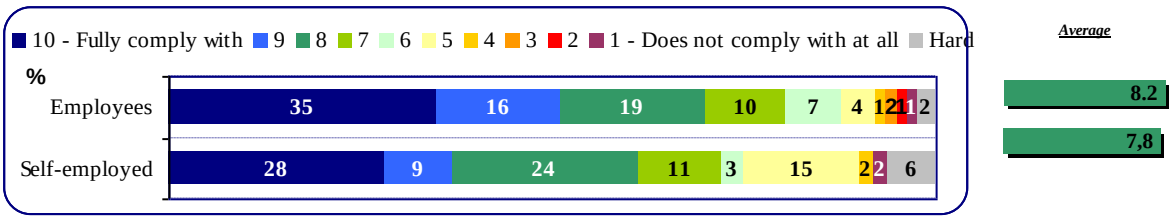
Slightly higher self-assessment occurs among higher-level management and directors (average - 8.2) than operational level managers (average - 8.0). Also respondents using Russian during the survey gave slightly higher scores (8.3) than Latvian speakers (8.1). The most critical self-assessment was among respondents from companies with 50-249 employees (7.8), while the most optimistic – from companies with 250 or more employees (8.3) (1-9 employees – 8.2; 10-49 employees – 8.1). Respondents from companies that have been established before 1990 gave the average score 7.9; 1991-1995 – 8.2; 1996-2000 – 8.1; 2001-2005 – 8.2. The average score for the public sector respondents is 7.5, the private sector – 8.2, nongovernmental organisations – 8.3.

**Opinion of employees and self-employed workers.** Questions to employees and self-employed workers were formulated slightly differently:

- To what extent occupational health and safety requirements are being followed in the company where the respondent works (for example, use of personal protective equipment, such as earplugs and protective gloves; occupational health and safety instructions, compulsory health examinations, training);
- To what extent the self-employed workers follow requirements of occupational health and safety (for example, use of personal protective equipment, such as earplugs and protective gloves).

To answer these questions the respondents were asked to give a score between 1 and 10, where 10 is "requirements are being followed fully" and 1 – "the requirements are not being followed at all" (see Figure 12).

**Figure 12. Self-assessed compliance with occupational health and safety requirements among employees and self-employed workers.**




Note: Data obtained during survey of employees and self-employed, employees n= 2455, self-employed n=65.

The average score among employees is 8.2, and among the self-employed – 7.8. This indicates that self-employed workers are less compliant with occupational health and safety requirements than employees working for companies or institutions.

Average scores for employees from different sectors vary significantly – the highest scores are given by respondents in electricity, gas and water supply sector (8.9), but the lowest – in manufacture of wood, products of wood and cork and manufacture of furniture (7.6), see also Table 4.

**Table 4. Compliance with occupational health and safety requirements – assessment by employees, per sector.**

| Sector | Average score |
|---|---|
| Electricity , gas and water supply | 8.9 |
| Education | 8.8 |
| Health and social work | 8.7 |
| Mining and quarrying | 8.7 |
| Fishing | 8.2 |
| Other sectors (a number of sectors which are considered to be low risk sectors) | 8.2 |
| Manufacturing | 8.1 |
| Manufacture of food and beverages | 7.9 |
| Manufacture of basic metals, fabricated metal products, machinery and equipment | 7.9 |
| Agriculture, hunting and forestry | 7.7 |
| Construction | 7.6 |
| Manufacture of wood and products of wood and cork, manufacture of furniture | 7.6 |

Note: Data obtained during survey of employees, n=2455.

Higher scores were given by women (8.4) than men (7.9). This could be related with the fact that according to the data obtained during survey of employees, men more often than women were able to list occupational risks that are linked to occupational safety and workplace accidents. With increase of age among respondents, also average scores increase (18-24 years – 7.8; 25-34 years – 8.1; 35-44 years – 8.2; 55-74 years – 8.5). There are no significant differences among different ethnical backgrounds (ethnic Latvians – 8.2; Russians – 8.2; other ethnic groups – 8.3). The average score among public sector workers is 8.6, private sector – 8.0, non-governmental sector – 7.3. The average

scores increase with the increase of size of companies (1-9 employees – 7.9; 10-49 employees – 8.2; 50-249 employees – 8.2; 250 and more – 8.3). Significant differences in assessments of compliance with the requirements of occupational health and safety were found if comparing against payment of illegal "envelope salaries" (if "envelope salaries" are never paid, the average score is 8.4; sometimes – 7.5; always – 6.8).

## 3.2.2. Occupational risk assessment

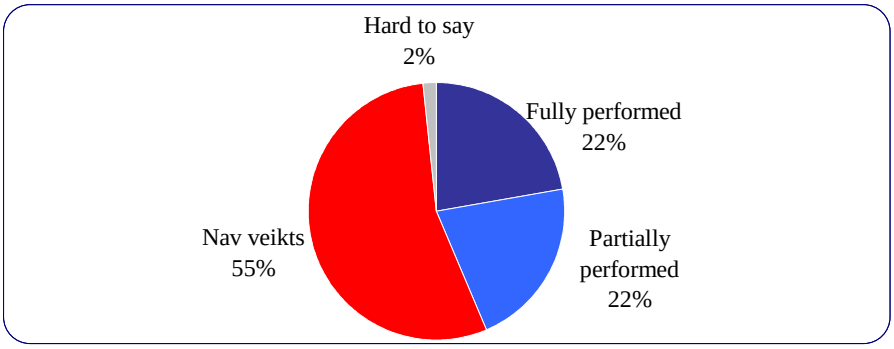
According to the Section 5, Chapter II of the Labour Protection Law (adopted on July 6 2001, in force since January 1, 2002) the employer has an obligation to organise occupational health and safety management system. The most significant part of the system is occupational risk assessment. The Cabinet Regulation No 379 (adopted on 23 August 2001 and in force since 1 January 2001) "Procedures for the Performance of Internal Supervision of the Working Environment" specifies occupational risk assessment procedure.

There are numerous occupational risk assessment methods being used worldwide. According to Latvian legislation, the employer may choose a method and standards in line with company's technical and financial capacities, as well as working conditions, as long as the chosen method complies with the requirements of the Cabinet Regulation No 379 "Procedures for the Performance of Internal Supervision of the Working Environment". Most of the methods used consist of the following stages:

- Stage 1 – identification of occupational risk factors by inspecting the workplaces or types of work.
- Stage 2 – working environment measurements to identify hazards and assessment of any other relevant data (analysis of safety sheets, analysis of workplace accidents, etc.).
- Stage 3 – on basis of the information and literature sourced during the first two stages and in accordance with occupational risk assessment scale, occupational risks are then assessed and required preventive measures designed.

**Opinion of employers**. Though the requirement for occupational risk assessment in Latvia is in force since January 1, 2002, three quarters of employers indicated that occupational risk assessment has never been carried out in their company or institution, or it has been carried out only partly; only 22% indicated that occupational risk assessment has been carried out completely (see Figure 13).

**Figure 13. Completion of occupational risk assessment in companies.**




Note: Data obtained during survey of employers, n=1058.

According to research carried out by A/S „Izstrādājumu bīstamības novērtēšanas aģentūra" in 2002, the number of companies, where occupational risk assessment has been carried out fully, is on increase (from 15% in 2002 to 22% in 2006). Although, also the number of companies, where no occupational risk assessment has been performed, has increased (from 44% in 2002 to 54.8% in 2006). But this could be due to difference between respondent groups used in the two surveys. In 2002 most of the respondents were from companies that have more than 6 employees – only 5.5% of all respondents were from companies with 1-5 employees. The survey in 2006 focused primarily on micro companies with 1 to 9 employees (74.1%), and according to survey results this is the group with the lowest occurrence of occupational risk assessments if compared to small, medium and large companies (see the Table 5). Hence, the Study shows that the size of enterprise correlates with probability of presence of occupational risk assessment – the larger is enterprise, the more likely that occupational risk assessment has been carried out (see Table 5). It should be noted that it is likely that employers in larger companies overestimate the efforts devoted to occupational risk assessment in their enterprise, assuming that their occupational health and safety specialists or departments have already carried out all required assessments.

**Table 5. Completion of occupational risk assessments in different size companies.**

| | All companies | | Number of employees | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1-9 (micro) | | 10-49 (small) | | 50-249 (medium) | | ≥250 (large) | |
| | N | % | N | % | N | % | N | % | N | % |
| Has been carried out fully | 323 | 22,1 | 106 | 15,2 | 109 | 39,3 | 75 | 49,0 | 33 | 54,7 |
| Has been carried out partly | 253 | 21,5 | 90 | 17,5 | 95 | 32,0 | 46 | 36,3 | 22 | 36,8 |
| Has not been carried out | 461 | 54,8 | 354 | 65,7 | 85 | 26,8 | 18 | 13,3 | 4 | 5,0 |
| Difficult to say | 21 | 1,6 | 12 | 1,5 | 5 | 1,8 | 3 | 1,4 | 1 | 3,5 |

In terms of completion of occupational risk assessments – as required in Latvian legislation – the situation in Latvia has slightly improved as compared with 2002, but it still should be regarded as unsatisfactory. Higher number of companies, where occupational risk assessments have been carried out completely, are in manufacture of food and beverages (44%), mining and quarrying (43.7%), manufacture of wood and products of wood and cork, manufacture of furniture (35.4%), education (35.5%), and fishing (31.9%). The lowest numbers of companies, where occupational risk assessments have been carried out completely, are in agriculture, hunting and forestry (75.6%) and manufacturing (55.6%).

A significant indicator is the number of companies that do not have any occupational risk assessment at all (not even partial). For example, construction sector has relatively low number of companies with no occupational risk assessments (36.8%, compared to average among all sectors – 54.8%). A similar example is also mining and quarrying (23.2%), manufacture of wood, products of wood and cork and manufacture of furniture (35.6%), manufacture of food and beverages (35.9%). These rates in any case should be regarded as unsatisfactory – occupational risk assessments had to be prepared in all companies already several years ago, at the same time relatively better situation in some sectors could indicate certain success of some targeted campaigns and priorities. For example, in 2004 the European week "Construct safely" was carried out; in 2003 the priority of the State Labour Inspectorate was

wood processing, etc. The sectors with highest rates of companies with no occupational risk assessments are in agriculture, hunting and forestry sector (75.6%) and in "other sectors" considered to be low risk sectors, such as financial services, insurance, etc (57.6%).

With the regard to occupational risk assessments, there are significant differences among public sector (28.5% of companies have not carried out occupational risk assessments), private sector (56.0%) and non-governmental sector (52.7%). Slightly better situation is in companies where the majority of owners are of foreign origin (42.8% of such companies have not carried out occupational risk assessments) and in companies which focus on export markets (36.8%) than in companies where the majority of local ownership (55.4%) and which focus primarily on local markets (56.0%). The number of companies without occupational risk assessments located in villages and rural areas (61.5%) is higher than the number of such companies in Riga (53.0%). Among companies established after 1991, the number of those lacking occupational risk assessments (55.6%) is higher than among those established before 1991 (33.1%).

The highest rates of companies lacking any occupational risk assessments are in Balvi District (74.6%), Kuldiga District (73.7%), Ogre District (70.2%), Limbazi District (70.0%), Madona District (68.2%), and Gulbene District (66.2%). Comparing numbers of companies with / without occupational risk assessments per territorial units of the State Labour Inspectorate, the highest rate of companies without any occupational risk assessments is in Easternvidzeme Region (64.0%) and Southern Region (64.4%).

As part of employers' self-assessment it was found that 49.7% of employers, who think that working environment in their companies comply with the requirements of the Labour Protection Law (corresponding to 9 or 10 points in our 10 point scale), have also indicated that occupational risk assessment in their company has not been carried out. This indicates low awareness on requirements of the Labour Protection Law - the requirement to carry out occupational risk assessment is included in the Section 8 of the Law, and occupational health and safety management system in each enterprise has to be based on occupational risk assessment. Similar analysis was carried out with regards to occupational risk assessment; 59.1% of employers, who indicated that there are no barriers to implement occupational health and safety measures, have also indicated that their company does not have an occupational risk assessment. These results indicate that employers are not informed or do not understand the role that occupational risk assessment plays in setting-up an occupational health and safety management system.

According to the results of the survey of employers, most often legislation requirements regarding occupational risk assessment are not followed in:

- Small (micro) companies;
- Companies located in villages and rural areas;
- Agriculture, hunting and forestry sector companies, as well as manufacturing;
- Private and nongovernmental sector;
- Companies with majority of local ownership;
- Companies focusing on local markets;
- Companies established after 1991 (new companies or reorganised ones).

**Opinion of employees.** The survey results do not really allow to estimate, whether employees are simply not informed about the work carried out as part of occupational risk assessment (while in fact, it has been), or such assessments indeed have not been carried out. However, in any case it is possible

to conclude that occupational risk assessment requirements, included in our legislation, are more often not followed by the following types of companies:

- Fishing, manufacturing, health and social work, and construction sectors;
- Private and non-governmental sectors;
- Small (micro) companies;
- Companies located in Riga;
- Companies that sometimes or always pay illegal "envelope salaries".

According to the results of the survey of employees, 13.2% of all respondents indicated that their employer has carried out occupational risk assessment at their company / institution. The sectors with highest rates of occupational risk assessments are: mining and quarrying (46.0%), electricity, gas and water supply (38.9%); but the sectors with lowest rates of occupational risk assessments are: fishing (8.5%), manufacturing (9.4%), health and social work (10.6), construction (10.9%). Men have indicated presence of occupational risk assessments more often that women (16.5% versus 10.6%). No significant differences across age groups were found (12.1% - 13.8%) or across various ethnical backgrounds (ethnic Latvians – 14.5%, Russians – 10.9%, other ethnic groups – 12.6%). There is no significant variation among respondent groups with different education levels, though there is a trend showing higher number of respondents indicating presence of occupational risk assessments with increase in education (elementary education or uncompleted primary education - 8.6%; primary or uncompleted secondary education – 9.7%; secondary education – 12.0%, secondary vocational education – 12.8%, higher education – 16.4%). Government sector workers have indicated presence of occupational risk assessments more often (18.7%) than workers in private sector (10.3%) or non-governmental organisation (9.9%). Number of respondents indicating presence of occupational risk assessments increases with the increase in size of companies (1-9 employees – 6.9%, 10-49 employees – 12.1%, 50-249 employees – 16.1%, 250 and more employees – 20.6%). Number of respondents indicating existence of occupational risk assessments is higher among companies, which illegal "envelope salaries" are never paid (14.9%), than in companies, where it is done sometimes (10.4%) or always (5.4%). According to the employees, occupational risk assessments more often are carried out in companies that are located in other cities (16.6%), villages or rural areas (16.9%) than in Riga (8.4%).

For more details please refer to Topical Annex "Occupational risks and risk prevention".

## 3.2.3. Organising occupational health and safety management system

According to the Section 9 of the Labour Protection Law, in order to perform occupational health and safety measures and internal monitoring and control of working environment, an employer:

- May himself / herself perform the duties of occupational health and safety specialist - the company has no more than ten employees and the employer has been trained in accordance with the procedures specified by the Cabinet;
- Designate an occupational health and safety specialist – if the company has less than 50, but more than 10 employees;
- Designate several occupational health and safety specialists or establish an occupational health and safety organisational unit – if the company has 50 or more employees.

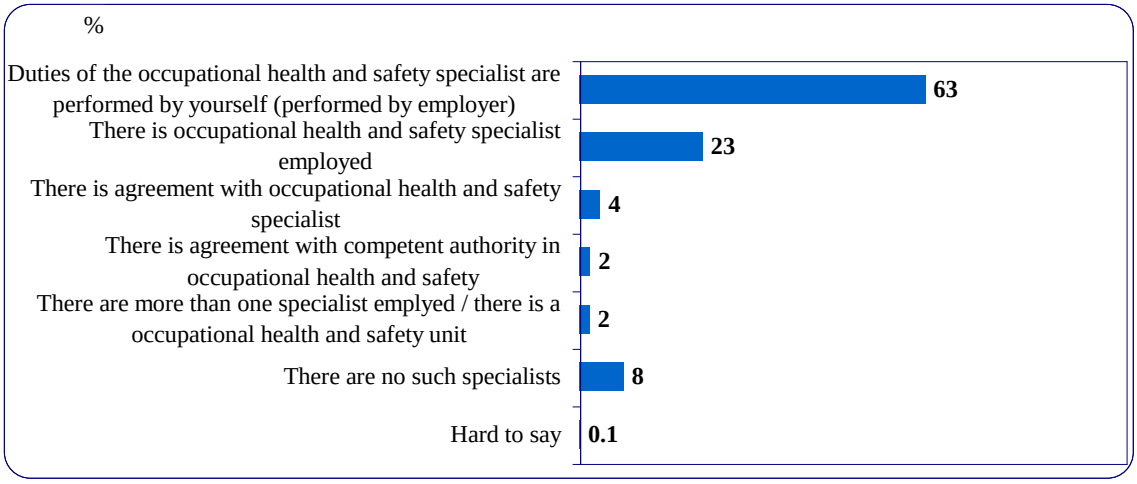
Employer has to grant the occupational health and safety specialist the necessary means and time (during the working hours), in order to enable him/her to perform the duties. The employer may also engage a competent authority or competent specialists; operations of these are regulated primarily by:

- Cabinet Regulation No 99 adopted 8 February 2005 "Regulations regarding the Types of Commercial Activities in which an Employer shall Involve a Competent Authority" (in force since 1 January 2006 with a transition period until 1 January 2009);
- Cabinet Regulation No 101 adopted 8 February 2005 "Regulations regarding the Requirements for Competent Authorities and Competent Specialists in Labour Protection Issues and the Procedures for Competence Evaluation" (in force since 1 January 2006).

At the time of preparation of this Study there are 26 competent authorities and 227 competent specialists in Latvia (data as per January 1, 2007.).

**Opinion of employers.** During the survey, employers were asked, who in their company / institution performs duties of occupational health and safety specialist. A total of 8.1% of employers indicated that they do not have such specialist (see Figure 14).

**Figure 14. Occupational health and safety specialists in companies.**




Note: Data obtained during survey of employers, n=1058.

A total of 63.4% employers indicated that occupational health and safety tasks in their enterprise are carried out by himself / herself. At the same time 61.6% of these employers have neither undergone occupational health and safety training (160 hours), nor have higher professional education in this area. In general, this indicates that employers do not have sufficient knowledge about occupational health and safety issues and that occupational health and safety legislation requirements regarding training and education are not being followed. Most often occupational health and safety tasks are carried out by the employer him/herself in small companies (1-9 employees – 76.1%, 10-49 employees – 31.6%, 50-249 employees – 13.0%, 250 and more employees – 5.5%). At the same time it is important to mention that, according to the requirements of the Labour Protection Law, the employer is allowed to carry out tasks of occupational health and safety specialist only in companies that are smaller than 10 employees and when the employer has been trained in accordance with the procedures specified by the Cabinet. The employer has to designate an occupational health and safety specialist if

the enterprise employs less than 50 people, or to establish a specialised structural unit dealing with occupational health and safety issues if the enterprise employs more than 50 people.

In 22.6% of cases occupational health and safety measures are carried out by one occupational health and safety specialist, in 1.9% of cases – by several specialists or by a special unit. In 79.0% of cases occupational health specialists perform these duties along other, unrelated duties and in 25.8% of cases – these specialists work full time. In 79.5% of cases employers have indicated that the designated specialists have undergone specialised occupational health and safety training (160 hours), while 12.3% are with the higher professional education in the area of occupational health and safety. Contrary to the situation with employers, only 1.6% of the designated specialists have neither undergone a specialised training, nor have a relevant higher education. This indicates that in most cases if employers have decided to designate a specialist, they also have paid sufficient attention to required expertise and/or training.

Relatively small portion of employers have opted to use external services of competent specialists (3.8%) or competent institutions (2.0%). According to the survey results the competent specialists and competent institutions have been involved for various services, but the most often mentioned services are those related to occupational risk assessment and preventive measures, as well as preparation of occupational health and safety instructions (see Table 6).

**Table 6. External occupational health and safety services received from competent institutions or specialists.**

| Type of service | Number of employers who used the service (%) |
|---|---|
| Consultations about required preventive measures | 79.0 |
| Occupational risk assessment | 73.3 |
| Preparation of workplace safety instructions | 69.9 |
| Internal monitoring and control of working environment | 65.8 |
| General consultations on topics related to occupational healthcare and occupational health and safety | 52.7 |
| Assistance in training and instructing employees | 51.3 |
| Consultations on selection and use of appropriate tools and equipment | 38.8 |
| Laboratory services | 34.5 |
| Health examinations | 29.6 |
| Consultations on selection of protective clothing and personal protective equipment | 29.6 |
| Opinion about non-compliance with legislation | 22.3 |

Note: Data obtained during survey of employers, basis – respondents from companies which use external services of occupational health and safety specialists or competent institutions, n=75.

Companies with 10-249 employees use external services in occupational risk assessment slightly more often than others (1 - 9 employees – 67.5%, 10-49 employees – 81.4%, 50 - 249 employees – 79.0%, 250 and more employees – 60.9%). External laboratory services are more often used by larger companies (1 - 9 employees – 22.4%, 10 - 49 employees – 45.7%, 50 - 249 employees – 59.1%, 250 and more employees – 80.0%). Similar, though not so widely varying situation appears also regarding

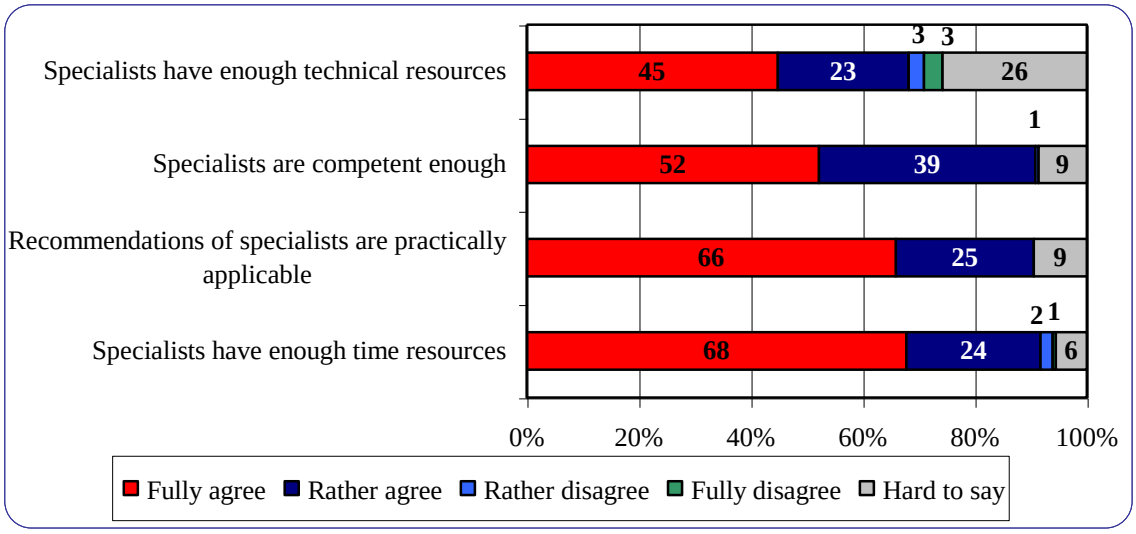
internal monitoring and control of working environment (1 - 9 employees – 53.0%, 10 - 49 employees – 83.5%, 50 - 249 employees – 69.9%, 250 and more employees – 91.7%).

External services for occupational risk assessment are more often used by companies established relatively recently (77.1% of all companies established after 1990, 42.3% - of companies established before 1991, 48.0% - of reorganised companies). Particularly high rate of use of external services is among the ones established between 1996 and 2005 (companies established before 1990 – 39.8%; 1991-1995 – 56.1%, 1996-2000 – 85.0%, 2001-2005 – 79.4%). Similar situation is also in case of use of external laboratory services.

Private companies have generally higher rates of use of external services. The exceptions to this are internal monitoring and control of working environment, and training and instructions of employees – use of these services was mentioned by public sector (66.3% and 55.4% respectively) and by private sector companies (65.7% and 51.3% respectively) at very similar rates. "Opinion about non-compliance with legislation" and "Health examinations" were more often mentioned by public companies (33.1% and 41.6% respectively) than by private sector companies (21.8% and 28.8% respectively).

The Study also analysed opinions about quality of external services (see Figure 15).

**Figure 15. Opinion on external occupational health and safety specialists.**




Note: Data obtained during survey of employers, basis - respondents from companies which use external occupational health and safety services, n=75.

Due to relatively low number of respondents from companies, which use external occupational health and safety services, it is not practical to carry out any detailed analysis across sectors, regions, sizes of companies, or other parameters. Significantly different answers were given on availability of "technical means". By this the survey designers meant feasibility to carry out laboratory measurements of working environment, which perhaps was not understood properly by employers (26% of respondents found it difficult to answer this question).

Analysing opinions of occupational health and safety specialists with higher professional education in occupational health and safety (or who are currently pursuing such studies) regarding competent specialists and competent institutions, the following trends can be noticed:

- Most (approximately half) of the staff of the State Labour Inspectorate and Ministry of Welfare, as well as occupational health and safety specialists from competent institutions fully agree or rather agree that specialists are sufficiently knowledgeable, they have appropriate technical means, their consultations are practical and feasible to implement; but not always these specialists have sufficient time; sometimes their outputs are superficial and formal and specialists fail to notice significant occupational health and safety issues;
- Assessment of answers "fully agree" and "rather agree" given by specialists of the State Labour Inspectorate, the Ministry of Welfare, occupational health and safety specialists working for competent institutions and companies reflect differences in opinions among these respondent groups regarding: cost of services provided not being comparable with quality; and costs being too high (and not sufficient number of specialists in all parts of Latvia);
- Quite large number of specialists (24 - 38%) finds it difficult to answer or do not have answers to the questions asked.

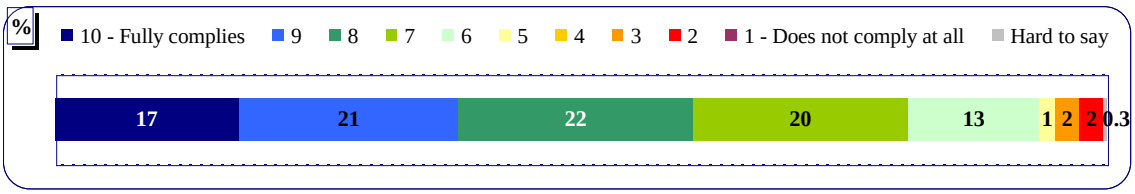
For more details, please, refer to the Topical Annexes "Training and education of occupational health specialists" and "Competent institutions and competent specialists in the area of occupational heath and safety".

## 3.2.4. Compliance with specific regulations

**Opinion of employers.** Various results of this Study indicate that employers are not sufficiently informed about requirements of occupational health and safety regulations. Therefore, this section will not present all results of employers' self-assessment regarding compliance of companies with legislation, because the analysis presented above (inadequately high scores) indicates that employers' self-assessment is not objective, but subjective.

However, a special note shall be taken of some specific regulations regarding occupational health and safety in, for example, construction, or mining and quarrying. In this regard questions to employers were formulated in the same manner as above – they were asked to assess compliance of working environment to specific occupational health and safety requirements using a 10 point scale, were 10 is "fully complies" and 1 – "does not comply at all" (see Figures 16 and 17).

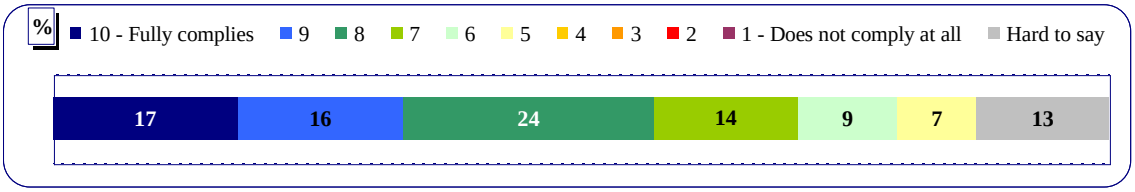
**Figure 16. Employers' self-assessment of compliance of working environment with specific occupational health and safety requirements in construction sector.**




Note: Data obtained during survey of employers, n=56.

Average score among the employers in construction sector assessing compliance of working environment to specific occupational health and safety requirements is 7.8.

**Figure 17. Employers' self-assessment of compliance of working environment with specific occupational health and safety requirements in mining and quarrying sector.**

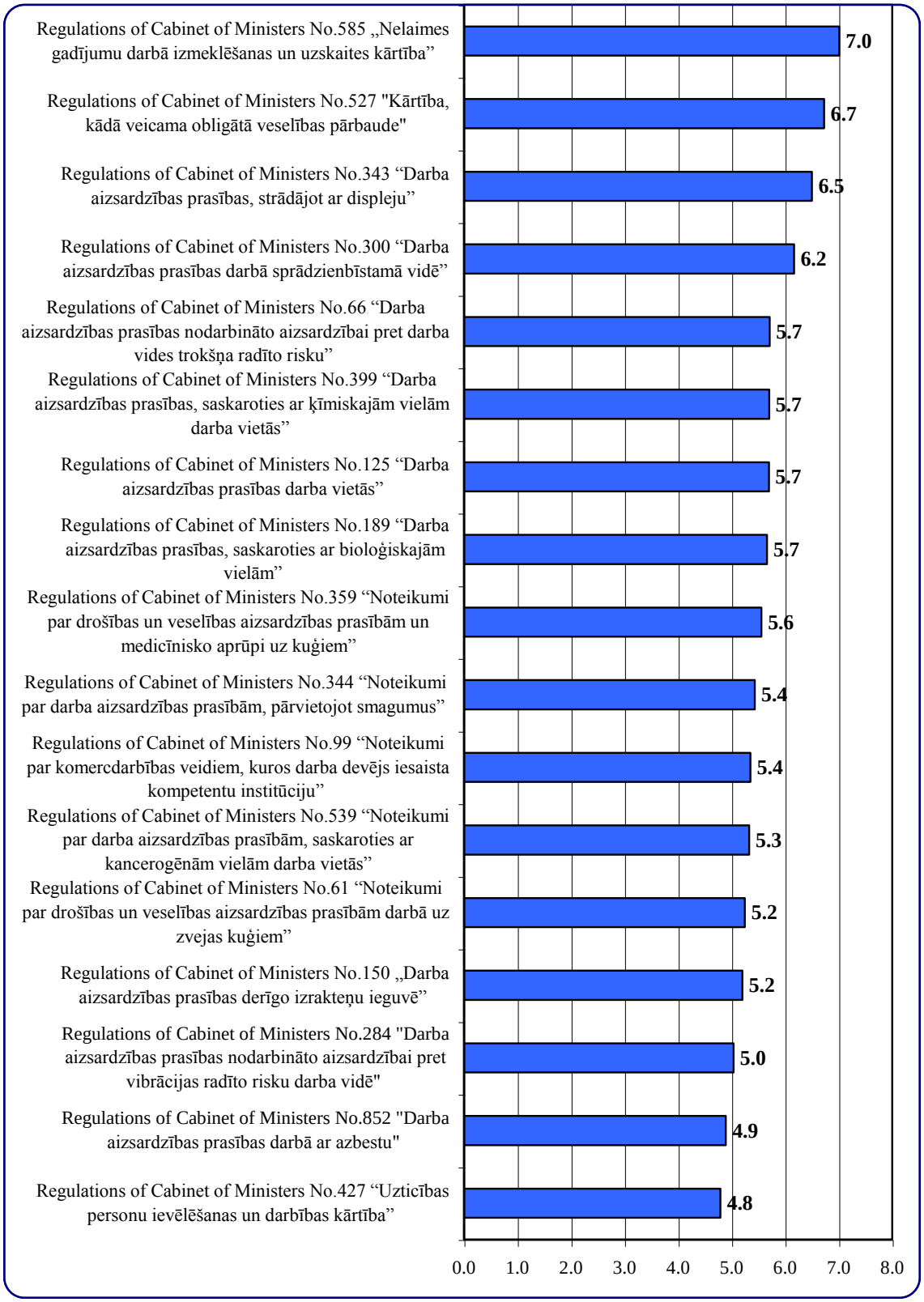



Note: Data obtained during survey of employers, n=31.

Average score among the employers in mining and quarrying sector, while assessing compliance of working environment to specific occupational health and safety requirements, is 8.0.

**Opinion of occupational health and safety specialists.** Specialists having or still continuing higher professional education in the field of occupational health and safety were asked to assess to what extent Latvian companies comply with various occupational health and safety requirements, using a 10 point scale, where 10 is "comply fully" and 1 "do not comply at all"). Opinion of these professionals shows that the highest compliance levels are related to investigation of workplace accidents, while the lowest – regarding elections of trusted representatives (see Figure 18).

**Figure 18. Compliance with regulations in companies.**




Note: Data obtained during survey of occupational health and safety specialists, n=86.

It is important to note that even those regulations, which according to this survey have the highest rates of compliance, are also often not being followed. For example, according to expert opinions and

calculations, large portion of all workplace accidents are not investigated according to the requirements of legislation, and are not registered, which indicates that rate of compliance in companies is very low (for details see the relevant Topical Annexes, for example, "Workplace Accidents", "Compulsory health examinations", "Asbestos", others).

## 3.2.5. Compliance with legislation regarding legal labour relations

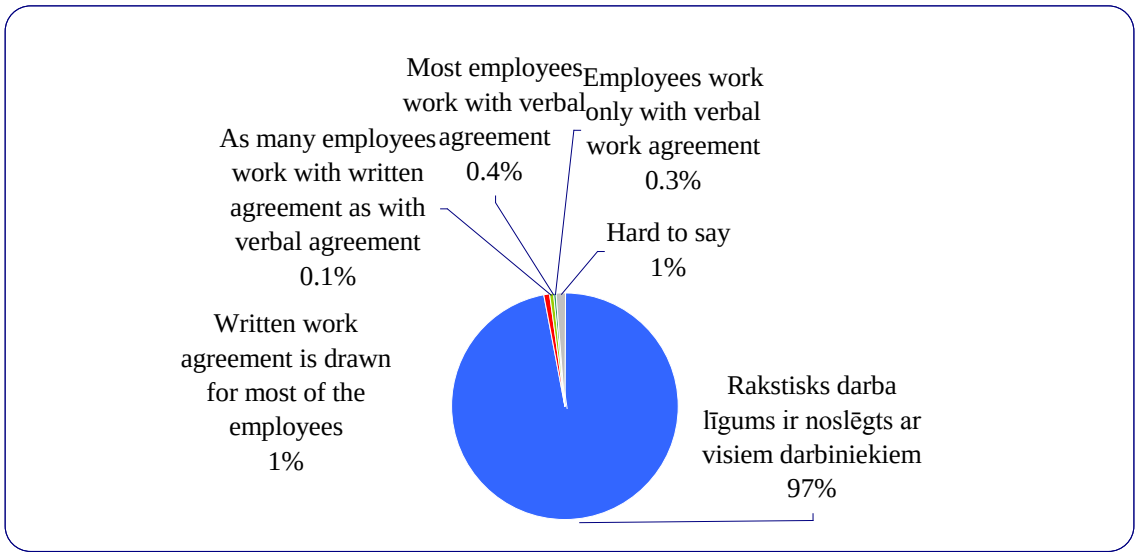
The new Labour Law came into effect on 1 July 2002, replacing the Labour Code of Latvia. The Law determines mutual relations between the employer, and employees - obligations, rights and responsibilities. A number of Cabinet Regulations have been issued under the Law, determining minimum salary, limitations when using work of children and youth, seasonal jobs, other.

The Labour Law sets an obligation for the employer and employee to enter into a written contract of employment. With a contract of employment the employee undertakes to perform specific work, subject to specific working procedures and orders of employer, while the employer undertakes to pay the agreed remuneration and to ensure fair and safe working conditions that are not harmful to health.

If there is no written contract of employment, the employee risks failing to receive guarantees that he/she is entitled to under labour legislation defining legal labour relations. For example, to get remuneration for the time worked, annual leave, job termination compensation, others. Only legal contracts (that is, a contract of employment between employer and employee) will warrant that employee's social guarantees are being protected by Latvian legislation. It means that in case of workplace accidents or occupational diseases, the State Social Insurance Agency will cover costs of medical care, rehabilitation and related additional costs and will also compensate loss of work ability. Only legally drawn employment relationships warrant the right to unemployment benefits.

**Opinion of employers**. The employers were asked what portion of their employees has a written contract and what – a verbal agreement. According to the employers' information, 96.9% of companies have entered into written contracts with all their employees (see Figure 19).

**Figure 19. Dominance of written contracts and verbal agreements in companies.**




Note: Data obtained during survey of employers, n=1058.

Quite likely, data from the survey of employers on this topic is not very objective. Due to several recent government campaigns, it is likely that employers are not disclosing the real situation. Since the number of employees, who indicated that not all employees have a written contract, is very small, it is not practical to analyse this question in more detail across sectors. It is possible, however, to mention that among high-risk sectors (occupational health and safety wise) such cases have been mentioned for companies in agriculture, hunting and forestry; manufacture of wood, products of wood and cork and manufacture of furniture; construction; and education. No significant differences have been observed among respondents using different languages during interviews (Latvian – 96.9%, Russian – 96.9%); among respondents with different positions (higher level managers / directors – 96.8%, operational level managers – 97.9%). But it is important to note that 1.6% of higher level management could not answer the question at all. More significant problems occur in the group of smaller companies. Though the number of respondents from this group indicating that all employees have a written contract is just slightly lower (1-9 employees – 96.5%, 10-49 employees – 97.8%, 50-249 employees – 99.0%, 250 and more employees – 99,3%), there were some respondents, who indicated that at least half of the employees work on basis of verbal agreements. Such cases have been observed more often in private sector and non- governmental organisations, as well as in companies with majority of local ownership.

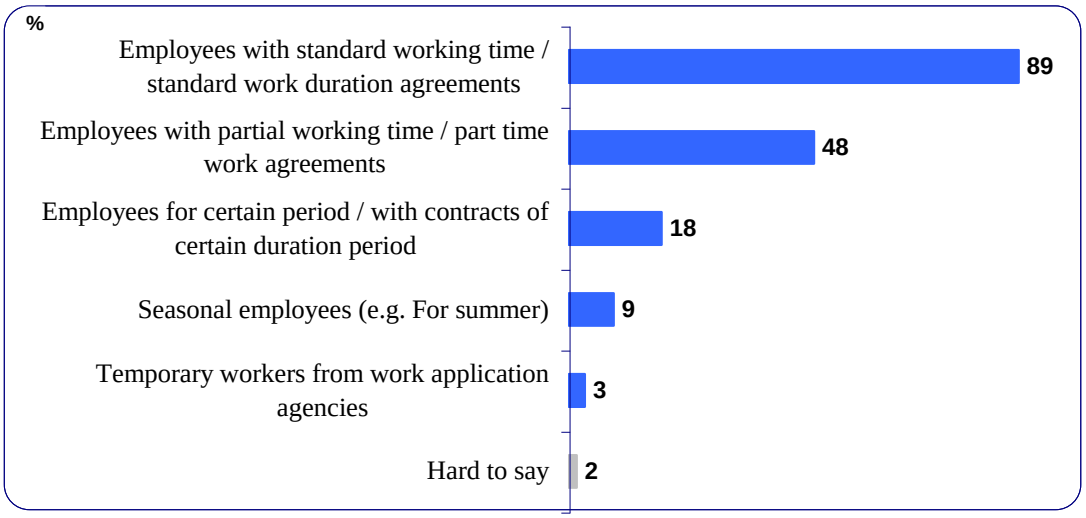
Though just a minor part of employers indicated that not all employees have a written contract, this Study suggests that problems with written contracts can be observed in:

- Micro companies (1-9 employees);
- Recently established companies (established after 1996);
- Companies with majority of local ownership;
- Private sector companies.

These are risk groups and the State Labour Inspectorate should pay a special attention to companies falling under all these categories when planning and carrying out preventive measures. To identify such companies, the State Labour Inspectorate should coordinate with other government institutions. To further narrow down the number of companies to be investigated, it is recommended to focus on high-risk sectors (from the perspective of occupational health and safety).

Analysing types of contracts and working hours, it can be concluded that the most widely used contracts are normal working hours contracts (see Figure 20).

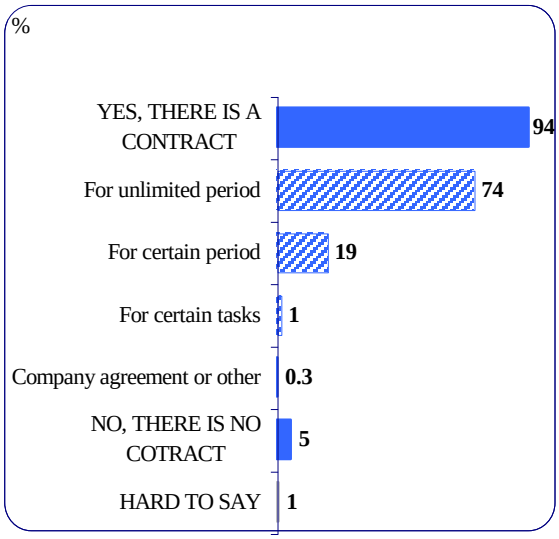
**Figure 20. Distribution of types of contracts and working hours in companies.**




Note: Data obtained during survey of employers, n=1058.

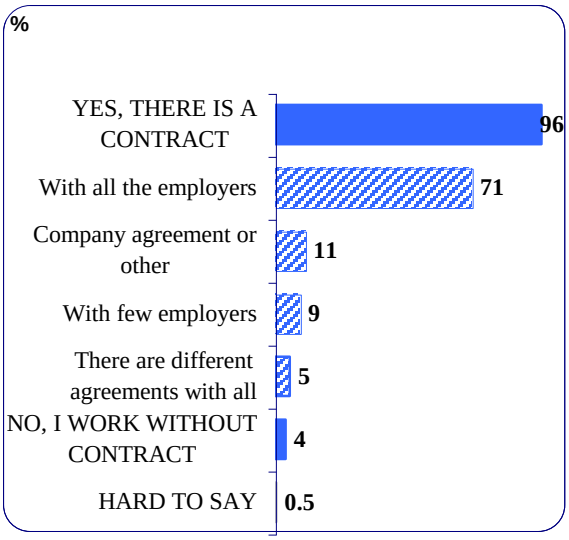
**Opinion of employees.** Also analysis of survey of employees indicates that very small portion of respondents do not have written contracts (see Figures 21 and 22).

**Figure 21. Written contracts for employees working for one employer.**




Note: Data obtained during survey of employees, basis: workers with only one employer, n=2235.

**Figure 22. Written contracts for employees working for more than one employer.**




Note: Data obtained during survey of employees, basis: workers with more than one employer, n=220.

As can be seen from comparison of the two figures, the two respondent groups show similar results, but our further analysis will make a special emphasis on respondents, who do not have written contracts. It is also important to note that according to the survey results, among people, who work for more than one employer, number of those, who do not have a written contract with any or some of his/her employers, is higher than among those, who work only for one employer.

Among the respondents working for one employer, more employees without a written contract occur in agriculture, hunting and forestry sector (13.6%) and construction sector (18.8%); while among the respondents working for more than one employer – construction sector (13.4% of respondents indicated that they have employment contracts only with some of their employers, 26.6% indicated that they work without any contracts of employment). Among men number of cases of no contracts was higher (1 employer – 8.5%; 2 and more employers – 16.7%) than among women (1 employer – 2.6%; 2 and more employers – 9.7%). Besides, higher rate of no-contract cases is among younger respondents (see also Table 7), which highlights the need to pay a special attention to awareness building among youth on the need to enter into contracts of employment (involving schools and universities).

**Table 7. Number of employees without a written contract of employment (%).**

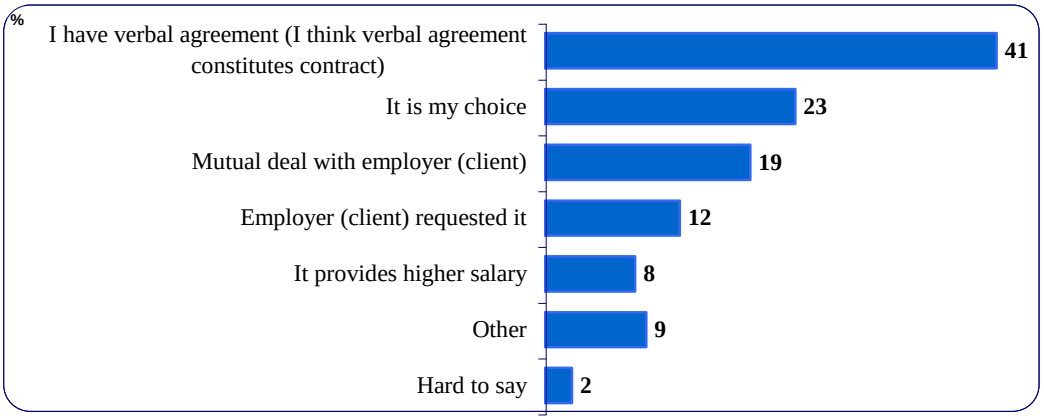
| **Average in Latvia** | | **18-24 years** | | **25-34 years** | | **35-44 years** | | **45-54 years** | | **55-74 years** | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **2+** | **1** | **2+** | **1** | **2+** | **1** | **2+** | **1** | **2+** | **1** | **2+** |
| 5,2 | 12,7 | 13,2 | 27,7 | 4,3 | 14,2 | 4,0 | 15,4 | 5,3 | 7,0 | 2,6 | 3,4 |

Notes: data from survey of employees, n=2455; 1 – workers with one employer; 2+ - workers with two or more employers.

No significant differences were observed among respondents with different ethnical background (1 employer: ethnic Latvians – 5.6%, Russians – 5.4%, other ethnic groups – 2.1%; 2 and more employers: ethnic Latvians – 12.6%, Russians – 12.9%, other ethnic groups – 12.8%). In public sector number of those without written contracts of employment (1 employer – 0.3%, 2 and more employers – 4.5%) is less than in private sector (1 employer – 7.8%, 2 and more employers – 20.7%). Respondents from small companies (1-9 employees) have indicated that they work without any contract (1 employer – 14.6%, 2 and more employers – 20,9%) more often than respondents from larger companies (10-49 employees: 1 employer – 4.7%, 2 and more employers – 12.1%; 50-249 employees: 1 employer – 1.5%, 2 and more employers – 4.8%, 250 and more employees: 1 employer – 0.3%, 2 and more employers – 8.0%). In Riga rates regarding rates of employees without contracts are slightly higher (1 employer – 5.0%, 2 and more employers – 19.9%) than in other cities and towns (1 employer – 4.3%, 2 and more employers – 7.1%) or in villages and rural areas (1 employer – 6.9%, 2 and more employers – 10.4%). No significant differences were found among respondents from different territorial units of the State Labour Inspectorate.

Among the reasons, why workers have not entered into a written contract of employment or other written agreement, the most frequently mentioned one is an assumption that a verbal agreement is also a contract (see Figure 23). It can be assumed that this is related to lack of understanding on necessity of contracts of employment and lack of awareness on consequences that may arise if employment relationships are not set in a legally binding manner.

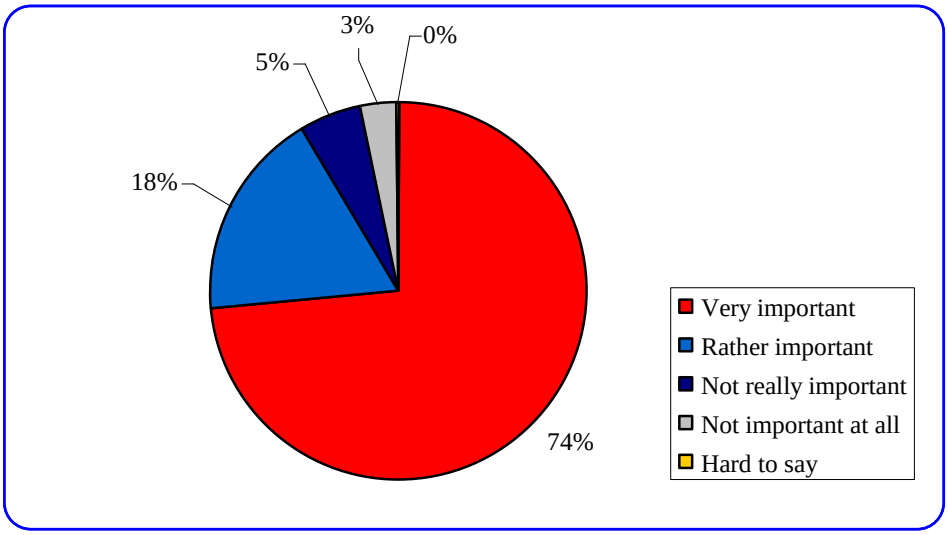
**Figure 23. Reasons behind lack of written contract of employment or other contract.**




Note: data from survey of employees, basis – workers without written contracts of employment, n=144.

The employees were also asked to assess, how important it is for them to have a written contract of employment with their employer. In total, 91.4% of all respondents indicated that it is more or less important to them (see also Figure 24).

**Figure 24. Importance of having written contracts of employment among employees.**




Note: data from survey of employees, n=2455.

No significant differences among respondents from various sectors were found, with the exception of construction sector, where only 80.8% regard it to be of importance. Women find written contracts of employment slightly more important (93.8%) than men (88.5%). Youth find it slightly less important than other age groups (18 to 24 years – 87.3%, very important it is only for 65.1%; 25-34 years – 91.5%, 35-44 years – 92.1%, 45-54 years – 93.3%, 55-74 years – 90.4%). Among respondent groups with different ethical backgrounds - Latvians find it the most important (93.0%), while Russians – the least (88.7%, besides only 65.3% find it very important). Comparing respondent groups with different education levels, it can be noticed that with increase in education levels also the importance of written contracts increases (elementary education or uncompleted primary education – 81.0%, primary

education or uncompleted secondary education – 89.4%, secondary education – 89.9%, secondary vocational education – 91.5%, higher education – 93.8%). Respondents from private companies find written contracts of employment less important than respondents from public sector (private sector – 89.1%, public sector – 95.1%), but all non-governmental sector workers find a written contract of employment important. Importance of written employment contracts is higher among respondents from medium sized companies (50-249 employees – 94.6%) and large companies (250 and more employees– 95.8%) than in micro companies (1-9 employees – 84.9%) and small companies (10-49 employees – 90.9%). Employees, who never get illegal "envelope salaries", find written contracts of employment more important (93.8%) than others (sometimes receive "envelope salaries" – 86.9%; always – 78.1). No significant differences were found among respondents living in Riga (90.3%), other cities and towns (92.7%) or small villages and rural areas (91.4%).

For details see Topical Annex "Legal labour relations".

# 3.3. Occupational risk factors and their prevention

## 3.3.1. Occupational risk factors

Occupational risk factors appear in all economic sectors and can affect large numbers of employees. It is difficult to imagine an occupation with absolutely none occupational risk factor that could affect safety or health of an employed individual. The most significant occupational risks are:

- Chemical substances (e.g., varnish, paint, synthetic detergents etc.),
- Physical factors (e.g., noise, vibration, microclimate etc.),
- Dust (e.g., welding fumes, abrasive dust, wood dust etc.),
- Biologic factors (e.g., organisms causing tick-borne encephalitis, viral hepatitis B and C, HIV/AIDS etc.),
- Mechanic factors (e.g., work with equipment and with dangerous equipment, work at height, work in explosive atmosphere etc.)
- Ergonomic factors (e.g., awkward posture, repetitive movements, lifting of heavy objects etc.),
- Psychosocial factors (e.g., shortage of time, overtime work, work at night, bad relationship with superiors and colleagues, conflicts etc.).

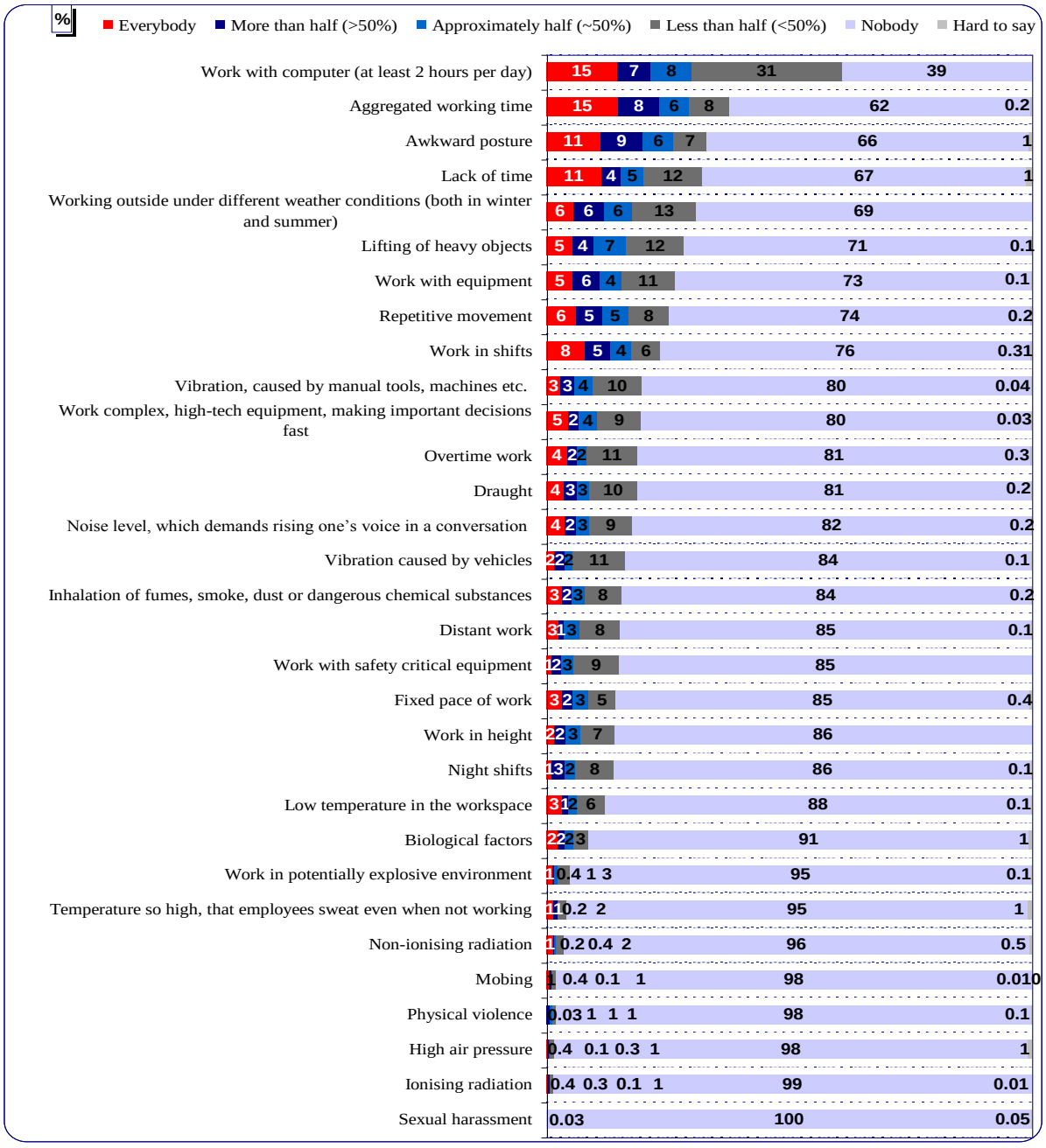
There is a traditional opinion in Latvia that in Latvian enterprises conventional occupational health problems, such as noise, vibration, dust, chemical substances etc., prevail, while EU countries mostly deal with psychosocial, managerial and ergonomic risks. Information obtained during the Study "Work conditions and risks in Latvia" show that at present psychosocial factors (shortage of time, overtime work, long working hours etc.) and ergonomic factors (work with a computer, lifting heavy objects, awkward posture, repetitive movements etc.) are one of the most essential occupation risk factors. It means that conventional risk factors are substituted by modern ones. On the other hand, laboratory analysis show that microclimate and dust (especially abrasive dust and welding fumes)

should be considered as significant occupational problems. Taking into account that psychosocial and ergonomic risk factors, as well as microclimate, usually interfere with each other and even intensifies the effects of one another, this group of factors should be treated with great care, especially because there are no standards for microclimate in Latvia and no simple and convenient method for assessment of psychosocial and ergonomis risk factors (for details see Topical Annexes "Microclimate", "Psychoemotional risk factors", "Ergonomics").

**Opinion of employers**. Ten most frequently mentioned risk factors according to employers' survey are listed below:

1. Work with computer more than 2 hours a day was mentioned by 60.9% of respondents;
2. Aggregated working time– 37.6%;
3. Awkward posture (e.g., standing, sitting) – 33.1%;
4. Shortage of time – 32.2%;
5. Working outside under different weather conditions (both in winter and summer) – 30.9%;
6. Lifting or handling of heavy objects – 28.4%;
7. Usage of equipment (risk of trauma) – 26.6%;
8. Repetitive movements – 25.3%;
9. Shift work– 23.4%;
10. Vibration, caused by manual tools, machines etc. – 19.7%.

**Figure 25. Number of employees exposed to occupational risks within enterprises/ institutions.**



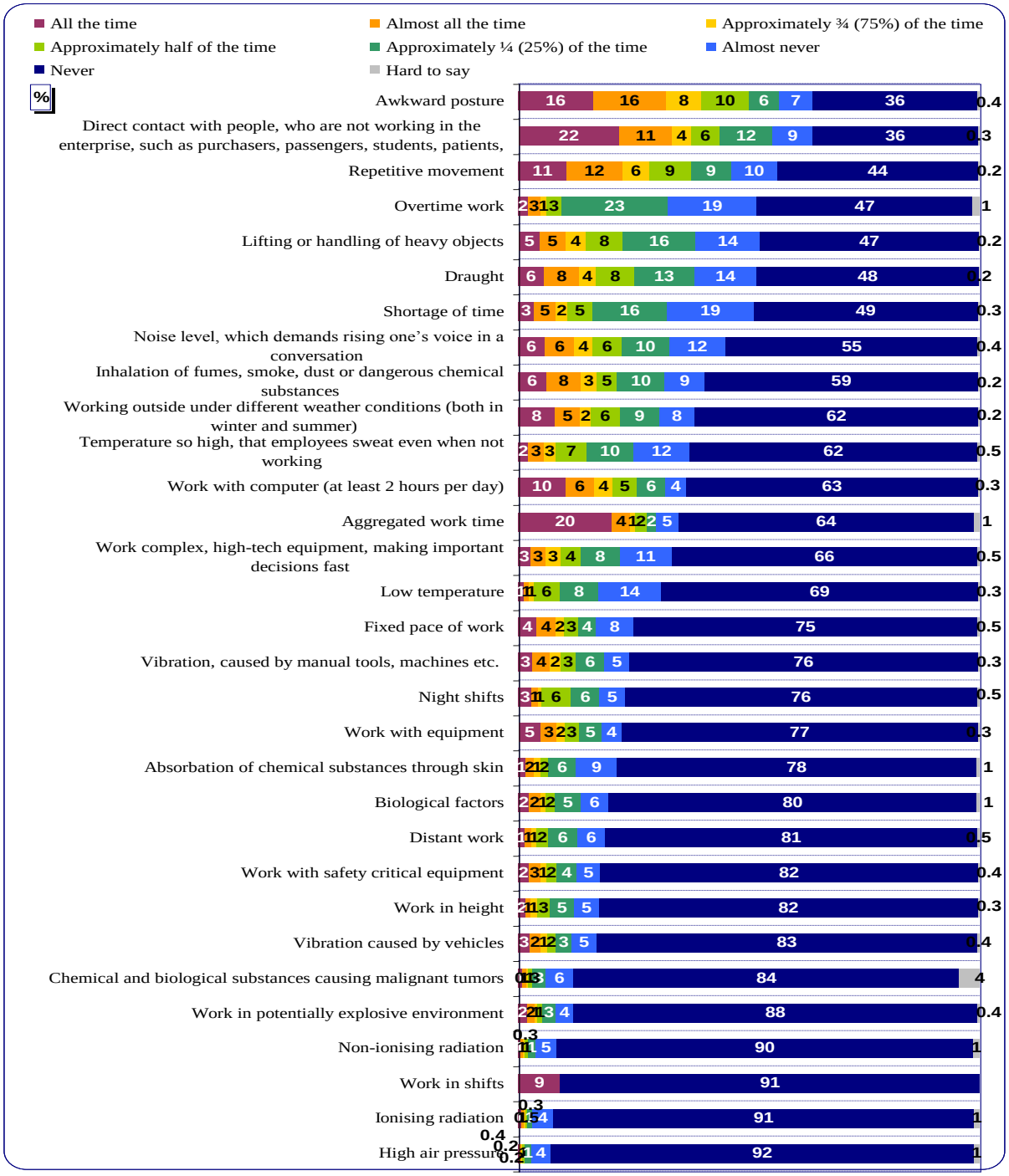

Note: Employers survey data, n=1058.

**Opinion of employees**. Ten most frequently mentioned risk factors according to employees' survey are listed below:

1. Awkward posture (e.g., standing, sitting) was mentioned by 63.8% of respondents,
2. Direct contact with people, who are not working in the enterprise, such as purchasers, passengers, students, patients, clients etc. – 63.8%;
3. Repetitive movements – 56.1%;
4. Overtime work – 51.7%;
5. Lifting of heavy objects (carrying or handling) – 52.4%;

6. Draught – 51.7%;
7. Shortage of time – 51.1%;
8. Noise level, which demands rising one's voice in a conversation – 45.0%;
9. Inhalation of fumes, smoke, dust or dangerous chemical substances – 40.3%;
10. Working outside under different weather conditions (both in winter and summer) – 38.2%.

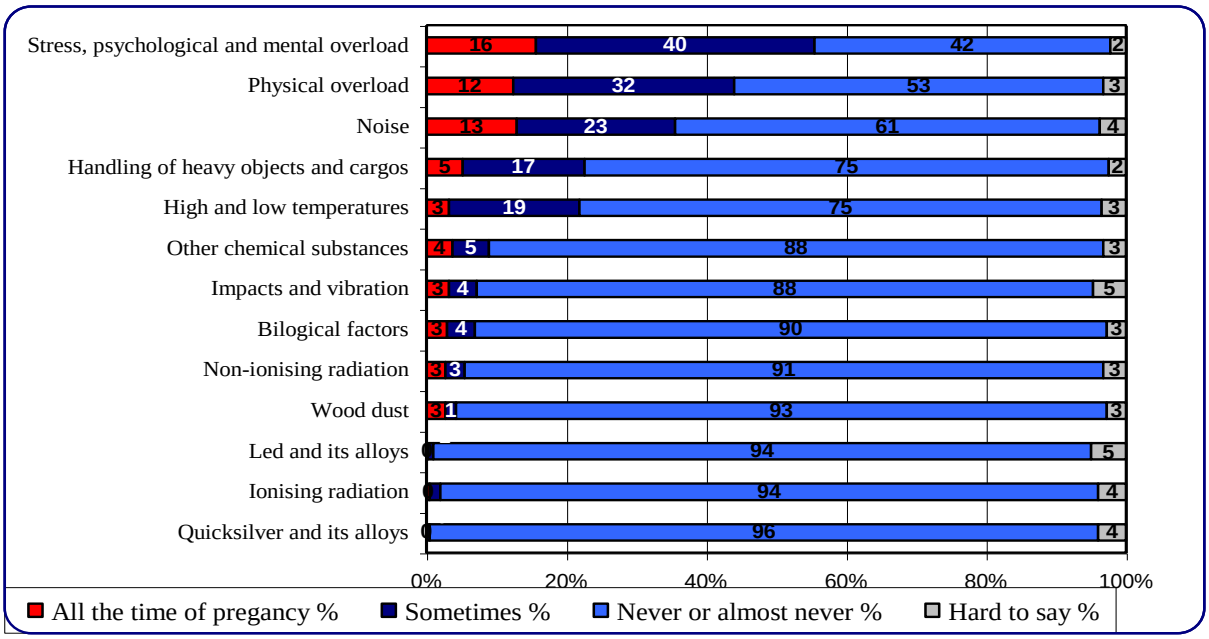
**Figure 26. Exposure of employees to occupational risk factors.**




Note: Employees survey data, n=2455.

Specific questions were asked to women, which have been working during their last pregnancy, to clarify prevalence of occupational risks that are essential during a normal pregnancy.

**Figure 27. Exposure of pregnant women to occupational risk factors.**



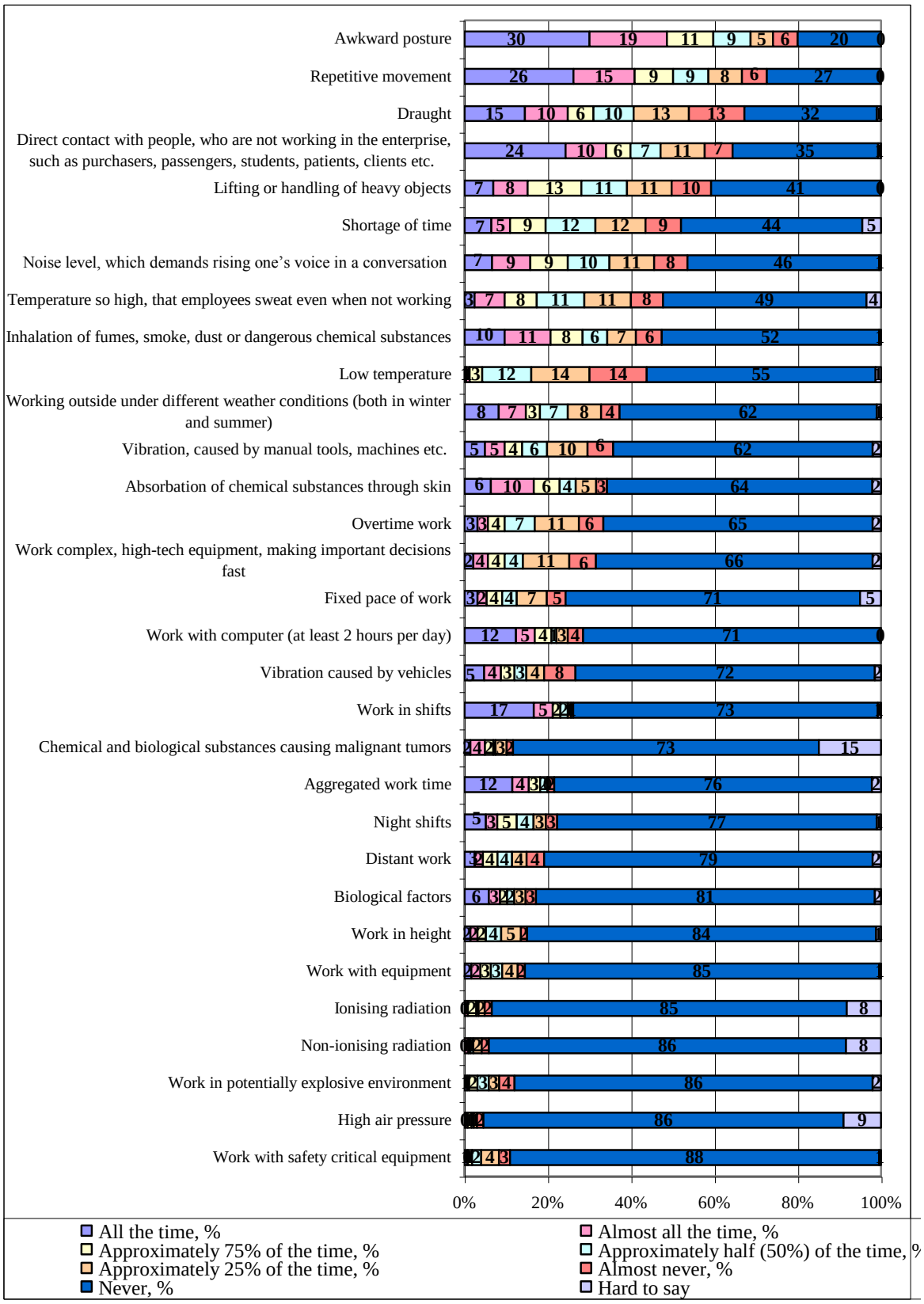

Note: Data obtained during survey of pregnant women and parents, who have returned from leave for child care, basis - respondents, who have been employed before giving birth to their youngest child, n=402.

Pregnant women were most frequently exposed to stress, psychological and mental overload (55.5%), physical overload (44.0%), noise (35.6%), handling of heavy objects and cargos (22.6%), high and low temperatures (21.9%). Less than 10% of surveyed women mentioned other type of occupational risks. Obtained data show that during pregnancy women are more frequently affected by factors, which can significantly worsen one's subjective condition due to fatigue or other non-specific complaints. Risk factors, which could affect development of a child, are much less topical.

Employees with special needs also were asked to assess their exposure to more than 30 occupational risk factors. Ten most frequently mentioned risks are listed below:

1. Awkward posture –79.9%;
2. Repetitive movements – 72.6%;
3. Draught – 67.8%;
4. Direct contact with people, who are not working in the enterprise – 64.4%;
5. Shortage of time – 64.4%;
6. Handling of heavy objects – 59.2%;
7. Noise level, which demands rising one's voice in a conversation – 53.6%;
8. High temperature, when one sweats even with no physical activity – 47.7%;
9. Inhalation of fumes, smoke, dust or dangerous chemical substances – 47.4%;
10. Low temperature indoors – 43.9%.

**Figure 28. Exposure of employees with special needs to occupational risk factors.**



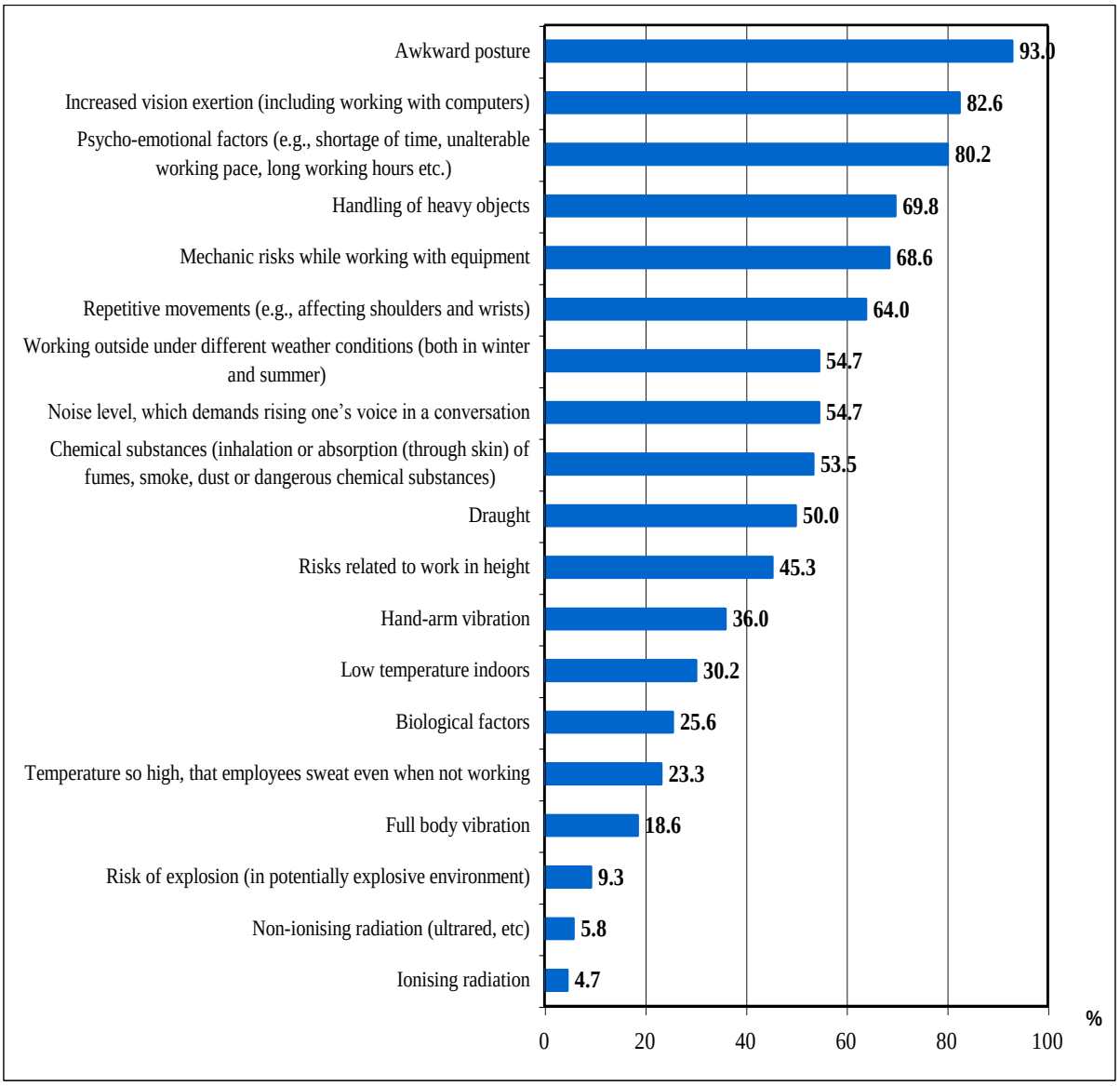

Note: Data obtained during survey of employees with special needs, n=406.

Most essential risks, which people with special needs are exposed to, are similar to those of other employees, i.e., psycho-emotional and ergonomic factors, which can lead to musculoskeletal disorders and non-specific complaints as fatigue, sleep disorders etc. One should remember that half of respondents were occupational diseases patients and that musculoskeletal disorders are the most prevalent occupational disease in Latvia. May be this is the reason, why people with special needs have mentioned ergonomic risk factors (e.g., awkward posture, repetitive movements) more often compared to other employees.

**Opinion of occupational health and safety specialists**. Specialists, who have already finished or are still continuing professional education in the field of occupational health and safety, mentioned following 10 most essential risk factors within their companies (where they also provide services of competent specialist/institution):

1. Awkward posture (e.g., standing, sitting) was mentioned by 93.0% respondents;
2. Increased vision exertion (including working with computers) – 82.6%;
3. Psycho-emotional factors (e.g., shortage of time, unalterable working pace, long working hours etc.) – 80.2%;
4. Handling of heavy objects – 69.8%;
5. Mechanic risks while working with equipment – 68.6%;
6. Repetitive movements (e.g., affecting shoulders and wrists) – 64.0%;
7. Working outside under different weather conditions (both in winter and summer)– 54.7%;
8. Noise level, which demands rising one's voice in a conversation – 54.7%;
9. Chemical substances (inhalation or absorption (through skin) of fumes, smoke, dust or dangerous chemical substances) – 53.5%;
10. Draught – 50.0%.

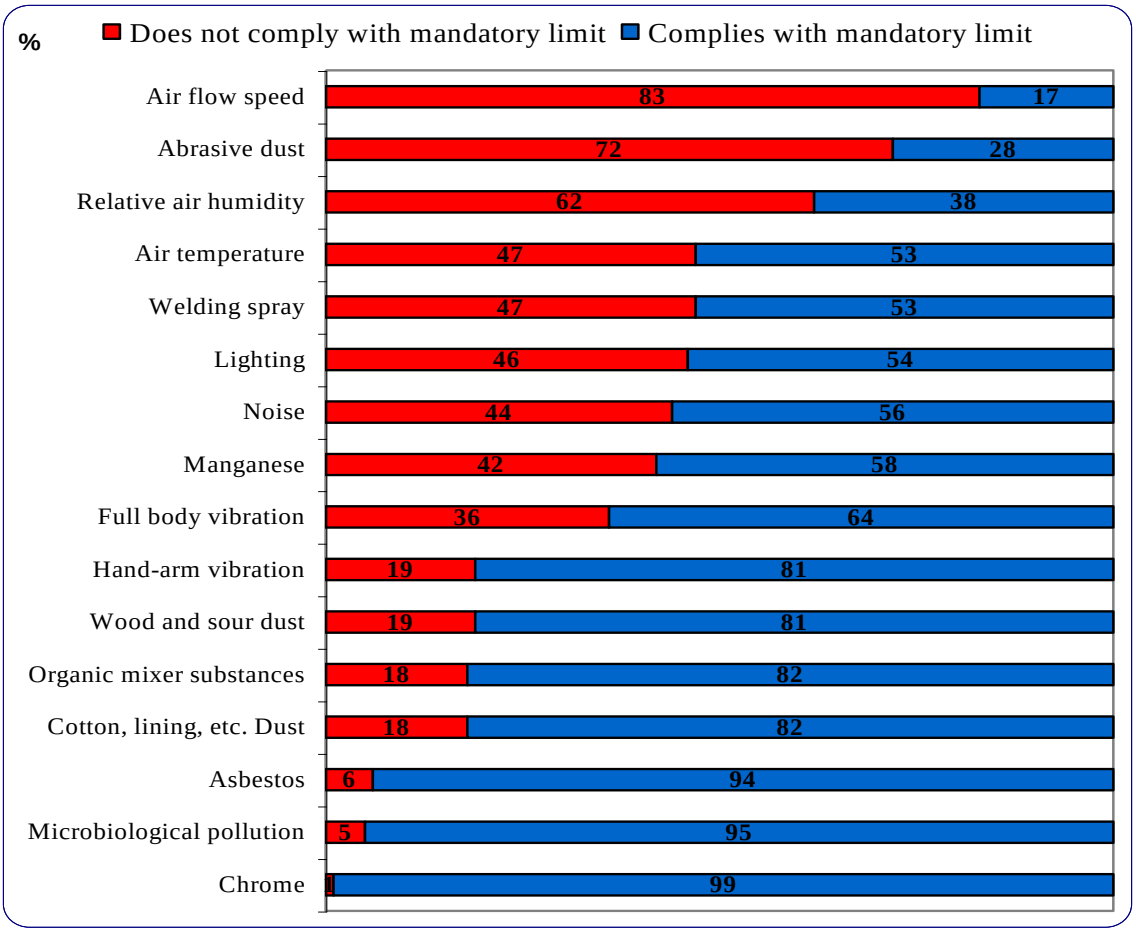
**Figure 29. The most essential occupational risk factors in the view of occupational health and safety specialists.**




Note: Data obtained during survey of specialists, who have already finished or are still continuing professional education in the field of occupational health and safety, n=86.

**Laboratory measurement results regarding working environment.** In addition to subjective data gathered during surveys, objective data can also be used for analysis of occupational risk factors. However, it is not always possible to carry out adequate measurements. Analysis of database of the Hygiene and Occupational Diseases Laboratory of the Institute of Occupational and Environmental Health of the Riga Stradins University helped to assess compliance of the measured values with mandatory or recommended standards summarised in Figure 30.

**Figure 30. Summary of occupational risk factors (compliance with mandatory of recommended standards, % of carried out measurements), 1995 – 2006.**




As reflected in Figure 30, more than one third of measured values of most occupational risks exceed mandatory or recommended limits. There could be an explanation that measurements are carried out only in workplaces selected by the client (e.g., employer or competent specialist), but not in all workplaces. Thus, the most "dangerous" and "hazardous" workplaces are selected.

According to the database of work environment measurements, improper microclimate (inappropriate air temperature, too low or too high relative air humidity, as well as too low or too high air) should be considered as the most problematic issue. Bad microclimate itself causes neither occupational diseases, nor workplace accidents. However, it negatively affects subjective condition and work ability of employees, thus decreasing quantity and quality of the performed job, and could aggravate already prevalent diseases. For example, draught can worsen course of musculoskeletal disorders. Inappropriate microclimate is mostly found in offices with bad air exchange and insufficient ventilation, in outdoor sheltered and semi-sheltered workplaces, as well as in workshops having draught (for details see Annex "Microclimate"). Another essential occupational risk according to the database is dust, especially abrasive dust caused by abrasive tools (e.g., polishing equipment) and welding fumes (for details see Topical Annex "Dust" and "Welding fumes, manganese and chromium in welding and gas cutting".

For details see Topical Annex "Objective assessment of working conditions and occupational risk factors – laboratory measurements within work environment".

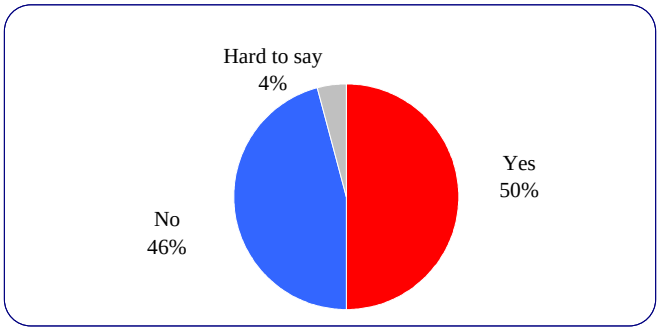
## 3.3.2. Measures for occupational risk prevention

Cabinet Regulation No. 379 of 23 August 2001 "Procedures for the Performance of Internal Supervision of the Working Environment" (in force since 1 January 2002) define that for the assessment of working environment one shall determine occupational risks prevention or reduction of which is necessary. Labour Protection Law, in its turn, defines that employer shall consider following general principles regarding occupational health and safety:

- Setting up of the work environment in such a way as to avoid occupational risks or to reduce the impact of unavoidable occupational risks;
- Preventing the causes of occupational risks;
- Adapting the work to the individual, mainly as regards the design of workplaces, work equipment, as well as in respect of the choice of work and production methods paying special attention to alleviating monotonous work and work at a predetermined work-rate and to reducing negative effect thereof on health;
- Taking into account technical, hygiene and medical developments;
- Replacing the dangerous by the safe or the less dangerous;
- Developing a co-ordinated and comprehensive system of labour protection measures;
- Giving priority to collective labour protection measures in comparison with individual labour protection measures;
- Preventing the impact of work environment risks on the safety and health of those employees for whom in accordance with regulatory enactments special protection has been specified;
- Performing employee instruction and training in the field of labour protection; and
- Co-operating in the field of labour protection with employees and trusted representatives.

**Opinion of employers.** According to the requirements of Cabinet Regulation No. 379 of 23 August 2001 "Procedures for the Performance of Internal Supervision of the Working Environment", employer, taking into account occupational risk assessment results and information obtained during inspection of workplaces, shall define occupational health and safety measures for prevention or mitigation of identified occupational risks, as well as define deadlines and responsible persons for implementation of such measures. Therefore, during the Study employers, who declared that occupational risk assessment is fully or partially carried out in their enterprises, were asked, if there is a programme of preventive measures for improvement of working environment and risk mitigation (see Figure 31).

**Figure 31. Availability of programme of measures for occupational risk prevention in enterprises having undergone occupational risk assessment.**

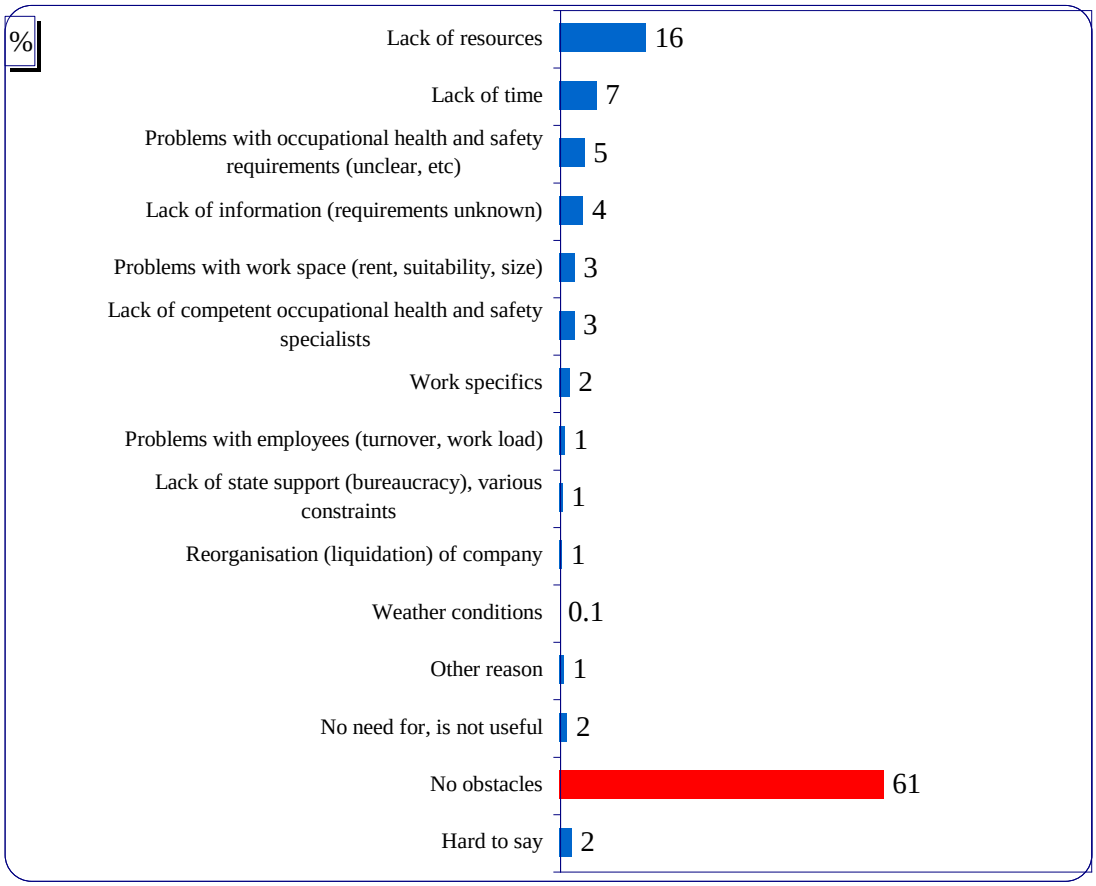



Note: Data obtained during survey of employers, base – employers of enterprises, which have undergone occupational risk assessment, n=576.

Employers were not directly asked, why there was no programme of measures for prevention or mitigation of occupational risks developed after occupational risk assessment (the project's researchers did not envisage such a large number of respondents, who would answer that there is no programme of measures). Therefore, it is impossible to find reasons for such a situation. Experience of researchers based on working in several competent occupational health and safety institutions show that there is no enterprise, where researchers have been working from 2002 to 2006, which does not call for any preventive / risk mitigation measures according to the results of occupational risk assessment. This means that formal approach to occupational risk assessment prevails.

36.7% of all surveyed employers admitted that there are obstacles for carrying out occupational health and safety measures in their company (enterprise), but 61.0% declared that there are no obstacles for implementation of such measures (detailed analysis of obstacles see in Figure 32).

**Figure 32. Obstacles for carrying out occupational health and safety measures according to the opinion of employers.**



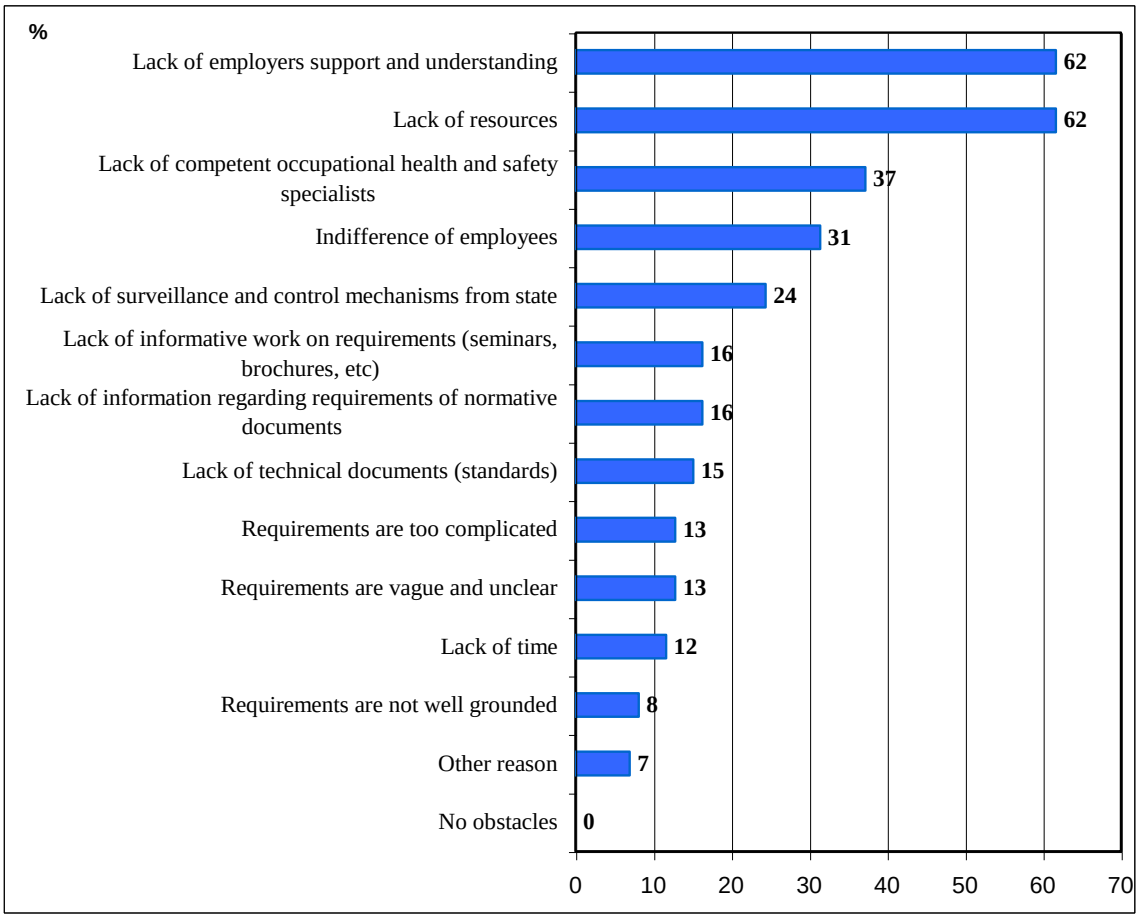

Note: Data obtained during survey of employers, n=1058.

Regarding obstacles, construction is a very different sector. The main reason for non-implementation of occupational health and safety measures in construction is lack of time (14.7% of employers). In public sector lack of resources prevail compared to private sector (public sector – 43.7, private sector – 35.9%). Only 4.5% of respondents mention lack of information as being an obstacle, however, results of other studies leads to a conclusion that in fact employers are not aware that occupational health and safety measures are necessary. Thus, they even do not consider this issue a problem.

Obstacles are frequently mentioned by respondents working in enterprises dealing with manufacture of wood and products of wood and cork, manufacture of furniture (65.5%), enterprises dealing with manufacture of basic metals, fabricated metal products, machinery and equipment (62.7%), educational sector (55.0%), enterprises dealing with manufacture of food (52.5%). Latvian speaking respondents more frequently find obstacles (40.0%) compared to Russian speaking ones (30.9%). Obstacles are mainly indicated in large enterprises rather than in small ones (1 to 9 employees – 31.7%, 10 to 49 employees - 46.7%, 50 to 249 employees – 66.3%, 250 and more employees – 53.4%), which probably correlates with awareness regarding occupational health and safety issues. The fact that new enterprises name obstacles less frequently than older ones (founded until 1990 – 61.3%, 1991 to 1995 – 35.5%, 1996 to 2000 – 37.1%, 2001 to 2005 – 33.7%) could have the same explanation. There is no mayor difference among Riga (obstacles mentioned in 34.9% of cases), other towns (38.3%) and villages, countryside (40.3%).

**Opinion of occupational health and safety specialists.** Survey of specialists, who have already finished or are still continuing professional education in the field of occupational health and safety, reveal a slightly different picture regarding obstacles. Most specialists mention lack of employer's understanding and support (61.6%), which probably is the reason, why so many employers have not recognised any obstacles for implementation of occupational health and safety measures. It is probable, that lack of resources is also directly related to lack of understanding on necessity of occupational health and safety measures. Other obstacles mentioned by occupational health and safety specialists are listed in Figure 33.

**Figure 33. Obstacles for carrying out occupational health and safety measures according to the opinion of occupational health and safety specialists.**

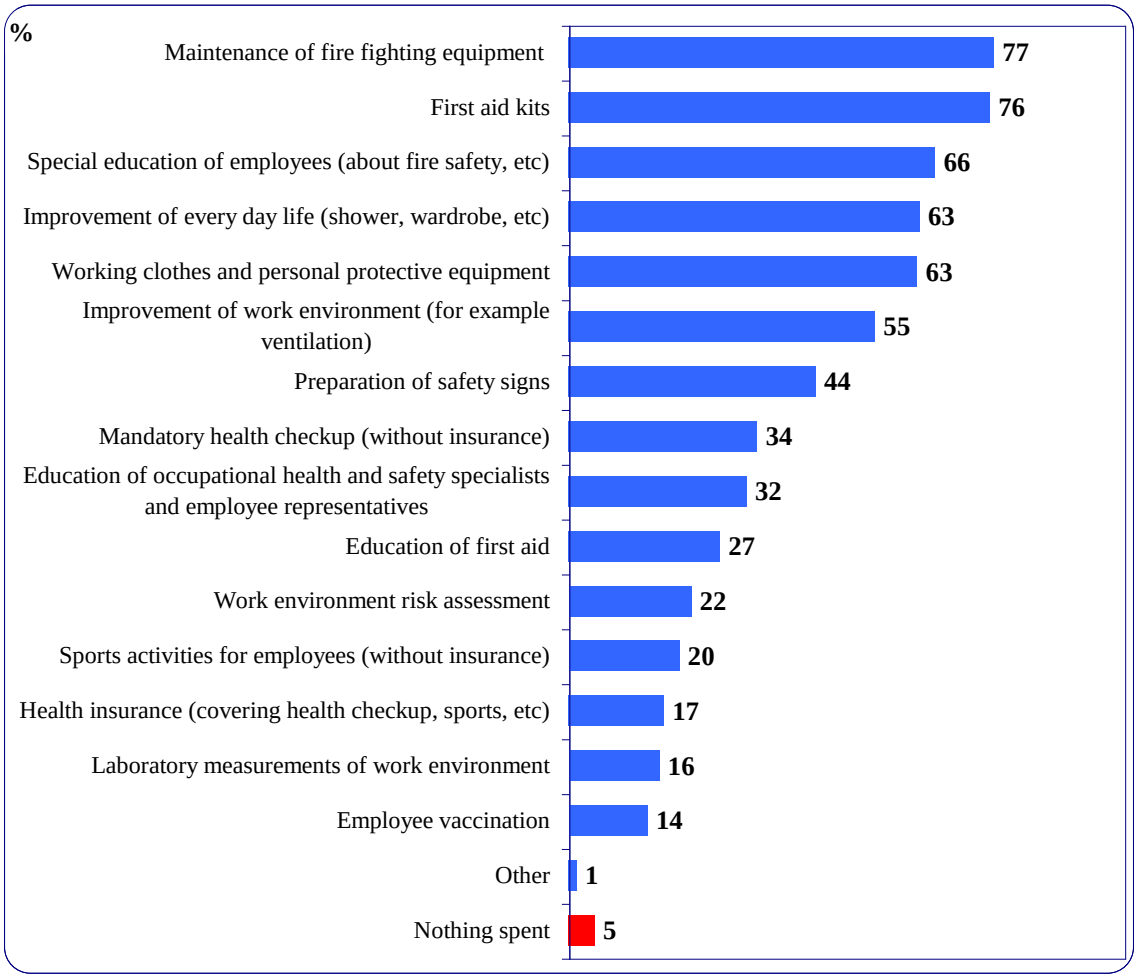



Note: Data obtained during survey of occupational health and safety specialists, n=86.

On the other hand, employers have carried out occupational health and safety measures without any special plan, because only 4.7% of surveyed employers say that they have not invested in occupational health and safety of their enterprises during the last year. Most of these employers belong to agriculture, hunting and forestry sector (9.8%) and educational sector (11.0%).

Employers most frequently mentioned measures related to action in case of emergency: purchase and maintenance of fire fighting equipment (76.6%) and first aid kits (75.8%) (see Figure 34).

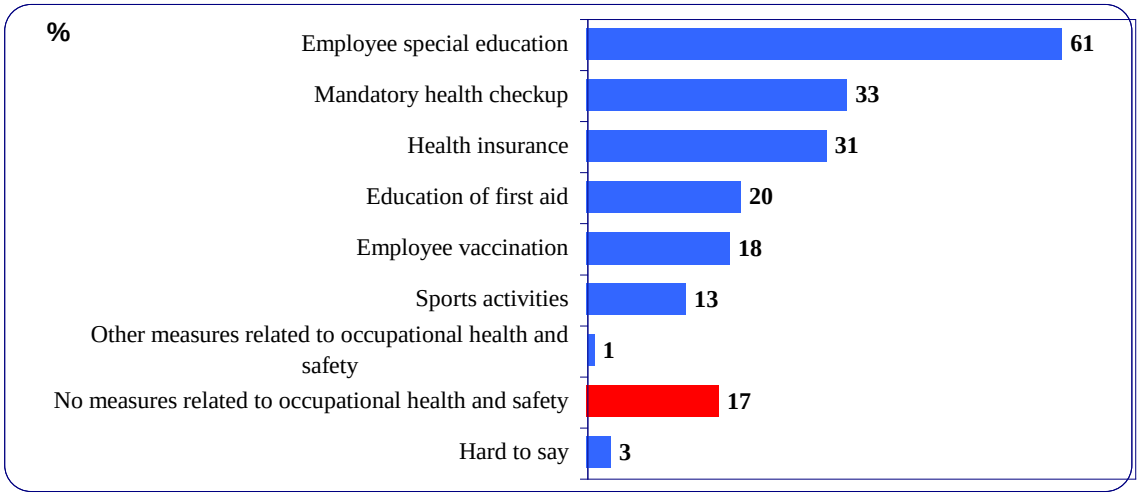
**Figure 34. Financial resources invested in occupational health and safety measures in enterprises during the last year.**




Note: Data obtained during survey of employers, n=1058.

**Opinion of employees.** In the frames of the Study employees were asked, what occupational health and safety measures have their employers provided during the last year. The most popular answers were related to work safety and fire safety instructions and trainings. However these results should be looked at with care, because a more detailed analysis of such instructions lead to a conclusion that instructions are formal and are limited to a signature in respective occupational health and safety registers (for details see Figure 35). However, it shall be noted that Figure 35 reflects only issues that could be related to all employees. Specific issues are described in Topical Annexes, e.g., "Occupational health and safety requirements regarding safety signs", "Personal protective equipment").

**Figure 35. Occupational health and safety measures provided to employees during the last year.**




Note: Data obtained during survey of employees, n=2455.

# 3.4. Effects of non-compliance with occupational health and safety requirements

Workplace accidents are the most frequently mentioned consequences speaking about non-compliance with occupational health and safety requirements, because they are the most obvious ones, however, other effects are also possible. Most important consequences are:

- Workplace accidents,
- Occupational diseases,
- Other diseases or exacerbations,
- Loss of working capacity,
- Direct and indirect costs related to occupational diseases and workplace accidents, etc.

## 3.4.1. Workplace accidents

According to the Law On Compulsory Social Insurance in Respect of Accidents at Work and Occupational Diseases accidents at work (or workplace accidents) are defined as follows:

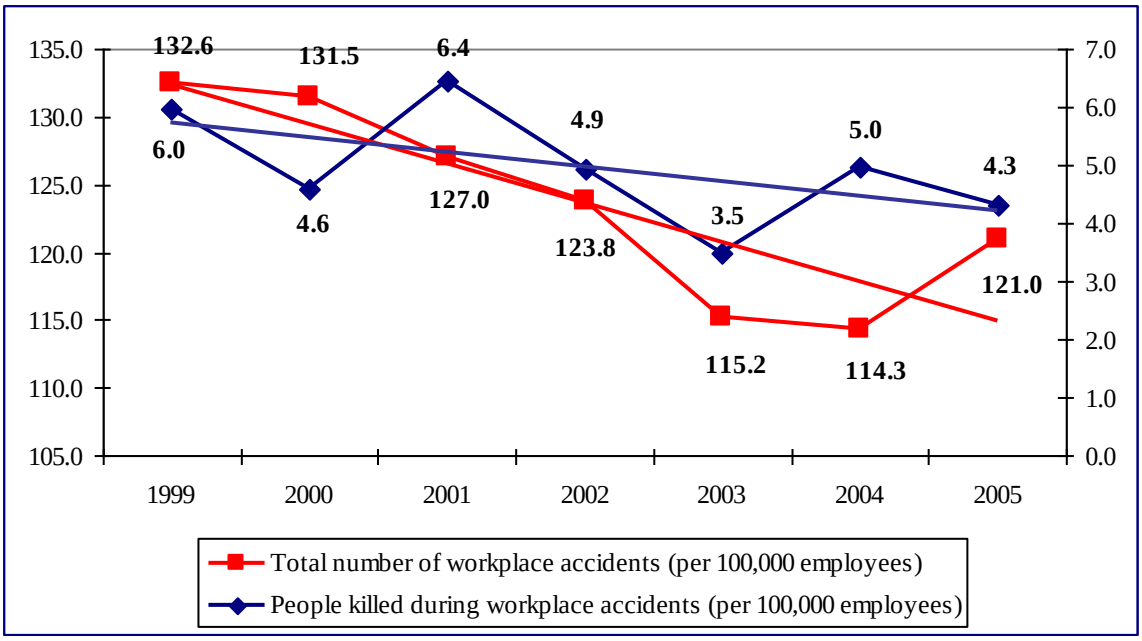
> *Accident at work – harm caused to the health of the insured person or death of the insured person, if the cause of such is an extraordinary incident, which has occurred within one working day (shift) during the performance of work duties, as well as while acting to save any person or property and to prevent a threat of danger to such.*

Loss of work ability means temporary or permanent limitation of physical or mental capacity that is not related to ageing and is caused by an accident at work, an accident while commuting to or from work in a means of transport, which is possessed by the employer, or by an occupational disease, and which encumbers the integration of the person into society, entirely eliminates or partly restricts the ability to work and take care of oneself.

Workplace accidents have to be investigated and registered in compliance with Cabinet Regulation No. 585 of 9 August 2005 "Procedures for Investigation and Registration of Accidents at Work".

During the Study the data on workplace accidents provided by the State Labour Inspectorate were recalculated per 100,000 employees. This allows comparing data among different sectors and States, as well as analyse data dynamics (see Figure 36).

**Figure 36. People affected by workplace accidents per year (per 100,000 employees).**




Analysis of information on workplace accidents that could be found in Annual Reports of the State Labour Inspectorate from 1999 to 2005 shows that until 2004 there is no trend towards increase or decrease of workplace accidents in absolute numbers (see Figure 36). There is a slight increase only in 2005 (by 158 cases). On its turn, analysing number of people affected by workplace accidents per 100,000 employees, we find a general trend towards decrease, in spite the increase of workplace accidents in 2005 (national data on employment were provided by the State Revenue Service). Number of fatal accidents in absolute numbers is relatively stable (with a slight decrease in 2003), but numbers per 100,000 employees show a trend towards decrease (see Figure 36). Evaluation of data per sectors per 100,000 employees shows a dramatic decrease in fatal accidents related to wood processing (by 3.3 times) and logging (by 10.8 times) during 2002-2005, while there is an increase of such accidents during the same time period in such sectors as construction (by 1.1 times), transportation (by 1.2 times) and health care (by 3 times). In 2005 there was a jump in fatal accidents per 100,000 metal workers (by 10.7 times). However, significant decrease of fatal accidents in construction and logging maintain the overall trend towards decrease of workplace accidents per 100,000 employees.

Both the results of this Study and experts' opinion reveal that there are relatively few workplace accidents compared to other States within the European Union. However, it is rather an indicator of poor registration of workplace accidents than of a well-arranged and safe working environment. Not every workplace accident in Latvia is registered, but it is difficult to assess real registration levels, because of great variety of data obtained within different studies, for example:

- According to inquiry of employers, 70.9% of employers have reported to the State Labour Inspectorate on workplace accidents that have taken place at their enterprise (institution) during the last 3 years,
- According to inquiry of employees, employers have reported only on 25.0% of workplace accidents (15.9% of respondents found it difficult to answer to this questions),
- Comparing average number of registered accidents per 100,000 Latvian employees with the number of accidents registered per 100,000 of persons employed by institutions under the Ministry of the Interior of the Republic of Latvia, it was found out that average occurrence of workplace accidents in Latvia is 15 times lower. It can be assumed that people employed by institutions under the Ministry of the Interior of the Republic of Latvia are more exposed to danger, however, comparing the number of fatal accidents affecting employees of special service rank, who are employed under the Ministry of the Interior, with that related to employees working under the State Labour Inspectorate, the difference is only 1.5 times. At the same time total number of workplace accidents per 100,000 employees differs by 15 times. This shows that institutions supervised by the Ministry of the Interior of the Republic of Latvia hide their accidents less frequently (or do not hide at all). Thus, it is probable that only every $10^{th}$ workplace accident that takes place in enterprises of Latvia is registered.
- Some studies comparing data on workplace accidents in Latvia with other EU Member States show that in Latvia up to 40 times less accidents have been registered.

Extended and complicated documentation of workplace accidents and coordination with the State Labour Inspectorate are the reasons, why employers do not want to report on and register workplace accidents. Besides, interpretation of the requirements of Cabinet Regulation No. 585 of 9 August 2005 "Procedures for Investigation and Registration of Accidents at Work" differ among inspectors of the State Labour Inspectorate. To raise the workplace accident registration level, following actions, for example, could be undertaken:

- Provide that classification codes are attributed to accidents not by employers, but by specialised inspectors (2-3 in each region), who would simultaneously enter data regarding the corresponding accident into the database of the State Labour Inspectorate (this approach is used in Germany, where employees of insurance companies carry out registration and classification of workplace accidents),
- Simplify accident investigation form. For example, in Demark such a document is a A4 format self-copying form (employer can fill it by hand in copies at once – one for each institution) and is carried to the accident site by state labour inspectors;
- Create an opportunity for registration of accidents on the Internet, for example, home page of the State Labour Inspectorate (this approach is used, for example, in Germany),
- Review actions of health care professionals when a workplace accident is suspected, thus, reducing number of non-reported cases (for example, by linking such cases with payment for provided assistance as established in Germany, where physicians are the ones, who report on workplace accidents, as otherwise they cannot receive remuneration for their services),

- Consider a possibility of defining shared responsibility of employees for hiding workplace accidents (such an approach is applied in Estonia).

For details see Topical Annex "Workplace accidents" and an alternative "Improvement of registration of workplace accidents and early diagnosis of occupational diseases, as well as early rehabilitation of patients with suffering from occupational diseases and workplace accidents".

## 3.4.2 Occupational diseases

According to the Law on Compulsory Social Insurance in Respect of Accidents at Work and Occupational Diseases (adopted on 2 November 1995, in force from 1 January 1997) the term "occupational disease" in Latvia is defined as follows:

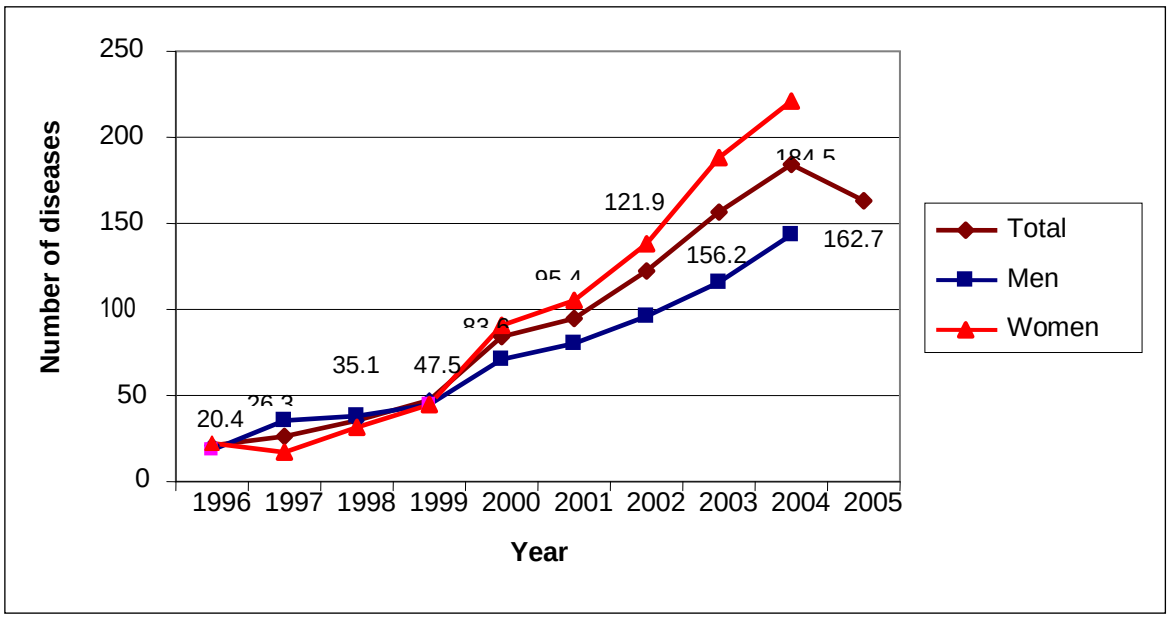
> *Occupational diseases are diseases characteristic to certain categories of employees, which are caused by physical, chemical, hygienic, biological and psychological factors in the working environment.*

In Latvia occupational diseases are diagnosed and codified according to the International Classification of Diseases (see description included in the introduction of this publication); corresponding codes are indicated in brackets after the name of a disease or a group of diseases.

Number of occupational diseases and patients revealed for the first time during a year, has been gradually increasing since 1993 until 2004. In 2005 there was a slight decrease in occupational diseases and patients registered for the first time. Number of first time patients in 2004 exceeded that of 1993 by 9.5 times, but number of first time diagnosis – by 14.5 times.

For adequate comparison of occupational morbidity in Latvia with that of other States, absolute numbers of new cases of occupational diseases were recalculated per 100,000 employees (see Figure 37). In Latvia 184.5 new cases per 100,000 employees were registered in 2004 and 162.7 cases in 2005, while in 2000 occupational morbidity rate was 83.6 cases per 100,000 employees. These numbers are considered coherent to those registered in other States (in 2000 18.1 new cases per 100,000 employees were diagnosed in Russia and 572.0 cases per 100,000 employees in Sweden (Work and health country profiles of twenty two European countries, 2002)). It should be noted that during the latest years occupation morbidity tends to decrease in developed EU countries, while it is still increasing in Latvia. Working conditions in European Union in general are improving and correspondingly lead to decreased occupational morbidity rates. However, in Latvia improved diagnosis of occupational diseases still outpace improvement of working conditions. Situation in Russia can be compared to that of Latvia in 1996 with no improvements in diagnostics.

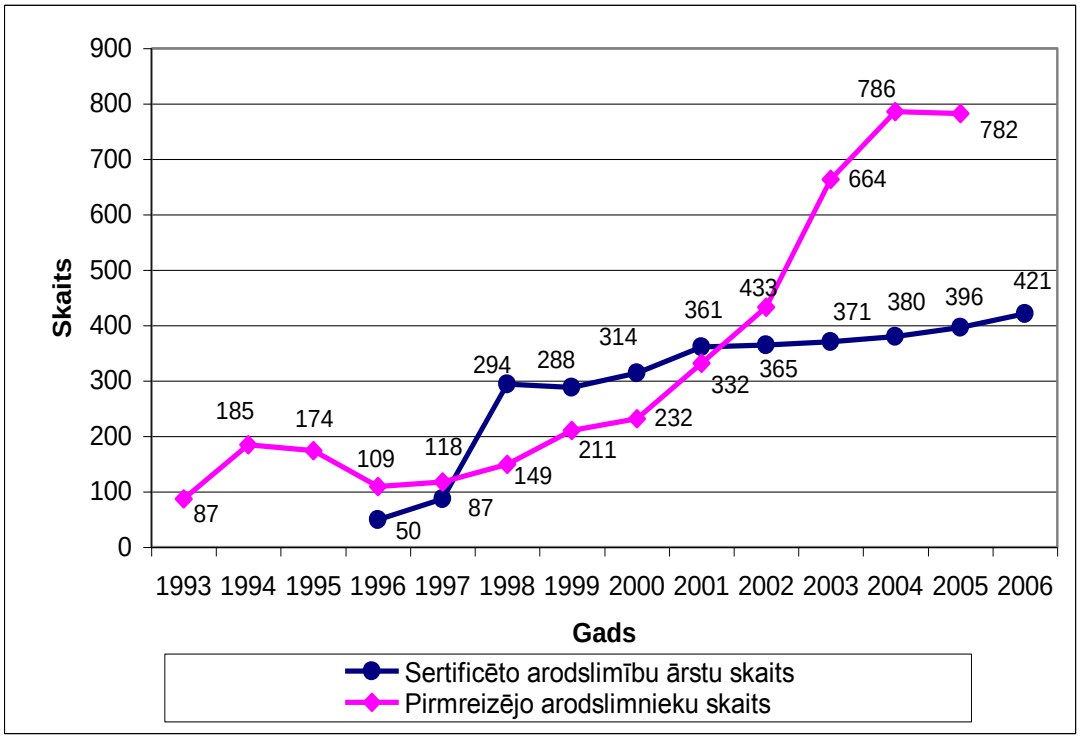
**Figure 37. Dynamics of occupational diseases annually registered for the first time in Latvia per 100,000 employees, 1996 - 2005 (figures indicate total numbers).**




The Latvian State Register of Occupational Disease Patients and People Exposed to Ionising Radiation due to Chernobyl NPP Accident mainly contain chronic forms of occupational diseases, which have developed within many years and do not correlate with exposure duration. Therefore, it can be assumed that increase of occupational morbidity in Latvia is more related to other factors than effects of working conditions. Following other factors could be mentioned:

- Many years occupational morbidity in Latvia was lower than that of other EU states, therefore, it is probable that due to improved diagnosis and registration of occupational diseases number of cases registered for the first time will still grow. However, considering amendments in legislation, it is hard to forecast onset and speed of such increase in future,
- Employees become more aware of occupational risks and signs of occupational diseases; more and more employees are informed on possibilities of receiving financial support in case of occupational diseases (for example, knowledge on occupational risk factors has increased among health care professionals by 7.1%, compared to 2002 (Vanadziņš, 2003),
- Number of certified occupational physicians has increased (see Figure 38), and most probably knowledge of physicians has improved as well (for example, duration of training courses for occupational physicians has increased from 50 hours in 1998 to 300 hours in 2006),
- In spite that implementation of compulsory health examinations seems to be unsatisfactory (see Annex "Compulsory medical examinations"), number of examinations carried out most probably has increased. Unfortunately, there are no reliable data on this issue.

**Figure 38. Dynamics of occupational disease patients registered for the first time and of certified occupational physicians (absolute numbers).**




Note: Data provided by the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital.

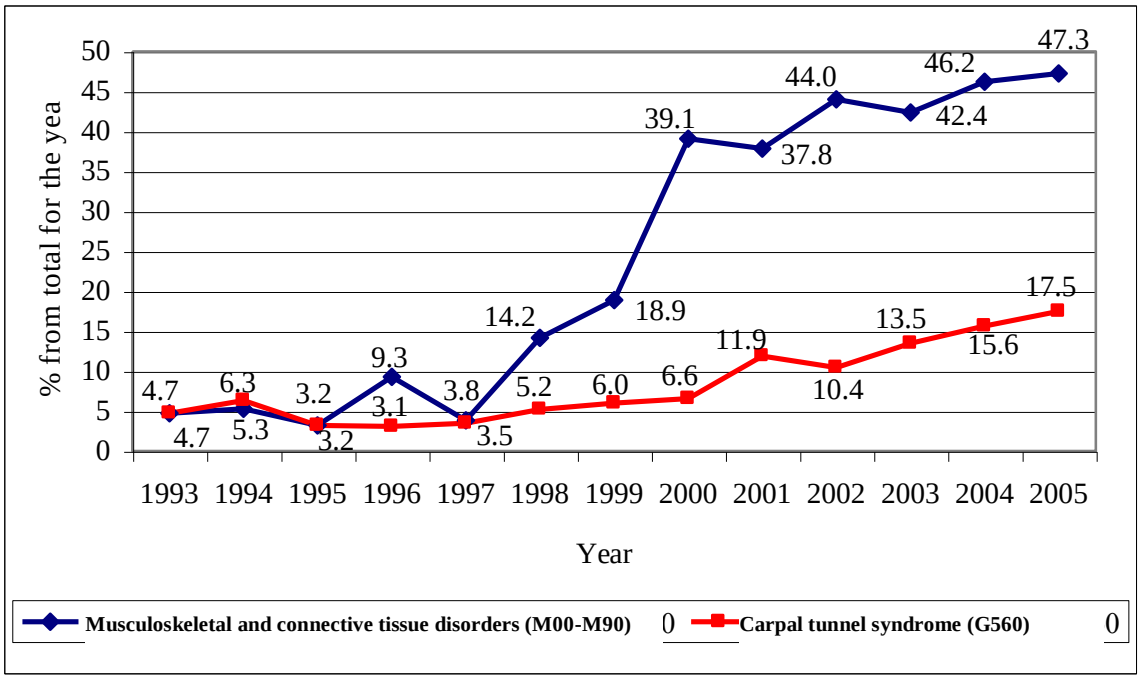
Decrease in number of first time occupational diseases in 2005 could be explained by amendments in legislation regarding compulsory medical examinations. Cabinet Regulation No 86 "On compulsory medical examination and training in providing first aid" (adopted on 3 April 1997) defined that only a certified occupational physician is authorised to issue final conclusion, whether health status of an employee corresponds to respective working conditions, but Cabinet Regulation No 527 "Procedure for carrying out compulsory medical examination" (adopted on 8 June 2004) establishes that such a conclusion can be issued by both a certified occupational physician and a family physician. Incompetence of family physicians could be one of the reasons leading towards decrease of occupational diseases diagnosed for the first time in 2005 compared to 2004 (see Topical Annex "Compulsory medical examinations").

Another essential factor pointed out by experts is insufficient capacity of the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital, which is an obstacle for larger number of occupational patients to be wholesomely examined. Calculations show that Commission of Occupational Physicians of the Centre of Occupational and Radiation Medicine, which is working only once a week, is able to examine only 15-30 patients in one session. Thus, patients have to be listed in a queue. Moreover, the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital even lacks a secretary, who would compile and process data and documents of all those patients.

Similarly to situation worldwide, structure of occupational diseases in Latvia has changed during 1993-2005. Since 1999 there was a dramatic increase in morbidity of diseases caused by physical overloads, such as musculoskeletal and connective tissue disorders, as well as carpal tunnel syndrome, but occurrence of occupational diseases caused by chemical substances and dust has decreased.

In Latvia musculoskeletal and connective tissue disorders (ICD-10 code M00-M90) and carpal tunnel syndrome (ICD-10 code G560) are included in the list of occupational diseases caused by physical overloads (several types of so called ergonomic problems, including lifting of heavy objects, awkward postures, repetitive movements etc.). Number of such disorders has been rapidly increasing since 1993, and they comprise almost half of all occupational diseases (see Figure 39). There was a slight decrease in 2005, which probably correlates with Guidelines on Diagnostics of Spinal Occupational Diseases, which were elaborated by the Society of Latvian Occupational Physicians and adopted in the beginning of the year, as well as with decrease of occupational diseases in 2005 in general.

**Figure 39. Breakdown of occupational diseases caused by physical overloads in Latvia, 1993-2005.**




Note: Data provided by the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital; disease codes correspond to those listed in the 10th revision of the International Classification of Diseases.

For details see Topical Annex "Occupational diseases" and the alternative "Improvement of registration of workplace accidents and early diagnosis of occupational diseases, as well as early rehabilitation of patients with suffering from occupational diseases and workplace accidents".

## 3.4.3. Work related health disorders

Occupational hazards can not only cause specific diseases, but also exacerbate chronic health disorders. The latter are not listed in Latvian legislation; therefore, employees cannot receive compensation for this type of harm. Nevertheless, occupation related disorders affect working ability of an individual and consequently also production process within the enterprise.

33.2% of respondents acknowledged that they do have or have had long-term health disorders, which negatively affect their everyday activities. Most often respondents mentioned chronic musculoskeletal health disorders (upper and lower back pain, aching joints) - 17.9%, cardiovascular and pulmonary disorders - 8.8% and neurological disorders (including headache, bad memory, memory loss, vertigo, arm numbness) – 8.3%. 58.8% of respondents believe that these disorders are related to working environment or working conditions, while additional 6.7% point out that disorders have started after an injury at work. Respondents having musculoskeletal disorders relate their problems to work even more often, i.e., working environment and conditions – 63.9%, workplace injuries – 9.8%. People having cardiovascular and pulmonary diseases, as well as neurological disorders, blame working hazards less frequently (50.0% and 46.3% respectively).

Musculoskeletal diseases are a particular issue, and, according to the data of the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital, they belong to most frequently found occupational disorders in Latvia. One should remember that musculoskeletal diseases are the so-called "painful diseases", which often have only short-term effects on working ability. On the other hand, the Study "Work conditions and risks in Latvia" reveal that ergonomic risk factors, which cause musculoskeletal problems, prevail in the working environment. Employers have to pay more attention to such ergonomic occupational risks as lifting of heavy objects, awkward posture, fast repetitive movements, but the state should focus on informing employers on different ergonomic risk assessment methods and preventive measures, as well as popularise activities that promote healthy and active way of living among employees (for example, sport events). It shall be appreciated that, according to employers' survey, 20% of employers have invested in sport events, but 17% - in heath insurance policies.

Besides, it shall be noted, that work ability of employees decrease already some time before a chronic disorder is diagnosed, which negatively affects their productivity. It is possible to estimate work ability by calculating work ability index. In the frames of the Study "Work conditions and risks in Latvia" this index was for the third time calculated for people working in health care and social care, and it has not significantly changed during four years. Number of respondents with outstanding work ability has slightly increased (by 3.4%). However, it shall be admitted that work ability in Latvia is still considerably lower, compared to other EU States, especially regarding persons with outstanding work ability.

For details see Topical Annex "Work ability index of health care and social care employees".

## 3.4.4. Costs of occupational diseases and workplace accidents

Following costs are related to workplace accidents and occupational diseases:

- To the employer:
    - Costs directly related to the accident (e.g., salary for the affected employee, first aid costs, transportation costs, benefit for temporary work disability for the first 14 days after an accident, (according to the Law on Compulsory Social Insurance in Respect of Accidents at Work and Occupational Diseases, adopted on 1 October 1997), productivity loss of involved employees, costs necessary for elimination of direct danger at the site of the accident, medicinal product costs etc.),

  - Accident investigation costs (for example, time spent for inspection of the accident site, compiling necessary documentation, drawing up a conclusion, registration of the accident at the State Labour Inspectorate, site photography etc.),
  - Damage costs (direct costs related to damaged equipment, exchange of damaged equipment, spare parts; time spent for assessment of damage and evaluation of recovery options etc.),
  - Substitution costs (time spent for evaluation of the situation – contracting of a new employee or substitution by a person already employed at the enterprise, selection of employees, communication costs, training costs, decreased productivity of new personnel etc.),
  - Lost productivity costs (interruption of production process on the day of the accident and during investigation of the accident, decreased productivity of involved personnel, repetitive instruction of personnel, foregone profit etc.);
- To the employee:
  - Recovery costs (until the diagnosis is related to work),
  - Lost income due to absenteeism or due to permanent work disability or invalidity etc.
- To the State (from the Special Budget for workplace accidents of the State Social Insurance):
  - Temporary work disability allowance from the moment occupational disease is diagnosed until full recovery or until a conclusion on permanent loss of work ability (according to the Law on Compulsory Social Insurance, adopted on 17 November 1997),
  - Temporary work disability allowance starting 14 days after the workplace accident (according to the Law on Compulsory Social Insurance in Respect of Accidents at Work and Occupational Diseases, adopted on 1 October 1997),
  - Compensation for loss of work ability, medicine, rehabilitation etc.

**Costs to the employer and employee.** As mentioned above, workplace accidents and occupational diseases result in costs to the employer. However, no reliable data are available in Latvia on the amount of costs, in spite that legislation regarding workplace accident investigation provides that employers shall calculate such costs (according to Article 42 of the Cabinet Regulation No 585 of 9 August 2005 "Procedures for Investigation and Registration of Accidents at Work"). The Study "Work conditions and risks in Latvia" revealed that only 43.0% of employers have calculated direct costs related to workplace accidents. It means that less than a half of accidents are investigated and registered in compliance with existing legislation. Besides, it also means that there are no credible data on what are the real costs of workplace accidents to the employer.

No data are available on what are the costs of workplace accidents or occupational diseases to employees, who have suffered from workplace accidents or are registered as occupational disease patients.

**Costs to the State.** In all cases of legal employment Latvian legislation establishing compulsory social insurance in respect of accidents at work and occupational diseases guarantees social security of employees. State Social Insurance Agency ensures to the employee, who has suffered from workplace accidents or an occupational disease, coverage of treatment, rehabilitation and other related costs, as well as compensation for permanent loss of working ability.

In case occupational disease is approved or a workplace accident is investigated and registered in compliance with existing legislation, employee is entitled to receive:

- Benefit for temporary work ability loss (for a period not exceeding 52 calendar weeks, 80% of the average monthly salary subject to insurance contributions),
- Compensation for loss of work ability (taking into account the level of lost working ability of the insured person as a result of the occupational harm and the average monthly salary subject to insurance contributions),
- If the determined permanent loss of ability to work falls within the range of 10 – 24% for an insured person, the State Social Insurance Agency may pay to the insured person a lump sum benefit instead of compensation for the loss work ability.

Occupational disease patient or a person, who has suffered from workplace accident, is entitled to receive following services for free:

- Additional costs related to treatment process and services,
- Rehabilitation and retraining costs,
- Purchase and maintenance of technical aids,
- Transportation costs necessary for visiting a health care (treatment or rehabilitation) institution, as well as travel expenses of his/her companions,
- Care taking of the insured person, if he/she cannot take care of himself/herself and needs permanent help of another person.

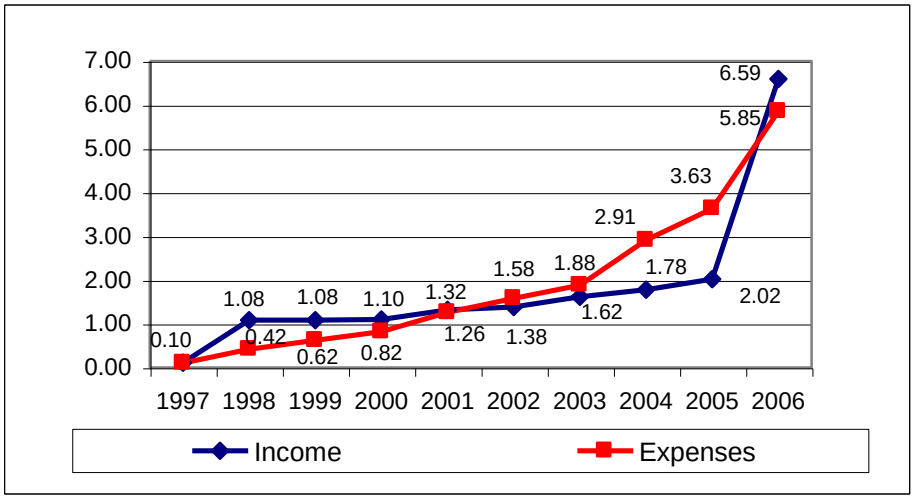
If an accident at work or an occupational disease has resulted in the death of an insured person, his/her family members receive:

- Compensation for the loss of a provider (to family members who are unable to work),
- A funeral benefit.

Costs that occur in case of an accident at work or an occupational disease are covered from the so-called Special budget for workplace accidents. This budget comprises contributions of employers for occupational accident and disease insurance and is managed as a special fund by the State Social Insurance Agency.

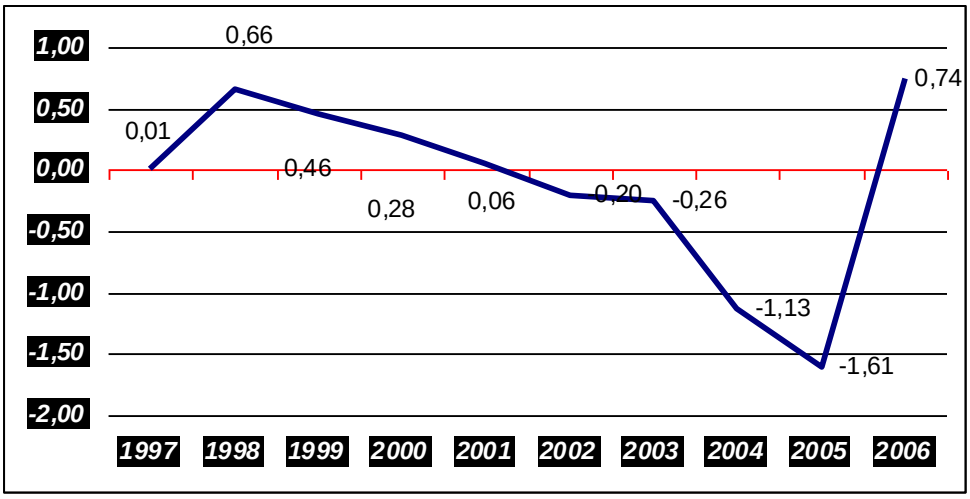
By the end of 2005 it was obvious that insurance costs (insurance indemnities) exceed insurance contributions to the Special Budget (see Figure 40) and correspondingly expenses of this fund exceed income (budget deficit by the end of 2005 was 1.61 million lats – see Figure 41). Therefore, when social insurance premium rates were calculated for 2006 (Cabinet Regulation No. 968 of 20 December 2005 "Regulation on breakdown of state social insurance premium rates per social insurance categories in 2006), breakdown of social tax rate was changed as contribution to the Special Budget for workplace accidents was raised from 0.09% to 0.25%.

**Figure 40. Income and expenses of the Special Budget for workplace accidents, million LVL.**




Note: budget forecast is included for 2006.

**Figure 41. Budget surplus/deficit for the Special budget for workplace accidents, million LVL.**




Note: budget forecast is included for 2006.

In nearest future measures have to be taken to ensure increase of budget income, because decrease of expenses is not prospective due to following reasons:

- Rapid increase of occupational disease patients (see Topical Annex "Occupational diseases"),
- High proportion of unregistered workplace accidents (see Topical Annex "Workplace accidents"),
- Low number of people, who apply for benefits to the State Social Insurance Agency (e.g., funeral benefits) (it is expected that these numbers will rise along with awareness of people),
- Number of employers, who have paid compensations to the affected employee or his/her family, or to a family in case of employee's death (it is expected that these numbers will rise along with awareness of employers),

- Breakdown of additional costs (expenses related to medicaments is rapidly increasing, while less resources are spent for medical and social rehabilitation).

It shall be noted that present costs are mostly related to fighting the consequences (treatment of people suffering from workplace accidents and occupational diseases) rather than preventive measures and rehabilitation (medical, social and professional rehabilitation, which would return employees to labour market after retraining). To improve labour market, the focus shall be switched from treatment to rehabilitation. Early diagnosis of occupational diseases is essential, for example, during compulsory medical examinations. This would increase efficacy of treatment and rehabilitation measures and, thus, prevent cases of disability. This, in its turn, will reduce necessity for long-term compensations from the Special Budget for workplace accidents to be paid in case of permanent loss of work ability.

For details see Topical Annex "Compulsory Social Insurance in Respect of Accidents at Work and Occupational Diseases".

# 3.5. Social dialogue on occupational health and safety

## 3.5.1. Representatives of employees

To maintain a social dialogue between employers and employees, the latter are entitled to nominate following representatives:

- Authorised employee representatives, who represent employees regarding legal labour relations,
- Trusted representatives, who represent employees regarding occupational health and safety issues,
- Trade union representatives, who deal with legal employment rights and with health and safety issues.

Opinion of employers. According to employers' opinion, employees of 8.7% of enterprises have their authorised employee representatives, 3.7% have trade union representatives and 9.1% have trusted representatives. There is a direct correlation between nomination of representatives and size of an enterprise, i.e., the larger is the enterprise, the larger is the likelihood of having a representative. This means that social dialogue is better developed in large enterprises (see Table 8).

**Table 8. Presence of authorised employee representatives, trade union representatives and trusted representatives in enterprises and institutions according to the opinion of corresponding employers.**

| Representatives | Number of employers (%), who have mentioned presence of employees representative, considering number of employees in the enterprise | | | |
|---|---|---|---|---|
| | 1-9 | 10-49 | 50-249 | 250 and more |

| Representatives | Number of employers (%), who have mentioned presence of employees representative, considering number of employees in the enterprise | | | |
|---|---|---|---|---|
| | **1-9** | **10-49** | **50-249** | **250 and more** |
| Authorised employee representatives | 4.9 | 15.6 | 29.1 | 46.1 |
| Trade union representatives | 0.6 | 7.4 | 27.4 | 36.0 |
| Trusted representatives | 4.6 | 18.8 | 31.9 | 37.8 |

Note: employers survey data, n=1058.

Formal (elected) representatives probably ensure that opinion of employees is considered. There is also a direct correlation between nomination of representatives and age of an enterprise, showing that social dialogue is less developed in new enterprises.

Employers of enterprises, where trade union representatives, authorised employee representatives or trusted representatives exist, were asked to name issues that are discussed with these representatives. 18.6% of respondents had difficulties with answering to this question, and this probably indicates that there is no efficient social dialogue. Other respondents (employers) have mentioned following issues:

- Work conditions – 49.2%,
- Salary – 29.4%,
- Working hours, overtime work – 23.2%,
- Additional payments, premiums and privileges– 17.1%,
- Results of occupational risk assessment – 14.4%,
- Vacations– 13.2%,
- Employment contracts – 8.7%,
- Job management, strategy and results –6.6%,
- Health, health care, insurance – 4.0%,
- Purchase of spectacles for those working with computers – 2.1%,
- Protective equipment – 5.2%,
- Recreation and leisure time activities of employees – 1.8%,
- Equipment, materials, tools – 1.4%,
- Other issues – 4.8%.

**Opinion of employees**. According to employees' opinion, 8.0% of enterprises have their authorised employee representatives, 10.5% have trade union representatives and 8.5% have trusted representatives. Like in employers' survey, there was also a direct correlation between nomination of representatives and size of an enterprise, i.e., the larger is the enterprise, the larger is the likelihood of having a representative. This means that social dialogue is better developed in large enterprises (see Table 9).

**Table 9. Presence of authorised employee representatives (represent employees regarding legal labour relations), trade union representatives and trusted representatives (represent employees**

**regarding occupational health and safety issues) in work places according to the opinion of corresponding employees.**

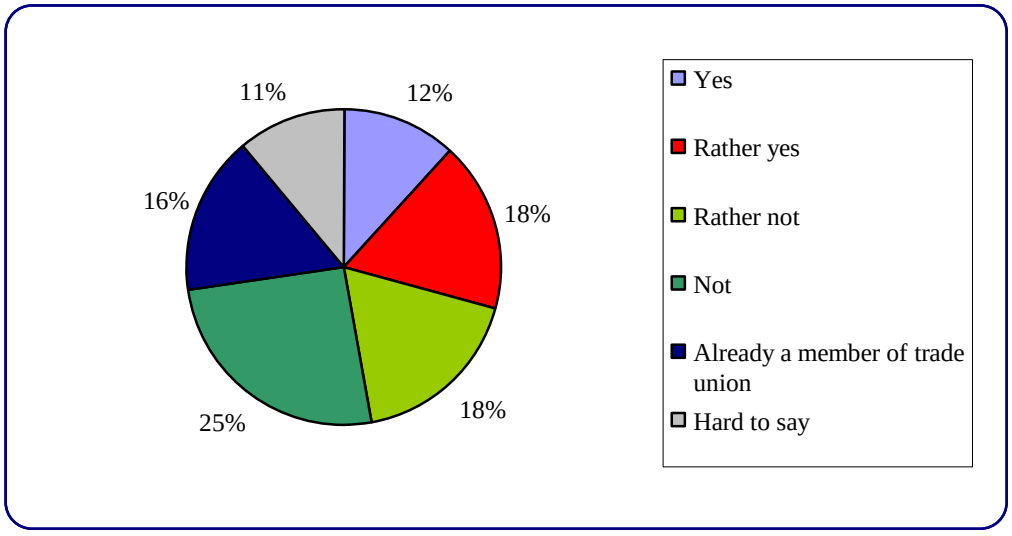
| Representatives | Number of employees (%), who have mentioned presence of employees representative at wok place, considering number of employees in the enterprise | | | | |
|---|---|---|---|---|---|
| | **1-9** | **10-49** | **50-249** | **250 and more** | **Hard to say** |
| Authorised employee representatives | 6.5 | 14.6 | 28.5 | 41.1 | 18.0 |
| Trade union representatives | 8.2 | 24.4 | 35.8 | 60.7 | 32.4 |
| Trusted representatives | 5.5 | 15.3 | 24.8 | 38.8 | 21.4 |

Note: employees survey data, n=2455.

The results reveal a trend that there is less probability to have employees' representative in enterprises, where salaries are "paid in envelopes", i.e., avoiding taxes.

The survey shows that there is no single opinion regarding trade unions. Respondents, which do not belong to any trade union, seem to be more sceptical (see Figure 42). In average 29.2% of employees would prefer membership in a trade union ("Yes" and "Rather yes").

**Figure 42. Readiness of employees for joining trade unions.**




Note: employees survey data, n=2455.

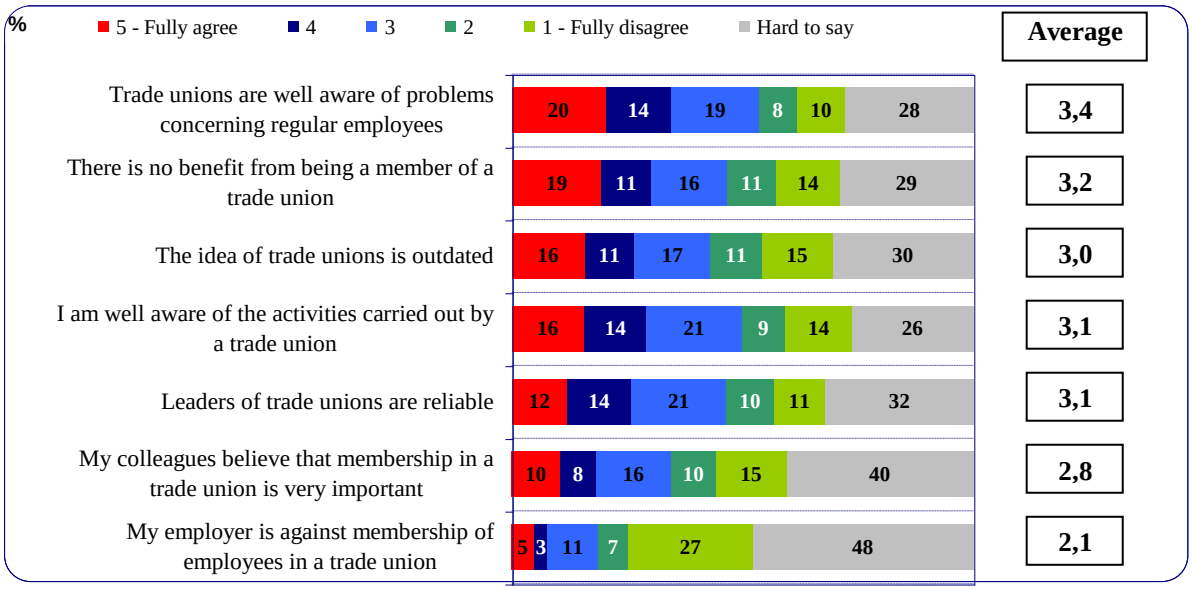
According to the opinion of employees, most members of trade unions belong to educational sector (52.6%), enterprises dealing with electricity, gas and water supply (38.8%), as well as health and social care institutions (28.8%)

Similar proportion of both men (30.9%) and women (27.8) are positively minded regarding trade unions. There is no mayor difference among age groups as well (18-24 years – 27.4%, 25-34 years – 27.7%, 35-44 years – 30.3%, 45-54 years – 33.8%, 55-74 years – 24.0%). On the other hand,

membership in trade unions increases with age (18-24 years – 3.8%, 25-34 years – 12.8%, 35-44 years – 15.0%, 45-54 years – 19.9%, 55-74 years – 23.7%). There are no differences regarding ethnical background of respondents. There is a larger proportion of members of trade unions among employees of public sector (36.3%), compared to that of private sector (5.4%) and non-governmental organisations (15.4%). Most respondents, who would not like to join trade unions, work in private sector (49.5%). Besides, membership in trade unions increases with the size of an enterprise (1-9 employees – 4.8%, 10-49 employees – 14.2%, 50-249 employees – 18.5%, 250 and more employees – 31.8%), but unwillingness to join trade unions decreases (1-9 employees – 54.6%, 10-49 employees – 45.8%, 50-249 employees – 42.2%, 250 and more employees – 27.1%).

All respondents were asked to agree or disagree with different statements regarding trade unions in the range from 1 to 5, where 1 means "fully agree" and 5 means "totally disagree" (see Figure 43).

**Figure 43. Assessment of trade union activities according to employees' survey.**




Note: employees survey data, n=2455.

It is obvious that many respondents found it difficult to answer questions on trade unions. This means that respondents lack real understanding, opinion or experience regarding activities of a trade union.

## 3.5.2. Suggestions of employees

**Opinion of employers**. Only 5.4% of surveyed employers admitted that employees have had frequent suggestion on issues regarding legal labour relations and occupational health and safety. 20.7% of surveyed employers mentioned some suggestions presented by their employees, but 73.0% had not received any suggestions at all. 0.8% of employers found it difficult to answer this question. These data indicate that employees are not active in discussing issues regarding legal labour relations and occupational health and safety. The most active employees belong to enterprises dealing with electricity, gas and water supply (54.2% of last year employees have had any proposals), manufacture of basic metals, fabricated metal products, machinery and equipment (42.9%), manufacture of food

and beverages (36.8%), educational establishments (36.0%), manufacture of wood, products of wood and cork, and furniture (36.0%). The least active employees belong to enterprises dealing with fishery (20.0%), construction (20.1%), agriculture, hunting and forestry (22.0%), health and social work (26.5%). Employees of larger enterprises are more active than those of smaller ones (1-9 employees – 18.6%, 10-49 employees – 43.3%, 50-249 employees – 60.7%, 250 and more employees – 71.8%), which is probably due to a better social dialogue in larger enterprises. The older the enterprise, the higher is the activity of its employees (enterprises founded until 1990 – 41.3%, from 1991 to 1995– 26.5%, from 1996 to 2000 – 28.4%, from 2001 to 2005 – 21.6%).

Employees have made following suggestions to their employers: in 68.8% of cases there were suggestions on occupational health and safety, in 28.4% - on social conditions, premises, surrounding area, smoking area, in 14.0% - on legal labour relations (contract, salary etc), in 3.3% - on social security (health insurance etc.), in 3.3% - on work management, in 0.4% - on fire security, in 3.1% - on other issues. This reveals that occupational health and safety is one of basic issues of social dialogue in Latvia.

At first authors of the Study assumed that the main reason, why employers do not consider opinion of employees, is position of employers meaning that they do not listen to the opinion of employees or do not take a note of such an opinion. However, employers' survey shows that they are ready to consider opinion of employees. Employers were asked to estimate their reaction on suggestions regarding improvements of work environment in the scale from 1 to 10, where 10 means "I do fully consider", but 1 – "I do not consider at all". The average result was 8.1. The rating increases (i.e. employers pay less attention to the opinion of employees) with the age of the enterprise (average for enterprises founded by 1990 was 8.3, form 1991 to 1995 – 8.2, form 1992 to 2000 – 8.1). Suggestions of employees are more often taken into account within private sector (8.2) compared to public sector (7.9).

**Opinion of employees**. Activity of making suggestions was also analysed among employees. They were asked, if they have made any suggestions to their employers regarding occupational health and safety or legal labour relations during the last year. 7.8% of respondents had made such a suggestion once, 18.9% - several times, 72.1% - never (1.2% found it difficult to answer this question). Activity of people working in mining and quarrying enterprises (10.3%) and construction enterprises (19.8%) was lower (suggestions made once or several times), but it was higher in educational institutions (38.7%) and enterprises dealing with manufacture of basic metals, fabricated metal products, machinery and equipment (31.9%). Speaking about other fields, 22.8-28.3% of respondents had made any suggestions. There is no big difference between men (27.5%) and women (26.0%).

More suggestions were made by employees between age of 25 to 34 years (31.4%) and 35 to 44 years (31.3%), less – by younger (18 to 24 years – 25.1%) and older persons (45-54 years – 23.6%, 55 to 74 years – 20.3%). Latvians (28.4%) seem to be a little bit more active than Russians (24.6%) and people representing other ethnic groups (22.5%). Activity of respondents regarding suggestions on occupational health and safety, as well as on legal labour relations, rise with their educational level (employees having complete primary or incomplete elementary education have made suggestions in 11.9% of cases, complete elementary or incomplete secondary education – 17.3%, complete secondary education – 19.9%, secondary vocational education - 25.3%, higher education - 38.6%). 29.8% of respondents working in public sector admit that they have made any suggestions, 24.7% - of private sector, 30.9% - of non-governmental organisations. Regardless of the size of the enterprise, 23.8%-27.7% of respondents have had any suggestions on occupational health and safety or on legal labour relations. Activity of respondents grows with their salary (up to 90 LVL – 20.7%, 91-150 LVL –

23.1%, 151-250 LVL – 28.6%, 251 LVL and more – 37.0%). Existence of illegal "envelope salaries" does not really affect number of suggestions (never get an envelope salary – 26.3%, some times get an envelope salary – 29.9%, get an envelope salary every month – 28.8%). Respondents, who have been working in the enterprise for less than 12 months, mentioned less suggestions regarding improvement of workplaces (up to 12 months – in 19.1% of cases, 1 to 5 years – 27.5%, 5 to 10 years – 33.2%, 10 to 15 years – 26.2%, more than 15 years 27.6%). Activity of respondents coming from Riga (28.4%), other town (26.2%) or village and countryside (24.2%) is almost the same.

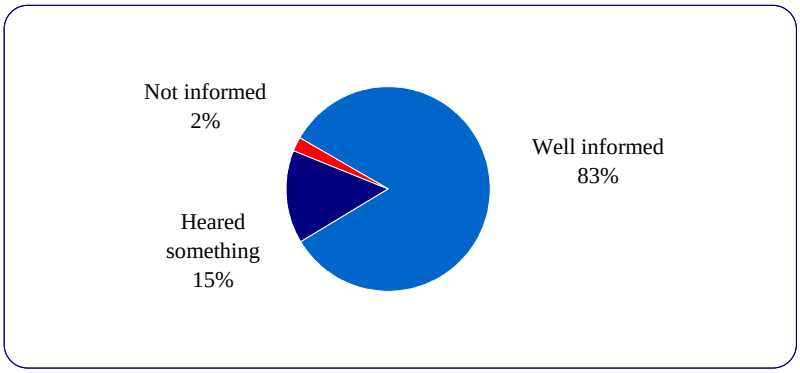
# 3.6. Occupational health and safety – awareness, education and training

Success of measures to improve occupational health and safety conditions, to reduce workplace accidents, and occurrence of occupational diseases is significantly influenced by attitude and understanding of each individual worker. Therefore, it is important to increase occupational health and safety awareness and, hence, also to stimulate development of preventive attitude towards these issues.

## 3.6.1. Public awareness

At first glance, direct and immediate analysis of the Survey of Latvian permanent residents presents a generally good picture about occupational health and safety awareness among general population – 97.7% of the respondents mentioned that they are aware about these issues (see Figure 44). The main risk group (respondent groups with lowest awareness levels) are those aged between 65 and 74 years (10.8%); and respondents with elementary education or uncompleted primary education (13.8%). The main reason for so low awareness level among the aged is perhaps the fact that this group includes retired people, who have not worked for the last 5 years; while for those with elementary education or uncompleted primary education – the fact that they are not yet part of the active workforce. Another risk group is young people (18-24 years old), but it is expected that awareness levels among this group will increase due to campaigns carried out during the Week of Europe „Safe beginning" in 2006.

**Figure 44. Occupational health and safety, and occupational risk awareness among general population.**



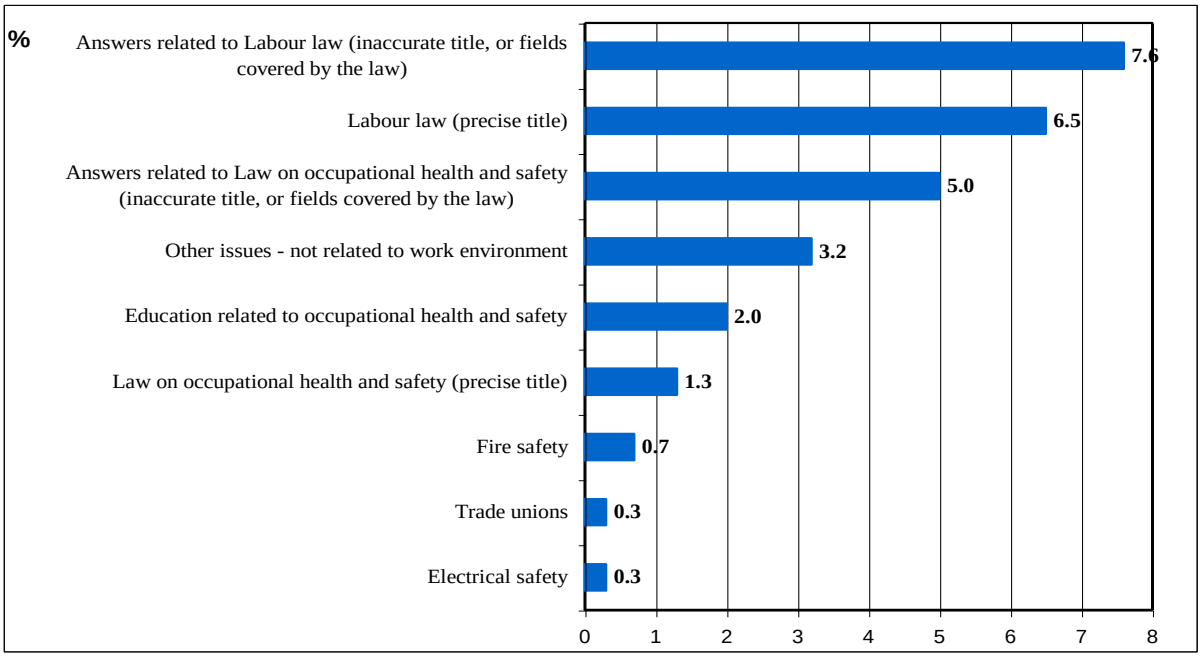

Note: Data obtained during Survey of Latvian permanent residents, n=1015.

At the same time, when those respondents, who regarded themselves as being informed about work conditions and environment issues, were asked to name any relevant legislation, 56.0% indicated that they did not know any and additional 24.8% of respondents had difficulties to name any. Only 19.2% of all respondents could either give an exact name of a specific piece of legislation, or an area regulated by a specific piece of legislation (e.g., occupational health and safety education and training; workplace safety instructions, etc.). No significant differences are found between men and women (18.9% and 19.4% respectively could name at least one regulation). The main risk groups are those aged 15-24 years (17.6%) and 65-74 years (8.5%). Low awareness levels are related to the fact that number of not working people within these two groups is higher as compared to other age groups (pupils, students, and retired people). With increase of education levels also the number of respondents, who are able to name a piece of legislation, increases (elementary education or uncompleted primary education - 7.1%; primary or uncompleted secondary education – 5.5%; secondary education – 17.1%, secondary vocational education – 18.8%, higher education – 41.5%). This finding suggests that awareness measures should target specifically those with lower education and, hence, information materials should be short, simple and brief.

The answers were grouped according to the following topics of working conditions and environment:

- Occupational health and safety training (workplace safety instructions, training, others);
- Answers concerning the Labour Law (respondents can not give an exact name of the law, or use the old name of the Law, but can name some areas regulated by the Law);
- Answers concerning the Labour Law (respondents are able to give exact name of the Law);
- Answers concerning the Labour Protection Law (respondents can not give an exact name of the law, or use the old name of the Law, but can name some areas regulated by the Law);
- Answers concerning the Labour Protection Law (respondents are able to give exact name of the Law);
- Fire safety;
- Safe practices, when using electric appliances and installations;
- Trade unions;
- Other topics not related to working environment.

**Figure 45. Ability of informed part of population to name specific pieces of legislation in the area of occupational health and safety, and legal labour relations.**

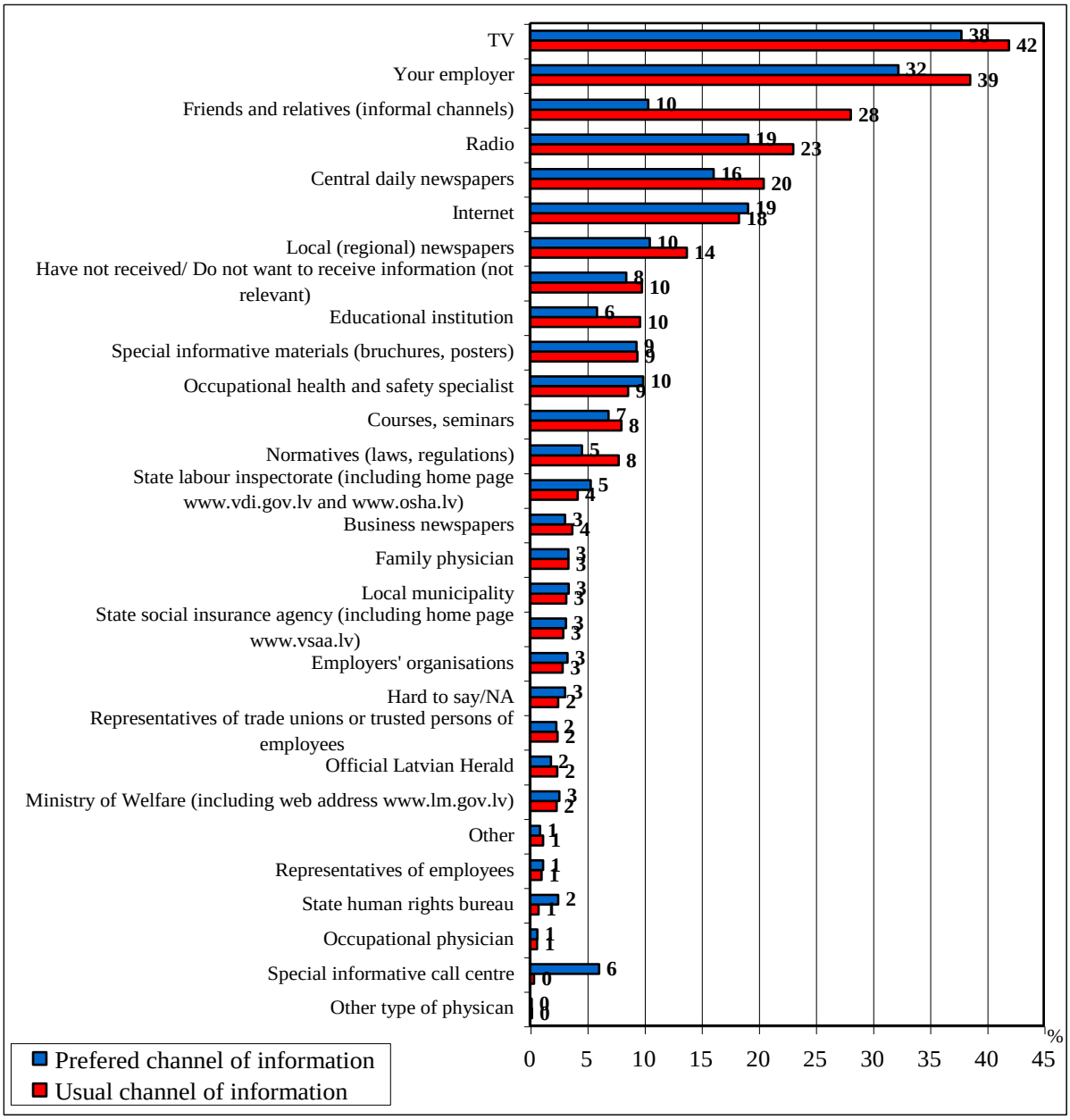



Note: Data obtained during Survey of Latvian permanent residents, basis – population informed about working conditions and environment related issues, n=835.

As it can be seen in Figure 45, public awareness about legislation on legal labour relations is higher than awareness about occupational health and safety requirements. Of course, one should not expect members of general public to give exact names of specific pieces of legislation, or to explain the contents of legislation; however, low numbers of respondents, who are aware about these issues, indicate that awareness building activities on the new requirements in these areas (occupational health and safety; legal labour relations) have not been sufficient. As the result also compliance with the relevant legislation in companies is low (for more details please refer to the Topical Annexes „Occupational risk factors and their assessment" and „Information, training and consulting employed workers and representatives of employees").

According to the survey, the preferred channels of information are TV and employers. This should be taken into account when planning information and awareness building campaigns and other activities (see Figure 46).

**Figure 46. Channels of information preferred by general public.**




Note: Data obtained during survey of Latvian permanent residents, n=1015.

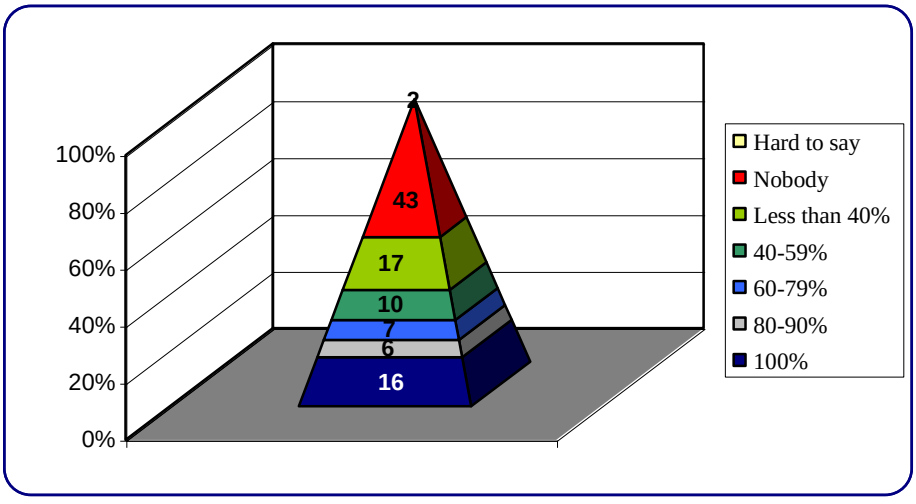
As it can be seen from Figure 46, the preferred channels are TV, employers, as well as informal channels – relatives, friends and acquaintances. On a less optimistic note it should be mentioned that only 38.6% of the respondents use their employer as a source of information and additional 8.6% - their occupational health and safety specialist. This indicates that companies do not inform their workers sufficiently, or employees do not trust that information. The most frequently mentioned source of information is TV (42.0%). Therefore, this channel should be used widely to explain occupational health and safety issues also in future. In addition, the general public would prefer to access more information from the Internet compared to current situation (internet in general, as well as specialised websites: www.vdi.gov.lv and www.osha.lv). Another channel requiring a special attention is a designated telephone number (call-in line). Currently the State Labour Inspectorate operates a

designated call-in line, through which anybody may call and receive answers to their questions on occupational health and safety, and legal labour relations. According to the data of the State Labour Inspectorate 19932 enquiries were answered in 2005, of which 2930 (or 15%) were related to occupational health and safety. However, according to the estimates of "Lattelecom" Ltd., this constitutes only 10-15% of all dialling attempts. According to the survey of Latvian permanent residents, only 0.4% of respondents have used this service, but the number of those willing to use it is significantly higher – 6.1%. This indicates the need to improve operations of the call-in line. Possible options could include: sorting of incoming calls according to topics (legal labour relations, occupational health and safety, dangerous equipment and machinery, etc.); or in addition to the call-in line, to establish also a "call-in centre" – possibly within the Information Centre of the National Institute of Occupational Heath and Safety to be established soon. This would leave the State Labour Inspectorate with receiving complains and the "first degree" calls.

## 3.6.2. Awareness levels among employers

Employers were asked to estimate the percentage of their employees exposed to any occupational risks (chemical, physical, ergonomic, psychosocial, risks of injuries, others) – see also Figure 47. The purpose of asking this question was not to estimate number of workers subject to occupational risks, but to establish awareness levels among employers concerning presence of occupational risks in any working environment. The point is that there is actually none risk free workplace/work method in Latvia. (Even if everything feasible has been done to reduce risks, occupational risks cannot be totally eliminated and are still present within the working environment. For example, if it has been ensured that concentrations of chemicals in working environment do not exceed the occupational exposure limit values, these chemicals are still present in the air and employees are still inhaling them. Similarly, when driving a vehicle even if one fully complies with the Road Traffic Regulations, risk of traffic accident is still there).

**Figure 47. Number of employees in Latvian companies subject to occupational risks – as perceived by their employers.**




Note: Data obtained during survey of employers, n=1058.

Practically there is not a single risk free workplace/work method, however, almost half of all respondents (43.0%) indicated that none of their employees are subject to any occupational risk. Further, the same respondents were asked how many employees work with a computer for a minimum of 2 hours per day; 60.9% of respondents answered that at least one employee, while only 39.1% - indicated that none. This again highlights low understanding among employers about possible impacts of occupational risks on health of their employees. Regardless of working environment in any office, employees are exposed to increased vision exertion and physical overload – because of working in awkward posture and local tension of muscles. In addition to that there is a possibility to be exposed to unsuitable microclimate, unsuitable lighting, psychosocial risks, etc.

## 3.6.3. Awareness levels among employees

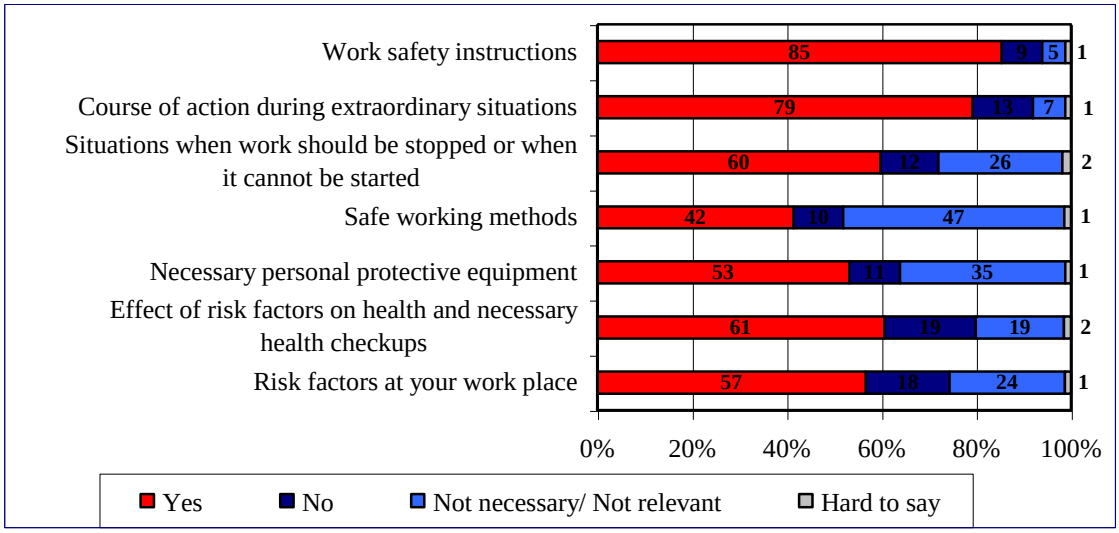
One of the most significant problems related to awareness of employees is that only 61.2% of employers have fulfilled their tasks properly - ensured that their employees are aware about occupational risks at their workplaces (chemical, physical, ergonomic, psychosocial, trauma risks, others). Besides, 17.1% of the respondents (employees) think that issues of such character are not of their concern, which indicates their low awareness and understanding of occupational risks and their impacts on health and safety. This conclusion is further confirmed through answers to the question if the respondents have recently received any information on health impacts of occupational risks and on need to undergo health examinations – 18.6% of the respondents indicated that this question is not relevant to their work or that they do not need such information.

The highest rates of respondents indicating that they have not received information on occupational risks are among those employed in construction (25,5%), manufacturing (23,0%), agriculture, hunting and forestry, (22,3%), manufacture of wood and products of wood, cork and furniture (21,6%). The highest rates of respondents indicating that this question is not relevant to their work are among those employed in education (35.5%) and fishing (28.1%). (Employees in these sectors also have insufficient access to information concerning potential impacts of occupational risks: agriculture, hunting and forestry – 27.5%; construction – 26.9%; manufacturing - 25,9%.) Men perceive that they are slightly better informed about occupational risks than women (62.8% versus 51.6%) and their health impacts (63.2% versus 58.5%). Youth perceive to be less informed than respondents of other age groups (18-24 years – 51.4%, other age groups – between 55,1% and 58,7%; health impacts: 18-24 years – 53.1%, other age groups – between 58,5% and 65,5%). No significant differences were found among respondents with different ethnic backgrounds (ethnic Latvians – 60.2%, Russians – 60.8%, other ethnic groups – 62.5%).

In total more than a half of the employees perceive that they are informed about occupational risks at their company, and their potential health impacts. However, it is expected that in most cases the information they have received has not been sufficient and of good quality – in order to provide correct information one needs to use results of occupational risk assessment that has been carried out in a correct manner. At the same time, the results of the employers' survey reflect that the situation with occupational risk assessments in Latvia is not satisfactory at all; hence, it is likely that quality of information provided to employees is low. Requirement for employers to provide such information to their employees is in force already for several years; therefore, perhaps, the employers need assistance in preparation of simple, short explanatory materials (1 page format) about each of the occupational risk factors. These texts could then be distributed using different channels.

With the regard to topics on which employees have been informed within the last year, the most significant one is workplace safety instructions, which, among others, must bare employee's signature. Upon more detailed questions about the contents of such instructions it was found that in most cases they are just a formality or they do not contain full information (see also Figure 48). Possibly this is partly related to the fact that the current legislation does not contain any minimum requirements for contents of such instructions. Specialists already having or still continuing higher education on occupational health and safety issues regard this aspect as a problem. Perhaps legislation should provide an outline for workplace safety instructions – covering all topics that employees need to be informed about, including the topics identified during this Study (for example, cases when employee should not start a certain operation; when current operation should be abandoned; how to act in a dangerous situation).

**Figure 48. Topics on which employees have been informed at their working place within the last year.**




Note: Data obtained during survey of employees, n=2455.

As it can be seen in Figure 48, 85.4% of respondents have indicated that they have been instructed by means of workplace safety instructions and they have signed for that. In general, this is a good indicator. Not so good results are in agriculture, hunting and forestry (77.9%; besides, 4.5% of employees in this sector think that they do not need such instructions), as well as in construction (80.3%; 5.3% of employees in this sector think that they do not need such instructions). A significant problem is the fact that the least qualified workers (unqualified workforce) have received such instructions less frequently (75.9% against the national average 85.4%). There are differences among respondents of different sectors: public sector – 91.8%, private sector – 82.4%, and non-governmental organisations – 82.4%. The rate of employees, who have received such instructions, increases with the size of companies (1 to 9 employees – 72.9%, 10 to 49 employees – 85.3%, 50 to 259 employees – 91.4%, 250 employees and more – 94.5%). Significant differences occur among employees who receive / don't receive illegal "envelope salaries" (sometimes receive – 74.4%, always receive – 68.6% versus never – 88.8%). The respondents from Riga mentioned such instructions less often (81.0%) as compared to respondents from other cities (88.7%) and villages and rural areas (88.5%).

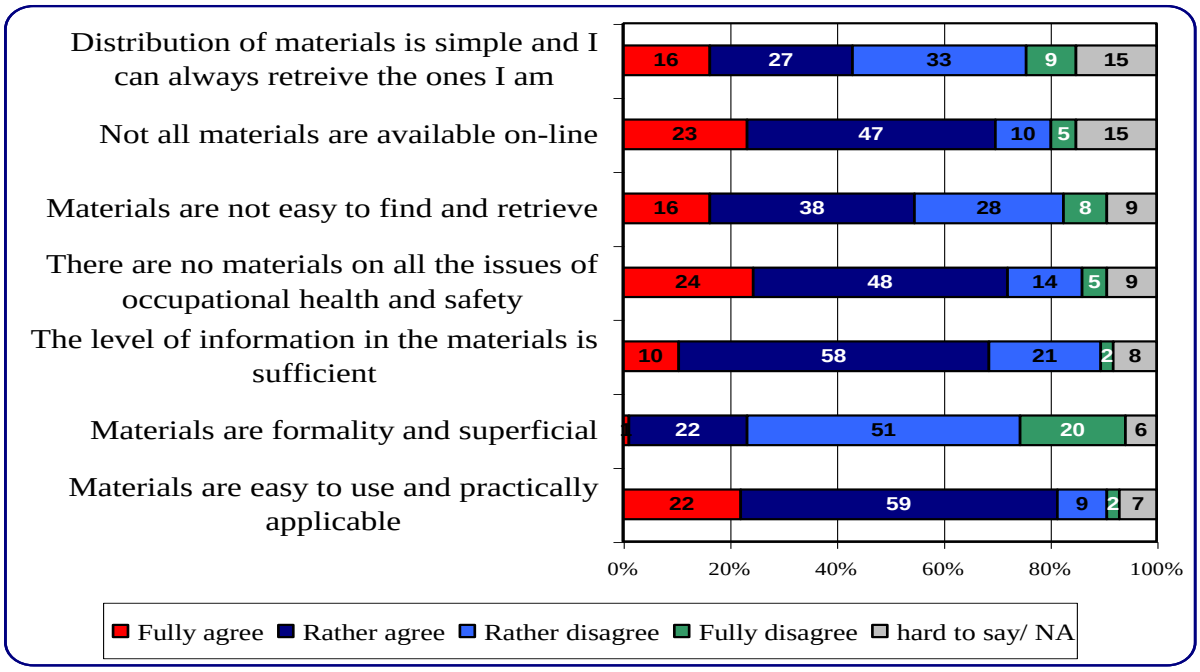
The survey results suggest that the most serious omission in the instructions is the issue on prevention of direct hazards (for example, situations, when employees should not start a certain operation, and when currently performed operations should be abandoned – only 59.8% of respondents were informed, besides 26.2% regard such information irrelevant for their work). Men are informed about such situations more often (69.7%) than women (51.8%).

## 3.6.4. Information materials on occupational safety information and their availability

As it can be seen from the above presented results, generally, public awareness should be regarded as low and not satisfactory, therefore the Study „Work Conditions and Risks in Latvia" attempted to find the causes behind this situation. Over the course of the last 5-6 years several awareness building and information materials have been prepared and distributed in Latvia. However, still, general public is not sufficiently informed about occupational risk assessment requirements and other requirements included in the Labour Protection Law and related regulations. This suggests that conventional channels of information (printed materials, workshops, training courses, others) have not resulted in the expected outcomes, particularly in smaller companies, in private sector and in companies established after the regaining of independence in Latvia.

Over the last few years, occupational health and safety specialists have been involved in assessment and evaluation of printed information materials, they also evaluated availability of these materials (see Figure 49).

**Figure 49. Evaluation of printed and electronic information materials in Latvia concerning occupational health and safety.**




Note: data obtained during survey of occupational health and safety specialists with higher education in the area, n=86.

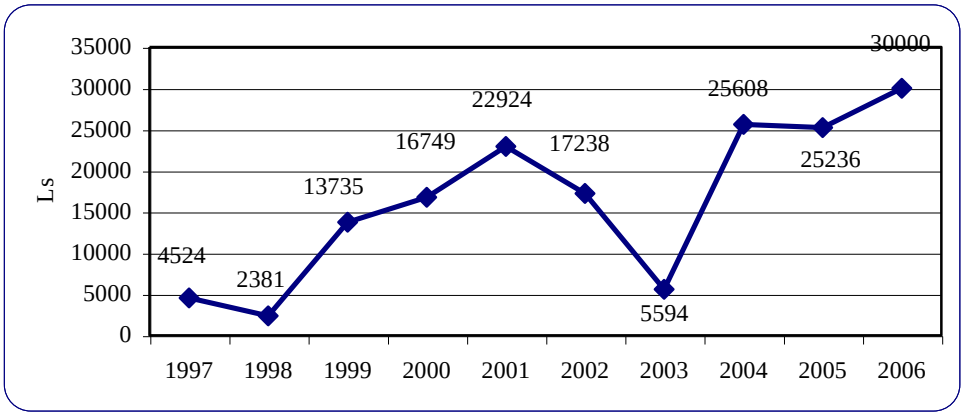
As it can be seen from Figure 49, the materials are considered to be easy to use (70%), of sufficient informative value (59%) and not being just a formality or superficial (61%). However, distribution channels is the most significant problem – 62% of occupational health and safety specialists think that the available materials do not cover all significant occupational health and safety issues, are not conveniently accessible and can not be all retrieved using the same channel (47%), materials are not available through the internet (60%). Besides, only 37% of all respondents agree with the statement that they are always able to obtain the issued materials). All this further suggests that it is necessary to set a certain procedure for distribution of informative and awareness building materials concerning occupational health and safety issues and to ensure that they are freely available (this should include designating persons responsible for placing the materials also on the internet). It is recommended to place such materials on the following websites:

- Ministry of Welfare www.lm.gov.lv;
- Latvian Focal point of the European Agency for Safety and Health at work www.osha.lv;
- State Labour Inspectorate www.vdi.lv;
- State Social Insurance Agency www.vsaa.lv;
- Latvian Employers' Confederation www.lddk.lv;
- Latvian Free Trade Union Federation www.lbas.lv.

Another option to solve the problem is to establish a specialised information centre, which would distribute information materials in cooperation with other information centres (which do not specialise in occupational health and safety).

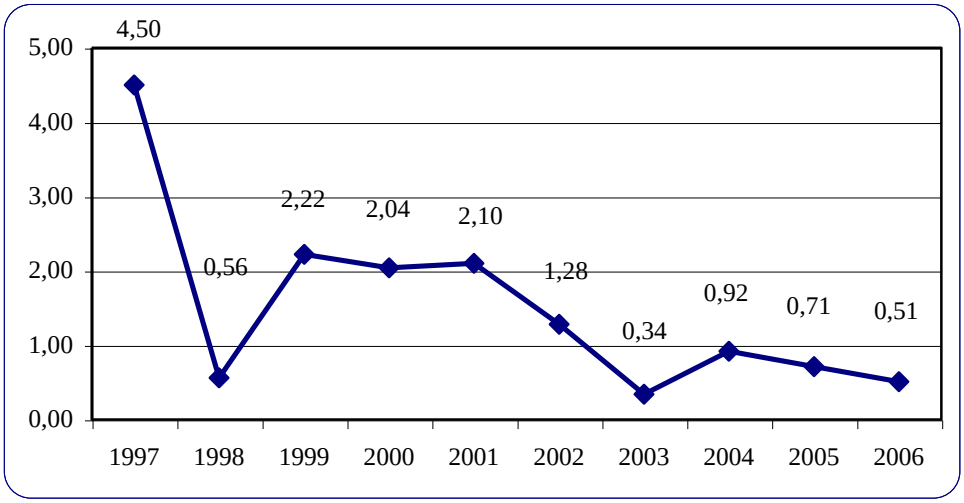
The only regular source of funding for such information materials is the Special Budget for workplace accidents. Its expenditures are planned according to legislation, but it does not follow a specific percentage-wise distribution of budget lines for various needs (see Figures 50 and 51).

**Figure 50. Expenditures for preventive measures from the Special Budget for workplace accidents (Ls), 1997 -2006.**




Note: Data obtained from the forecasted budget for 2006

**Figure 51. Expenditures for preventive measures from the Special Budget for workplace accidents (% of total), 1997 -2006.**




Note: Data obtained from the forecasted budget for 2006

As it can be seen from the two figures, in absolute numbers the expenditures for preventive measures tend to increase. This is a very positive sign. However, percentage-wise against the total budget, the trend is on a decrease. Currently there is no pre-determined percentage for preventive measures; however, in view of the fundamental change in approach towards occupational health and safety (from being effects oriented towards prevention of occupational risks) it is very important to facilitate further penetration of preventive culture at national level. Therefore, it is desirable to legislate a certain constant percentage of expenditures for preventive measures.

During the recent years the Special Budget for workplace accidents has been used to prepare and print a number of information and awareness materials on occupational health and safety:

- "On mandatory health examinations";
- "On occupational safety when working in explosive atmosphere";
- "On occupational safety when working at a height";
- "Consequences in case employees do not comply with occupational safety requirements";
- "On handling of heavy objects in a safe manner";
- "On lifting and handling heavy objects";
- "Workplace parameters (lighting, microclimate, others)";
- "Working with a computer";
- "On occupational health and safety at the start of your employment", others.

A significant obstacle is that most of the materials prepared between 2003 and 2006 were not available in electronic format for a considerable period, while some of the printed materials are available in huge quantities from the State Social Insurance Agency. A possible cause to this is the fact that no procedure has been set at national level for distribution of information materials on occupational health and safety issues in order to ensure their maximum availability for general public. The most efficient channels for distribution of such printed materials are inspections at companies carried out by the State labour inspectors; contacts with employers or their representatives during investigations of

workplace accidents, or registration of dangerous machinery and equipment, or others. However, according to the survey of employers, only in 51.4% of cases labour inspectors have offered some information materials (brochures, guidelines, others). It is also possible to distribute such materials through Latvia Employers' Confederation and Latvia Free Trade Unions Federation. A significant obstacle to this is that a number of materials are not available electronically despite the fact that the internet is the preferred way to receive information regarding occupational health and safety among employers (results of the study of public opinion on work of the Sate Labour Inspectorate, 2005).

It is also important to stress that employees do not receive sufficient information about occupational risks and the potential health effects (see the Topical Annex „Information, training and consulting of employed workers, representatives of employees"), nor about their duties and rights. This suggests the need to prepare simple, short information materials (sheets) and to distribute then using different channels (educational establishments, professional training schools, non-governmental organisations, etc.).

## 3.6.5. Education and training of occupational health and safety specialists, quality of training

Cabinet Regulation No. 323 "On occupational health and safety education and training" (adopted 17.06.2003.) sets the procedure for education and training of occupational health and safety specialists. The same regulation also prescribes procedures for training of trusted representatives, as well as expertise levels for occupational health and safety specialists, and the rights of these specialists corresponding to each of the levels.

Occupational health and safety expertise can be obtained at the two following levels:

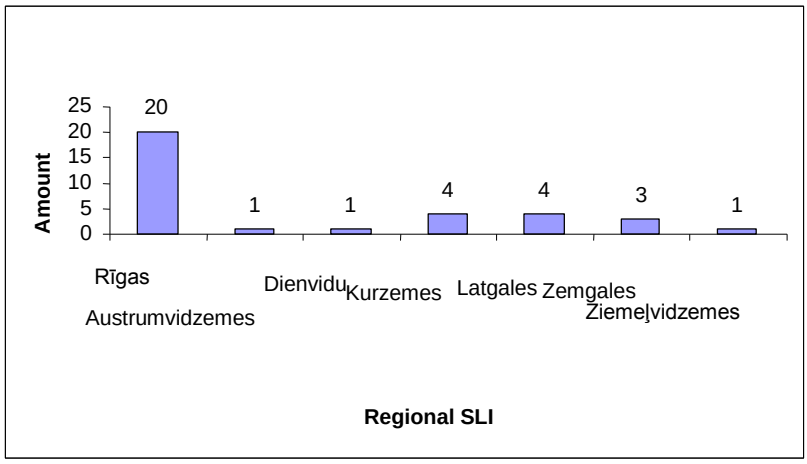
- Basic level – by undergoing a training programme licensed by the Ministry of Education and Science (a total of 160 hours of which 50 hours are theory);
- Higher professional education – by undergoing any education programme accredited by the Ministry of Education and Science, which complies with professional standards PS 0094 "Occupational health and safety specialist" or PS0100 "Senior occupational health and safety specialist".

A total of 46.9% of the employers could not evaluate the quality of basic training, because they had not used it. Those respondents, who mentioned that they had undergone basic training, were asked to evaluate the quality of training against such statements as very satisfactory, rather satisfactory, rather dissatisfactory or very dissatisfactory. The survey results suggest that 16.6% of the respondents find the training very satisfactory, 73.0% - rather satisfactory, 9.0% - rather dissatisfactory, 1.4% - very dissatisfactory.

Analysis across sectors reflects that the most critical respondents were among those in manufacture of wood and products of wood and cork, as well as manufacture of furniture (12.3% assessed the quality of training being rather dissatisfactory or very dissatisfactory), health and social work (12.1%), construction (11.7%), manufacture of food products and beverages (11.5%), manufacture of basic metals, fabricated metal products, machinery and equipment (10.1%). Analysis of answers from the other point of view reflects a trend of employers of smaller companies being more critical towards the quality of training than larger companies (among the employers of companies with 1 to 9 employees 12.2% of respondents evaluated the training as being very dissatisfactory or rather dissatisfactory; 10 to 49 employees – 8.6%; 50 to 249 employees – 6.0%; 250 employees and more – 3.8%). A similar

trend appears analysing the results within the scope of the time when companies were established – among more recently established companies rates of dissatisfaction are higher than among those established longer time ago (among companies established before 1990 – 7.2% of respondents evaluated the training as being very dissatisfactory or rather dissatisfactory; 1991-1995 – 4.0%; 1996-2000 – 11.7%; 2001-2005 – 14.9%). Analysis of the results in the scope of distribution of companies across districts is not feasible due to too small number of enterprises who are not satisfied with training. However, breakdown of the results across the territorial units of the Sate Labour Inspectorate brings to the attention the Southern Region, where 36.3% of respondents indicated that they are either very dissatisfied or rather dissatisfied with training (to compare with Kurzeme Region – 14.9%; Zemgale Region – 14.4%; Riga Region – 8.9%; Northernvidzeme Region – 6.4%, Latgale Region – 5.8%, Easternvidzeme Region – 1.2%). This can be explained by the number of specialised training institutions. If there are not many specialised training institutions in a given region, the existing ones do not face serious competition and standards fall. For example, there is only one training centre in the Southern Region. The number of training centres in each territorial unit of the State Labour Inspectorate is reflected in Figure 52.

**Figure 52. Number of training centres in each territorial unit of the State Labour Inspectorate.**

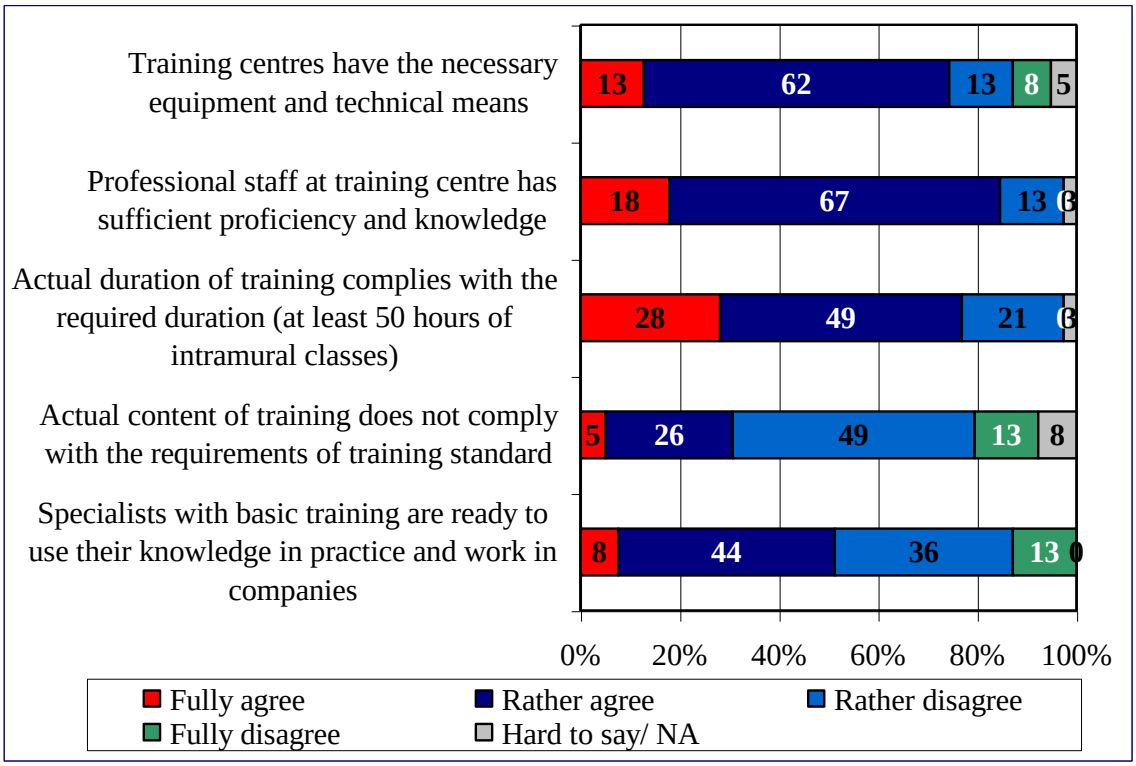



Note: Data sourced from www.osha.lv as per 03.10.2006.

Of all occupational health and safety specialists, who have a higher education in the area or are currently undergoing their studies, 45.3% indicated that they also have undergone basic training. These respondents were further asked to characterise the quality of basic training that they had received (160 hours) – to what extent they agree with the following statements:

- Specialists with basic training are ready to use their knowledge in practice and work in companies;
- Actual content of training does not comply with the requirements of training standard;
- Actual duration of training complies with the required duration (at least 50 hours of intramural classes);
- Professional staff at training centre has sufficient proficiency and knowledge;
- Training centres have the necessary equipment and technical means (see Figure 53).

**Figure 53. Assessment of basic level training programmes (160 hours).**

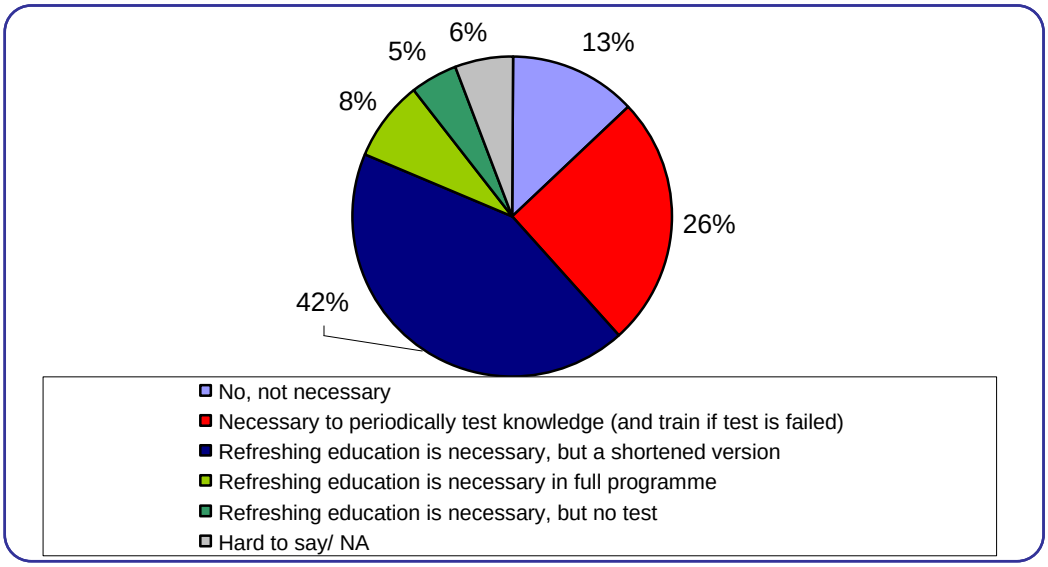



Note: data obtained during survey of occupational health and safety specialists, basis: respondents who have undergone 160 hours of basic training, n=39).

As it can be seen in Figure 53, in general the occupational health and safety specialists are satisfied with the quality of training they have received, but special attention has to be paid to such aspects as actual duration of training (20.5% of respondents think that the actual duration of intramural classes is not the required 50 hours) and compliance of actual content of training with the requirements of training standards (61.5% of the respondents agree or rather agree with the statement that the actual content does not comply with standards and additional 7.7% have difficulties to answer this question). It is important to note that opinions among the specialists differ on whether the specialists, who have received basic level training in occupational health and safety, are ready to put their knowledge in practice and work in companies (51.3% think that they are ready, while 48.7% - that they are not).

The occupational health and safety specialists with higher education in this area were asked a question about necessity to re-test occupational health and safety specialists who have undergone basic training (160 hours). Opinions of respondents differed on what is more necessary – refresher courses (full or shortened programme) or re-tests. However, only 12.8% of respondents think that neither of the two is necessary (see Figure 54).

**Figure 54. Necessity to have re-tests or refresher courses for occupational health and safety specialists (with basic level training – 160 hours).**




Note: data obtained during survey of occupational health and safety specialists, n=86.

To a further question on how frequently the refresher courses or re-tests should be done, the same number of respondents indicated that it should be done once in 3, or once in 5 years (41.9%), but significantly lower number of respondents indicates once in 7 or 10 years (2.3%).

The Study also assessed quality of higher professional education in the area of occupational health and safety. The most significant problems found are limited applicability of knowledge gained during the studies in real life situations; as well as the fact that study programmes do not cover all relevant topics. Specialists with higher professional education in occupational health and safety are supposed to be ready to work in companies immediately after graduation; therefore, these problems need to be addressed. On a positive note it should be mentioned that an increasing number of higher education institutions offer study programmes in this area; it will result in increased competition among these institutions and, hopefully, also improved quality of education (for more details please refer to the Topical Annex "Education and training of occupational health and safety specialists".

Continuing education of occupational health and safety specialists currently is not being organised and planned, and it is basically left upon the specialists themselves - by means of attending seminars in Latvia, literature search on the Internet, consultations with experts in relevant sectors, etc. Occupational health and safety specialists themselves (those with higher education or those undergoing such studies) consider that continuing education should be organised by higher education institutions. However, taking into account results of specialists' self-assessment of the quality of education provided by these institutions, as well as keeping in mind the main function of such institutions – providing higher education – rather education and training centres, the State Labour Inspectorate, and non-governmental organisations specialising in occupational health and safety should be involved. At the moment none of the mentioned institutions provide regular and planned continuing education of occupational health and safety specialists. At the same time, each of these institutions could play a specific role according to their own strengths – training centres could organise regular seminars and courses on specific occupational health and safety issues; the Ministry of Welfare together with the State Labour Inspectorate could provide for accessible interpretations of new

legislation; and nongovernmental organisations could facilitate information exchange among specialists and organise lectures and discussions about important issues or specific problems. This would contribute to improved continued education of occupational health and safety specialists, as well as facilitate information exchange and communications among the relevant specialists.

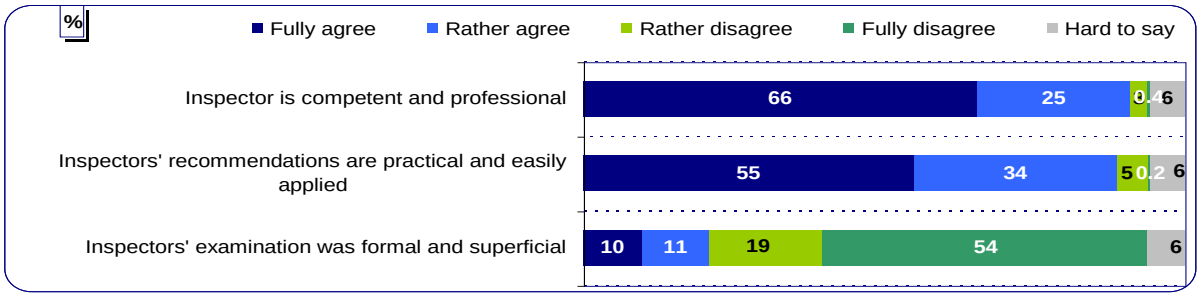
# 3.7. Assessment of activities of the State Labour Inspectorate

The State Labour Inspectorate is a public institution responsible for supervision and control in the fields of legal labour relations, occupational health and safety, and technical monitoring and control of dangerous equipment.

Results of this Study indicate significant differences across the territorial units of the State Labour Inspectorate – both in terms of occupational health and safety conditions in companies, and in terms of compliance with legislation. In several cases Riga Region was found to be among the more problematic ones (for example, in terms of occupational risk assessments, non-disclosure of workplace accidents). To identify the possible causes, territorial distribution of number of inspectors per 1000 of employees was analysed; and indeed this indicator varies significantly across regions (between 0.06 and 0.22). This points to insufficient strategic analysis and resource planning at the State Labour Inspectorate. Riga Regional Labour Inspectorate has the highest number of inspectors; however, when calculated against 1000 employees it turns out to have the lowest rate of inspectors for the period between 1997 and 2005 – 0.06 inspectors. Latgale Region has the second lowest rate of inspectors per 1000 employees between 2001 and 2004. The total number of inspectors of the State Labour Inspectorate per 1000 employees is quite comparable with other European countries, where it varies between 0.03 in France and 0.18 in Germany (data as per 2000, source: *Work and health country profiles of twenty two European countries*). This suggests the need to optimise and improve the work of inspectors, possibly also by restructuring the Inspectorate and its operations.

**Opinion of employers.** Data obtained during the survey of employers suggest that in general the inspectors are competent and knowledgeable, and their advice is practical and feasible to implement; however, problems are related with formal and superficial approach towards inspections (see Figure 55).

**Figure 55. Characterisation of cooperation between employers and the labour inspectors.**




Note: data obtained during survey of employers, basis: employers whose company has been visited by the State labour Inspectorate within the last 3 years, n=552.

It is important to highlight that the results of the employers' survey suggest that compliance at company level is directly related to inspections carried out by the State Labour Inspectorate. Among those respondent groups, where companies' compliance rates are lower (percentage wise lowest number of companies with occupational risk assessments, mandatory health examinations), also the rates of inspections carried out by the State Labour Inspectorate are lower. This confirms that control functions carried out by public institutions stimulate companies to comply with legislation; it also suggests that the State Labour Inspectorate is an important part of the occupational health and safety system, and it motivates employers to be more compliant. Therefore, it is important to support more active presence of the State Labour Inspectorate at companies by increasing the number of companies inspected on a preventive basis.

Employers of companies, where more problems were observed (for example, lower rates of companies with occupational risk assessments, mandatory health examinations) are more critical towards the work of the State Labour Inspectorate – in this group of respondents the rate of those indicating that inspectors have formal and superficial approach towards inspections is higher (examples of such respondent groups are micro companies, companies established after 1990). This suggests that companies from the identified risk groups would like to see at their enterprises higher standard inspections and to receive advice that is practical and feasible to implement. Occupational health and safety specialists with higher education and, especially, representatives of competent authorities appear to be even more critical towards the work of the State Labour Inspectorate. Most likely this can be explained by the fact that respondents from these groups are the ones, who are in direct contact with inspectors – both during routine inspections and during investigations of workplace accidents. As the result they are the ones, who have direct, personal and more substantial experience, – and in cases it has been less nice experience than that of employers (who most likely do not have so frequent contacts with inspectors, or contacts are indirect – via their occupational health and safety specialists).

In order to obtain a more general picture about employers' opinion on the activities carried out by the State Labour Inspectorate, answers to all three questions were scored per each territorial unit. Scores for each question and each region were given according to the region's assessment – the best assessed region got 1 point, while the worst – 7 points. Then the points scored by each region for each question were added. The less points a particular region scored, the better is its performance assessed by the employers (see Table 10).

**Table 10. Employers' opinion on activities of the State Labour Inspectorate.**

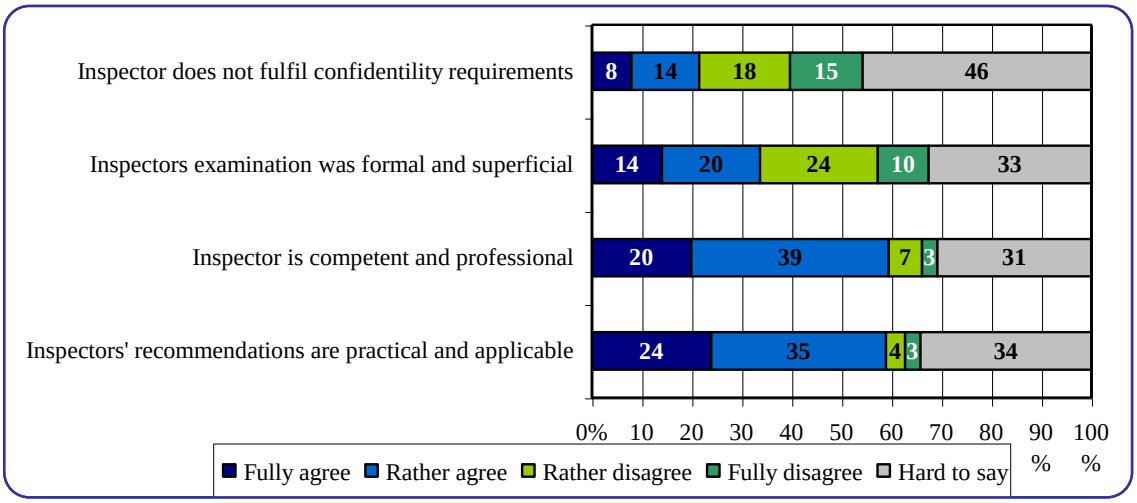
| Territory of the State Labour Inspectorate | The inspection carried out by inspectors had a formal character | | The inspectors are competent and knowledgeable | | The inspectors' advice is practical and feasible to implement | | Total score |
|---|---|---|---|---|---|---|---|
| | Number of points | Disagree (% of all respondents) | Number of points | Agree (% of all respondents) | Number of points | Agree (% of all respondents) | |
| Riga Region | 4 | 76,6 | 6 | 88,7 | 6 | 86,8 | 16 |
| Northernvidzeme Region | 7 | 54,8 | 5 | 90,6 | 4 | 91,1 | 16 |
| Easternvidzeme Region | 5 | 67,1 | 1 | 100,0 | 1 | 95,1 | 7 |
| Kurzeme Region | 6 | 58,6 | 7 | 86,6 | 5 | 88,1 | 18 |
| Zemgale Region | 1 | 90,1 | 4 | 96,3 | 7 | 77,6 | 12 |
| Latgale Region | 3 | 78,0 | 2 | 97,6 | 2 | 94,9 | 7 |
| Southern Region | 2 | 85,2 | 3 | 97,3 | 3 | 93,6 | 8 |

Note: data obtained during survey of employers, basis: employers whose company has been visited by the State labour Inspectorate within the last 3 years, n=552).

As it can be seen from the employers' opinion, the performance of the State Labour Inspectorate is better in Easternvidzeme, Latgale and Southern regions, but worse – in Riga, Northernvidzeme and Kurzeme regions. At the same time the companies operating in Southern Regional Labour Inspectorate have indicated more often, as compared to average in Latvia, that inspections ended with a verbal discussion without any written document (45.3 % in Southern Region, compared to national average of 25.8%). Besides, there are relatively more companies with no occupational risk assessments in the Southern region (64.4%, compared to national average of 54.8%). Also preparations of injunctions have been mentioned less often in Southern Region (17.6%, compared to national average of 28.2%). A similar situation seems to be prevailing in Riga Region, where only 21.7% of respondents have indicated that they have received a written injunction, which contains deadlines by when deficiencies have to be removed. Hence, activities of Riga Regional Labour Inspectorate and Southern Regional Labour Inspectorate require a special attention.

**Opinion of employees.** Along similar lines employees were also asked to assess the work of the State Labour Inspectorate, with a special emphasis on issues related to confidentiality.

**Figure 56. Employees' opinion on activities of labour inspectors.**




Note: data obtained during survey of employees, basis: employees who had encounters with inspectors, n=141.

In order to obtain a more general picture about employees' opinion on the activities carried out by the State Labour Inspectorate and its inspectors, answers to all three questions were scored per each territorial unit – similarly as in case of employers' assessment. Scores for each question and each region were given according to the regions assessment – the best assessed region got 1 point, while the worst – 7 points. Then the points scored by each region for each question were added. The less points a particular region scored, the better is its performance assessed by the employers (see Table 11).

**Table 11. Employees' opinion on activities of the State Labour Inspectorate.**

| Regions of the State Labour Inspectorate | The inspection carried out by inspectors had a formal character | | The inspectors are competent and knowledgeable | | The inspectors' advice is practical and feasible to implement | | Inspectors observe confidentiality | | Total score |
|---|---|---|---|---|---|---|---|---|---|
| | Number of points | Disagree (% of all respondents) | Number of points | Agree (% of all respondents) | Number of points | Agree (% of all respondents) | Number of points | Disagree (% of all respondents) | |
| Riga Region | 4 | 35,9 | 5 | 56,1 | 6 | 54,5 | 2 | 37,7 | 17 |
| Northernvidzeme Region | 6 | 19,3 | 6 | 49,6 | 7 | 49,6 | 7 | 13,1 | 26 |
| Easternvidzeme Region | 1 | 57,2 | 1 | 100 | 1 | 85,1 | 3 | 36,9 | 6 |
| Kurzeme Region | 3 | 36 | 3 | 61,5 | 2 | 70,2 | 6 | 20,2 | 14 |
| Zemgale Region | 7 | 17,1 | 7 | 33,3 | 3 | 66,1 | 4 | 33,3 | 21 |
| Latgale Region | 2 | 36,7 | 2 | 74,8 | 4 | 63,9 | 1 | 44,9 | 9 |
| Southern Region | 5 | 28,6 | 4 | 56,7 | 5 | 56,7 | 5 | 22,8 | 19 |

Note: data obtained during survey of employees, basis: employees who had encounters with inspectors, n=141.

Hence, according to employees' opinion, the performance of the State Labour Inspectorate is better in Easternvidzeme and Latgale regions, but less good – in Northernvidzeme, Zemgale and Southern regions.

In order to promote assistance of the State Labour Inspectorate to employees regarding their employers, it is of utmost importance that inspectors keep confidentiality and employees trust in the State Labour Inspectorate. However, 21.5% of the respondents fully or partly agree with the statement that inspectors are not confidential. Some employees mentioned that after submitting a complaint they were either fired or their remuneration was reduced. There are significant differences among regions. Lack of confidentiality was most frequently mentioned in Easternvidzeme Region (63.1%) and Kurzeme Region (37.0%), but no such cases were stated in Zemgale Region. It should be mentioned that a significant number of respondents found it difficult to assess, whether inspectors observe confidentiality.

# 4. CONCLUSIONS AND RECOMMENDATIONS

# 4.1. Compliance with legal requirements

Results of the Study reveal that following enterprises are at risk of non-compliance with legislation regarding occupational health and safety, as well as legal labour relations:

- Small enterprises (1-9 employees and 10-49 employees);
- Enterprises of private and non-governmental sectors;
- Enterprises dealing with construction, metal processing, wood processing, agriculture and forestry;
- Enterprises established after 1995 and, especially, after 2000;
- Enterprises located within Riga Region (according to territorial units of the State Labour Inspectorate).
- Enterprises, where illegal "envelope salaries" are paid (especially, when it happens each month).

Such companies should be considered a priority while preparing information on occupational health and safety issues, as well as while defining priorities of the State Labour Inspectorate.

Results of the Study show that mayor problems with observance of legal requirements regarding occupational health and safety exist in enterprises, where illegal "envelope salaries" are paid (especially, where it happens every month). Thus, the Study proved that enterprises ignoring one legal requirement are most often also non-compliant with others. Due to above-mentioned reasons number of workplace accidents and occupational diseases is also higher in these companies (according to employees' survey, workplace accidents occur more often in these companies). It means that employees of such enterprises have relatively small salaries compared to people employed in other companies, but relative costs to the State Budget in case of workplace accidents or occupational diseases are higher (due to small legal salaries less money is contributed to the State Budget, while the risk of an accident or a disease, and related costs, is higher). Therefore, the State Labour Inspectorate should cooperate with the State Revenue Service, as well as other relevant supervisory institutions, to identify and survey enterprises under risk of illegal employment.

The results of the Study indicate that there is a need to improve occupational health and safety legislation, as well as system for explaining such legal requirements and building public awareness. Too few employers, employees and self-employed are informed on legal requirements, as well as on their responsibilities and rights. Therefore, the Study paid much attention to elaboration of recommendations on necessary legislation amendments (see Alternative "Amendments necessary for improvement of occupational health and safety legislation") and improvement of public awareness (see Section "Results"). The main problems resulting from legislation are: the need to elaborate many similar occupational health and safety papers, lack of specific regulations (for example, on electric safety, first aid etc.) and lack of limit values for some work environment indicators (for example,

microclimate indicators, lighting). It is important to decide upon use of technical standards for setting limit values. Considering existing hierarchy of legislation and essence of the Standardization Law, standards should be voluntary. Therefore, there should be an institution (Labour Department of the Ministry of Welfare, Institute of Occupational and Environmental Health, Standards Technical Committee "Work environment"), which would transpose European and International standards into Latvian legislation.

Another occupational health and safety problem is related to self-employed, who, according to the Study, work in relatively unsafe and unhealthy environment, as well as suffer from workplace accidents more often. Besides, self-employed are not insured against workplace accidents and occupational diseases. Thus, self-employed are not subject to social protection in case of workplace accidents and occupational diseases.

No explanatory reviews are available in Latvia that would help self-employed to understand and assess their occupational hazards and to take measures to prevent such hazards. Even if such materials existed, they would not reach the target, because it is problematic to distinguish between self-employed and "pseudo self-employed". Development of a short, explanatory informative brochure for each sector, targeted at both self-employed and employees would be a reasonable solution. Such a brochure should focus on description of occupational hazards, possible consequences of exposure to these hazards and necessary preventive measures rather than just review of legal requirements.

Self-employed pay less attention to occupational health and safety issues, because they take less preventive measures compared to employers. This indicates that legal requirements and state supervision facilitate improvement of occupational health and safety situation in enterprises rather that workplaces of self-employed. At the same time only one third of respondents think that Labour Protection Law and related regulations should be related also to self-employed. One of solutions could be to elaborate regulations that would define minimum occupational health and safety requirements for self-employed (by specifying the requirement of the Labour Protection Law to take care of one's safety and health at work, as well as safety and health of people, who are affected or can be affected by their work).

The results of the Study do not reveal any mayor problems regarding illegal employment. However, it is probable that the results are affected by informative campaigns carried out in 2006, i.e., employer and employees have withholded truth being well aware of illegitimacy of working without a contract. Results of the study indicate that following companies most frequently tend to avoid conclusion of employment contracts in writing:

- Micro companies (1–9 employees);
- New companies (founded after 1996);
- Companies with majority of local ownership
- Private companies;
- Construction companies.

Young employees (this group is also less informed on occupational health and safety requirements), people employed in several workplaces, as well as men are at higher risk of working without a contract. A considerable problem concerning legal labour relations is that only in one fifth of surveyed companies overtime work is compensated in full compliance with requirements provided by the Labour Law. Manu employees are subject to such a problem, because approximately half of surveyed employees are working extra hours. Women have not received compensations more often, which indicate sexual discrimination in the field of labour relations in Latvia. Besides, employers seem to be unaware of such a problem, because only one fifth of surveyed employers mentioned that their

employees work for extra hours. Micro companies (1-9 employees) are at higher risk of non-compliance with requirements regarding compensations for overtime work.

# 4.2. Occupational risks and their prevention

Situation in Latvia regarding completion of occupational risk assessment and compliance of such an assessment with the requirements of existing legislation has slightly improved, compared to that of 2002. However, it is still dissatisfactory, and cannot be recognised as being good in any group of enterprises. Occupational risk assessment is frequently carried out formally and disregarding legal requirements:

- Employee managing the respective work is not involved in the occupational risk assessment (60%);
- Trusted representatives of employees are not involved in the occupational risk assessment (91%);
- Programme of measures for improvement of work environment and risk reduction id not developed after the occupational risk assessment (46%).

The Study confirms that occupational risks of the 21st century play a significant role in the working environment in Latvia: different psycho-emotional factors (shortage of time, overtime work, long working hours etc.) and ergonomic factors (work with a computer, handling of heavy objects, awkward posture, and repetitive movements). Speaking about so called traditional risks microclimate and dust (especially, abrasive dust and welding fumes) should be considered as very essential occupational problems. Taking into account that psychosocial and ergonomic risk factors, as well as microclimate, usually interfere with each other and even intensify the effects of one another, this group of occupational risks should be treated with great care, especially because there are no standards concerning microclimate in Latvia and no simple and convenient method for assessment of psychosocial and ergonomis risk factors.

The Study shows that in most cases occupational risk assessment cannot be considered as being objective, because it is rarely based on work environment measurements. Besides, survey of occupational health and safety specialists reveal that many measurements are performed in non-accredited laboratories, and, thus, so called indicative measurements are carried out. According to LVS EN 689:2004 "Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy", objective and wholesome exposure assessment in a workplace depends on proper and sufficient work environment pollution measurements. Results of the Study show that work environment measurement values exceed mandatory or recommended limit values in one third of cases. It could be explained by the fact that measurements are not carried out in all workplaces, but only in those indicated by the Client (for example, employer, competent specialist or competent authority), and, thus, the most "dangerous" or "hazardous" workplaces are selected.

The Study reveals that there is a problem regarding one group of people exposed to work environment – self-employed. Many of them are not aware that they are subject to occupational health and safety (especially, safety) issues and that they are responsible for taking care of their safety and health at work. Avoidance of longer vacations (more than a week) due to several reasons is big problem, because a person, who does not go for a vacation, does not relax sufficiently, fatigue accumulates and risk of workplace accidents and some occupational diseases gradually increases.

# 4.3. Awareness level

Despite many informative – explanatory publications that have been issued in Latvia during the latest 5-6 years, awareness of general public regarding provisions of the Labour Protection Law and regulations on occupational risk assessment, as well as other related issues, is dissatisfactory. This means that traditional means of information (printed materials, seminars, courses etc.) have not reached the target. The risk group includes managers of small and new companies, who need support to start the business. Among employees respondents having less education and young people are at risk, which means that informative publications on occupational health and safety and legal labour relations should be short, clear, simple, laconic and easy to understand.

In general, awareness of general public on occupational health and safety is good. However, more attention should be paid to rising awareness of youth, because, on one hand, number of young people employed during summers and probably exposed to occupational risks is increasing, and, on the other hand, number of employees working for less than a year and affected by workplace accidents in Latvia is high. Alternative ways of informing young people, for example, organising an exposition on occupational health and safety for school children and youth (similar expositions are open in almost all European Union countries) should be considered.

Publications (both in electronic and printed format) on occupational health and safety do not reach the target groups, because no procedures for spreading such publications exist. Therefore, a procedure, as well as responsible institutions, should be defined. Many publications (for example, information ordered by the State Social Insurance Agency and prepared during 2004 and 2006) are not available in electronic format in the most popular websites dealing with occupational health and safety (for example, www.osha.lv, www.vdi.gov.lv), as well as some available materials are devoted to out-of-date legislation. (By the end of 2006 publications with the permission of the State Social Insurance Agency have been placed into the home page of authors of the publications A/S "Inspecta Latvia" – http://www.inspecta.lv/pakalpojumi/darba_aizsardziba/publikacijas/). Results of the study carried out by the State Labour Inspectorate in 2005 show that employers often consider Internet as the best way of receiving information on occupational health and safety. Therefore, the most effective and fastest way (web pages and responsible institutions) for publication of information on the Internet should be identified. Different options of popularisation of these web pages should be considered (for example, banners in other frequently used web pages such as www.delfi.lv, www.tvnet.lv etc.). Following home pages would be the most appropriate for publishing information on occupational health and safety: Ministry of Welfare of the Republic of Latvia www.lm.gov.lv, Latvian Focal point of the European Agency for Safety and Health at work www.osha.lv, State Labour Inspectorate www.vdi.lv, State Social Insurance Agency www.vsaa.lv). One good solution could be establishment of a united

information centre, which would deal with spreading the information and updating of electronically published documents in cooperation with other information centres.

Further informative activities should target wider range of interested groups and focus on easier access to information, unconventional methods, as well as simple aids, which would make picking up and implementation of legal requirements less complicated. Higher educational programmes related to business management, personnel management and economy, where occupational health and safety issues should be included as a compulsory subject, should be identified. Besides, personnel of business support centres or other similar organisations (business incubators, municipal information services etc.) should be trained to facilitate consulting of people starting their own business, etc. It is recommended to elaborate simple, non-specific and easily accessible guidelines, which would step-by-step lead companies towards full compliance with occupational health and safety legislation.

Besides, The Study indicates that establishment of informative "line" (probably in the frames of the National Institute of Occupational Heath and Safety to be established soon) in addition to the existing information line of the State Labour Inspectorate. Complaints and so called "first level" calls should stay within the competence of the State Labour Inspectorate. According to the data of the State Labour Inspectorate, 19,932 questions were answered in 2005. Of those 2,930 (15%) questions were related to occupational health and safety. On the other hand, "Lattelecom", Ltd. declares that information was given by phone by only in 10-15% of cases, when people tried to call the State Labour Inspectorate. Besides, survey of general public shows that info line was used only by 0.4% of respondents, while 6.1% express their willingness to do so. It means, that activities of info line should be improved. If a special call centre is established, incoming calls can be sorted by topics (for example, legal labour relations, occupational health and safety, dangerous equipment etc.) and databases of most frequently asked questions developed.

The Special Budget for workplace accidents managed by the State Social Insurance Agency is the only regular financial source for explanatory publications. Expenditure of this budget is defined in legislation, however, no proportion is foreseen to be spent for preventive measures, including informative activities. Therefore, a constant proportion of the Special Budget should be defined for preventive measures. In the frames of the new approach to occupational health and safety issues (measures should be related to risks and their prevention instead of fighting the consequences) promotion of preventive culture in the field of occupational health and safety at national scale is essential.

# 4.4. Workplace accidents, occupational diseases and related costs

The results of this Study confirm experts' opinion that the relatively few workplace accidents in Latvia, compared to other European Union countries, is rather an indicator of poor registration of workplace accidents than of a well-arranged and safe working environment. Not every workplace accident in Latvia is registered, but it is difficult to assess real registration levels. One of the most frequent causes, why workplace accidents are not registered in Latvia, is the complicated procedure of investigation provided by legislation. The Study "Work conditions and risks in Latvia" has devoted an

alternative to this problem (see Alternative "Improvement of registration of workplace accidents and early diagnosis of occupational diseases, as well as early rehabilitation of patients with suffering from occupational diseases and workplace accidents").

Number of occupational diseases and patients revealed annually for the first time has been gradually increasing since 1993 until 2004. This is only partly related to current working environment. Many of currently revealed health problems are still associated with exposure to occupational risk factors during the latest 10-15 years. Increase of registered occupational diseases is also related to growing awareness of employees, increasing number of occupational physicians, as well as possibility to receive monetary compensation. Supposedly, during the next 5 to 10 years number of occupational diseases will still continue to grow reaching 250 cases per 100,000 employees. Then stabilization and even a gradual, slight decrease are expected. Nevertheless, due to amendments in legislation regarding procedure of occupational diseases diagnostics, number of occupational diseases could decrease during the next two to three years and after that increase again. This prognosis considers maximum number of registered occupational diseases in Europe Union countries during the latest 15 to 20 years and situation in Latvia, where occupational risk is still rather high (thus, development of new occupational diseases are expected), awareness level of employees is rather low (information of employees would rise their awareness on occupational diseases diagnostics and financial compensations) and diagnostics of occupational diseases will continue to improve.

Results of the Study reveal that social insurance against workplace accidents and occupational diseases is a big problem within the scope of work environment and risks, because there is an increasing deficit in the Special Budget for workplace accidents (workplace accident fund). This fund comprises contributions of employers as a compulsory social insurance against workplace accidents. Therefore, planning of income and expenditure of the Special Budget for the next years is essential. Decrease of expenses is not suspected, because of:

- Rapid increase of occupational disease patients;
- High proportion of unregistered workplace accidents;
- Low number of people, who apply for benefits to the State Social Insurance Agency; it is expected that these numbers will rise along with awareness of people;
- Breakdown of additional costs (expenses related to medicaments is rapidly increasing while less resources are spent for medical and social rehabilitation).

Expenditure of the Special Budget for workplace accidents is defined by legislation. However, currently expenses are mainly covering the consequences (treatment and other medical expenses related to workplace accidents and occupational diseases) instead of preventive measures and rehabilitation (medical, social and professional rehabilitation that would allow returning of the employees to the labour market for another type of job). To facilitate returning of employees into labour market, the focus shall be switched from treatment to rehabilitation. Early diagnosis of occupational diseases, for example, during compulsory medical examinations, is essential. This would increase efficacy of treatment and rehabilitation and, thus, prevent cases of disability or loss of work ability. This, in its turn, will reduce necessity for compensations from the Special Budget for workplace accidents to be paid in case of permanent loss of work ability.

Results of the Study show that workplace accidents affect self-employed as often as employees. Besides, relatively less self-employed comply with occupational health and safety (labour safety) requirements compared to employees. Social insurance against workplace accidents and occupational diseases should be established regarding self-employed, thus, ensuring social security in case a self-employed person suffers from a workplace accident or an occupational disease.

It is recommended to establish a united database of workplace accident victims, occupational diseases patients and related costs (as far as it is possible, by merging databases of the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital, the State Labour Inspectorate and the State Social Insurance Agency). Such a database would improve administration of taxes, ease compensation and remuneration payments, reduce unnecessary circulation of documents between the above-mentioned institutions (thus, saving time used for reviewing the documents) and allow analysis of costs per sectors, per disease/trauma groups etc. This would form economic justification for setting priorities. Institutions, which directly receive data, would be responsible for respective data input into the united database: State Labour Inspectorate – data regarding workplace accidents, Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital – data regarding occupational diseases, State Social Insurance Agency – data regarding costs. Besides, Office of Citizenship and Migration Affairs could supplement the database with data from the Population Register, which would ease identification of occupational disease patients, who have died or left the country.

Due to Cabinet Regulation No 263 "Procedure for establishment, supplement and maintenance of a register of patients having specific diseases" (adopted 04.04.2006, in force since 08.04.2006) the Health Statistics and Medical Technologies State Agency will legally take over information on occupational diseases of the Latvian State Register of Occupational Disease Patients and People Exposed to Ionising Radiation due to Chernobyl NPP Accident (ensuring its maintenance from 1 September 2006), but the Cabinet Regulation No 908 "Procedure for investigation and registration of occupational diseases" (adopted 06.11.2006, in force since 01.01.2007.) provide that the State Labour Inspectorate will carry out analysis of occupational diseases. These changes took place only during the last quarter of the Study "Work conditions and risks in Latvia", therefore, the research group could not assess probable impact of these regulations on such occupational indicators as number of occupational diseases. Besides, in the frames of the Study recommendations on aggregation of information were elaborated for the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital, and now the new responsible institutions (State Labour Inspectorate and Health Statistics and Medical Technologies State Agency) should consider these recommendations:

- To publish annual reviews on revealed occupational diseases, breakdown of diseases by sectors and occupational hazards, including not only statistics, but also analysis and development trends etc.;
- To publish actual information in publicly available home pages, for example, home page of the Latvian Focal point of the European Agency for Safety and Health at work www.osha.lv, or to develop a special home page of the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital, where data could be obtained from the register, as well as in the home page of the State Social Insurance Agency www.vsaa.lv;
- Data analysis and informing on occupational diseases, which is now spread among different institutions, could be delegated to the planned the National Institute of Occupational Heath and Safety (Agency of Riga Stradins University) in 2008. Considering potential functions of this institute, which include establishment of a united information and research centre, this would ensure most effective use of available information;
- To link the Latvian Cancer Register with Latvian State Register of Occupational Disease Patients and People Exposed to Ionising Radiation due to Chernobyl NPP Accident, which would ensure data exchange between these registers, for example:

- Latvian State Register of Occupational Disease Patients and People Exposed to Ionising Radiation due to Chernobyl NPP Accident receives information, when a new case of mesothelioma is registered in Latvia;
- Latvian State Register of Occupational Disease Patients and People Exposed to Ionising Radiation due to Chernobyl NPP Accident receives information, when a person registered in it is diagnosed a malignancy, which is registered in the Latvian Cancer Register.

# 4.5. State Labour Inspectorate

According to the results of the Study, compliance of enterprises with legal requirements correlates with the extent of surveys carried out by the State Labour Inspectorate. Within the group of enterprises, where compliance with legal requirements was the lowest (relatively least number of enterprises where occupational risk assessment and compulsory health examinations have been carried out), number of enterprise inspections performed by the State Labour Inspectorate was also low. This indicates that control measures of public institutions promote compliance of enterprises with the legal requirements. Thus, it can be concluded that the State Labour Inspectorate is an essential tool to secure functioning of occupational health and safety system and to motivate enterprises to consider legal requirements. Therefore, activities of the State Labour Inspectorate should be promoted, especially, by increasing number of preventive surveys in enterprises.

Number of inspectors per 1000 employees in Latvia is similar to that of other countries within European Union; however, territorial distribution of inspectors varies significantly across regions (between 0.06 and 0.22 inspectors per 1000 employees). In this regard Riga Region is the most problematic one, which probably explains, why enterprises located within Riga Region, are surveyed less frequently and do not comply with legislation more often. These results indicate dissatisfactory strategic analysis and planning of activities of the State Labour Inspectorate. This calls for optimisation and improvement of the work of inspectors, possibly also by restructuring the Inspectorate and its operations (changes have taken place regarding the State Labour Inspectorate in 2006; however, it was impossible to assess the efficacy of such changes in the frames of the Study).

The time-consuming, complicated and formal procedure for investigation of workplace accidents, which is defined by legislation, is one of the main reasons, why employers avoid investigating and registering workplace accidents, and, thus, do not notify the State Labour Inspectorate. Another motive is unwillingness to "get in touch" with public supervisory authorities due to a general belief that punishment is the main mission of such authorities. Recommendations on improvement of workplace accident registration rates are included in the Alternative "Improvement of registration of workplace accidents and early diagnosis of occupational diseases, as well as early rehabilitation of patients with suffering from occupational diseases and workplace accidents".

Lack of an adequate information system (database) essentially reduces effectiveness of the State Labour Inspectorate. The existing database is mainly used by the managerial staff of the State Labour Inspectorate for reporting to the Ministry of Welfare rather than as an instrument, which could ease work of inspectors and help to define inspection priorities. Evaluation of identified gaps and attitude of inspectors towards existing information system show that the only option is to develop a new database,

which would be compatible with databases of other institutions (for example, Register of Enterprises or inspection institutions, which test dangerous equipment and report to the State Labour Inspectorate).

The main deficiency of the existing database of the State Labour Inspectorate is that it is not linked to other state databases (for example, Register of Enterprises, Population Register, Legislation database), and, therefore, contain incomplete and incorrect data. For example, database includes data on enterprises, which have never existed or are closed, or persons with authority to sign, who never had such authority, or legislation, which is outdated.

During inspection of an enterprise the State Labour inspectorate should draw attention to contracts with self-employed, i.e., check if these contracts comply with the definition of "contract for work performance" of the Civil Law, and if there are no other types of contracts, which could mean incorrect legal labour relations.

The Public Annual Report of the State Labour Inspectorate does not describe good examples/companies regarding occupational health and safety, for example, companies, where inspectors could detect no incompliance.

Public information of the State Labour Inspectorate should be compiled in such a way that even non-specialists could easily, quickly and effectively use it. Home page of the State Labour Inspectorate could be designed similar to that of the State Social Insurance Agency, when by entering necessary parameters it would be possible to search for information on-line (for example, occupational diseases morbidity from 2000 to 2005 or fatal accidents in wood processing in 2003).

To ensure clearness of the published information, it is advisable:

1. To design the review in such a way that general information includes only summary analysis, interpretation and conclusions, but data as such could be found in annex;
2. To add Annexes according to functions delegated to the State Labour Inspectorate (State Labour Inspectorate Law, Section 3, Paragraph 2):
   - General information on number of surveyed companies;
   - Data on workplace accidents;
   - Data on occupational diseases;
   - Data on activities regarding legal labour relations;
   - Data on activities regarding occupational health and safety, including dangerous equipment;
   - Other.
3. To design Annexes in away that ensures data comparability.

# 4.6. Recommendations regarding further research

Currently there is no single location in Latvia, where all studies related to legal labour relations and occupational health and safety issues can be found. Besides, results of some studies have not been published at all (neither in the Internet, nor as printed copies), but can be only accessed by directly

meeting the authors of the studies. This indicates that there is a need to establish a single information centre, which would ensure easy and quick Access to such information. These functions could be delegated to the National Institute of Occupational Heath and Safety to be established soon (as Agency under Riga Stradins University), which has already started compilation of a database of studies carried out in Latvia. Current exchange of information and documents, as well as isolated (only of specific institutions) or limited accumulation of information, precludes inter-institutional data analysis (for example, it is impossible to calculate costs related to workplace accidents and occupational diseased within a specific sector; it is impossible to estimate, how many occupational disease patients have malign tumours; it is impossible to duly forecast increase of particular type of costs, etc.). Besides, support of research activities, which could carry out such an inter-institutional data analysis and ensure integration of studies and activities carried out in other states into a comprehensive guide to people, who develop and implement national policy regarding occupational health and safety, is poor. Thus, procedure of selecting priorities and measures at national scale or using financial resources of the state budget is based on obscure and ambivalent data. To obtain the above-mentioned information, to improve management of the collected taxes, as well as to ease compensation and remuneration payments, it is highly recommended to establish a united database of workplace accident victims, occupational diseases patients and related costs (as far as it is possible, by merging databases at disposal of the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital, the State Labour Inspectorate and the State Social Insurance Agency, as well as by adding data from the Register of Enterprises and Population Register). Such a database would reduce unnecessary circulation of documents between the above-mentioned institutions (thus, saving time used for reviewing the documents) and would allow analysis of costs per sectors, per disease/trauma groups etc. and ensure economic justification for setting of the priorities. Besides, data analysis would help to identify occupational health and safety issues, which call for extended, targeted and sound based studies. To ensure wholesome analysis of the obtained data, liabilities, functions and responsibilities should be defined for each institution regarding necessary analytic studies. Procedure for allocation of financial resources for such studies should be set as well.

Regular studies of issues related to occupational health and safety, as well as legal labour relations, are highly recommended. Such studies should focus on employers and specialists with higher education in the field of occupational health and safety, because the European Foundation for the Improvement of Living and Working Conditions regularly carries out surveys of employees. Such surveys of employees were carried out in Latvia in 2001 and 2005, and the survey of 2005 is the fourth survey in a chain of surveys carried out by the Foundation. The advantage of the survey of the Foundation is that it is performed both in European Union member states and candidate countries ensuring data comparability in dynamics and among countries. Frequency of similar surveys (of employers and specialists) should be adapted to that of studies carried out by the European Foundation for the Improvement of Living and Working Conditions (once in five years). It is recommended that all surveys be carried out reasonably simultaneously to ensure comparability. Future studies should be designed in a similar way as the Study "Work conditions and risks in Latvia", when wide range surveys and objective assessment of work environment is ensured. Studies should be planned at national scale to avoid asking the same questions to the same groups of respondents, as it happened in 2005 and 2006, when several studies on occupational health and safety and legal labour relations were carried out simultaneously: study of the European Foundation for the Improvement of Living and Working Conditions, study "Work conditions and risks in Latvia", opinion poll on activities of the State Labour Inspectorate.

Besides the above-mentioned large-scale studies, 3 to 5 smaller scale and more qualitative studies should be planned every year, which would help to understand results of the large-scale (mostly quantitative) studies and to develop a wholesome and scientifically grounded plan for eradication and prevention of the identified problems.

Establishment of an indicator system both at national and enterprise level, including annual analysis, is recommended.

Fundamental studies of specific fields should be continued (for example, occupational risks in wood processing, impact of heavy metals on health etc.), and different financial sources for financing such studies considered. This would maintain and replenish research staff, as well as help to find solutions for specific problems.

To enable use of statistical data of the Central Statistical Bureau for further analysis regular statistical studies should include following parameters:

Regarding employers:

- Compliance of companies with the requirements of the Labour Protection Law (assessment using a 10 point scale, analysis of mean result from different aspects and in dynamics);
- Number of employees exposed to occupational risk factors;
- Is occupational risk assessment carried out in company;
- Is programme of measures for prevention or reduction of occupational risks developed;
- Have workplace accidents taken place in the company and have they been investigated according to existing legislation.

Regarding employees:

- Compliance of companies with the requirements of the Labour Protection Law (assessment using a 10 point scale, analysis of mean result from different aspects and in dynamics);
- Have workplace accidents taken place in the company and have they been investigated according to existing legislation.

# 5. ALTERNATIVES

# 5.1. Improvement of registration of workplace accidents and early diagnosis of occupational diseases, as well as early rehabilitation of patients affected by occupational diseases and workplace accidents

Both results of this Study and foreign experts point at relatively low number of workplace accidents compared to other European Union countries, which is rather related to relatively low workplace accident registration rate, than to a well-arranged and safe working environment (for details see section "Results of the study" and thematic annex "Workplace accidents"). One of the reasons that makes workplace accident investigation and registration problematic is time consuming and complicated document keeping and coordination process with the State Labour Inspectorate, as well as ambivalent interpretation of Cabinet Regulation No 585 of 9 August 2005 "Procedures for Investigation and Registration of Accidents at Work" by the State Labour Inspectorate. Registration rate of occupational diseases is also relatively low compared to that of European Union (for details see section on "Results of the study" and thematic Annex "Occupational diseases in Latvia, 1993 – 2005"). Besides, poor awareness and understanding of employees aggravate problems related to low rate of workplace registration and occupational disease diagnostics. Results of the Study show that returning of patients affected by occupational diseases and workplace accidents to the labour market is rather complicated, because of:

- Late diagnostics of occupational diseases, when rehabilitation and early returning to labour market is impossible or very complicated;
- Existing system is focused on treatment of occupational diseases or workplace accident consequences, instead of rehabilitation;
- Existing system allows long-term sickness leave without an early expertise of work ability and rehabilitation options, as well as without early retraining.

Proposals for improvement of registration of workplace accidents and early diagnosis of occupational diseases, as well as early rehabilitation of patients are summarised in Table 12. Recommendations target not only improvement of registration and diagnostics, but also of raising awareness. Experts think that better understanding and analysis of situation would improve the situation. This table does not contain detailed wording of necessary amendments in legislation, but reflects experts' general

recommendations for improvement of existing situation. Detailed elaboration of legislation amendments is the next step in this process, which needs discussions of experts in working groups after a decision on necessary improvements is taken.

**Table 12. Proposals for improvement of workplace accident registration and early diagnosis of occupational diseases, as well as of early rehabilitation of patients.**

| No | Proposal | Justification/Description |
|---|---|---|
| 1 | Improvement of workplace accident notification, registration, rehabilitation and analysis system | |
| 1.1 | To simplify workplace accident investigation form and registration procedure | Workplace accident registration form defined by the current Cabinet Regulation No 585 is complicated and difficult to fill in even for specialists, who deal with it every day. Specialists of companies, where workplace accidents happen infrequently, lack experience necessary to complete such a form. Besides, opinion of inspectors on filling in this form often varies. It is recommended:<br>1) To simplify workplace accident investigation form to make it as elementary as possible (a good example is Denmark, where such a document is a A4 format self-copying form (employer can fill it by hand in 4 copies at once) and is carried to the accident site by state labour inspectors or is available for free). This form should include only the most important information, which is necessary for the investigating inspector to register the workplace accident (information on victim, information on company, short description of the accident, etc.). The form should not contain information, which is difficult to obtain or could be misinterpreted (for example, codes of traumatizing factors etc.);<br>2) To ensure workplace accident registration on the Internet, for example, on homepage of the State Labour Inspectorate, thus, saving time, which would be otherwise necessary for visiting the State Labour Inspectorate (use of electronic signature should also be enabled);<br>3) To implement in practice the option, which is already provided by the Cabinet regulation, to send investigation documentation by mail (this option is currently not used, because inspectors always demand that filled-in forms should be coordinated personally in the premises of the State Labour Inspectorate, which is needlessly time-consuming for both inspectors and employers);<br>4) Provide that classification codes are attributed to accidents not by employers, but by specialised inspectors (2-3 in each region), who would simultaneously enter data regarding the corresponding accident into the database. This would preclude situations, when labour inspectors ask to rewrite workplace accident forms because of incorrect classification codes, which is needlessly time-consuming for both inspectors and employers;<br>5) To revise documentation, which should be added to workplace accident investigation forms (for example, it is |

| No | Proposal | Justification/Description |
|---|---|---|
| | | hard to understand, why the State Labour Inspectorate needs a copy of employment contract and job description of the master of the affected employee;<br>6) To revise Annex to Cabinet Regulation on costs related to the workplace accident, because these data should be available in other state registers and because current Annex gives no useful information. It would be more reasonable to develop a new system for calculation of such costs at state level (for example, on the basis of the project of the State Labour Inspectorate). |
| 1.2 | To improve collaboration with medical practitioners for more effective registration workplace accidents | To develop a mechanism for motivating medical practitioners to report on probable workplace accidents. It is recommended:<br>1) To link reporting with payment for services;<br>2) To elaborate necessary amendments in Medical Treatment Law to establish that medical practitioner informs also employer of the workplace accident victim on consequences of such an accident, not only the State Labour Inspectorate. Informative support from the state is also necessary regarding such amendments. |
| 1.3 | To establish a shared responsibility of employees on not reporting on workplace accidents | It is recommended to establish a shared responsibility of employees on not reporting on workplace accidents. Current legislation provides that an employee shall report on workplace accidents, but no real sanctions for not doing so are prescribed. Such sanctions should not include a direct monetary penalty, but, for example, differentiated remuneration for a sick list (70% instead of 80% of mean monthly salary), administrative notification or information. Such a system can be implemented only after several years, when awareness of employees on necessity to report on workplace accidents is high enough. |
| 1.4 | To improve system for analysis of workplace accidents (database). A more detailed analysis of workplace accident causes should be carried out to enable planning of preventive campaigns (informative materials, inspection of workplaces etc.), by ensuring spreading of information and easy analysis of workplace accidents. | Reviews and analytic capabilities of the State Labour Inspectorate should be improved:<br>1) Design and contents of annual reports of the State Labour Inspectorate should be revised, because a large part of numerical information on workplace accidents included in these reports regarding 1995-2000 cannot be used for data processing and information retrieval. Information is aggregated and published in different formats, and comparison is possible only since 2002. Information analysis is insufficient even after 2002. For example, it is not possible to find out, how many workplace accidents were related to falling from height (working above 1.5 metres);<br>2) A united registration system of employees should be established (there is no united, reliable and correct information on number of employees). Lack of such a system interferes with accurate recalculation of workplace accidents |

| No | Proposal | Justification/Description |
|---|---|---|
| | | per 100,000 employees and comparison of data among districts, regions, sectors, as well as countries. Besides, no accurate information is available on number of employees per company size, per sex and per age groups.<br>3) A system for calculation of workplace accident related costs related should be developed in cooperation with the State Social Insurance Agency, thus, the most costly groups of workplace accidents could be recognised;<br>4) Public information of the State Labour Inspectorate should be compiled in such a way that even non-specialists could easily, quickly and effectively use it. Home page of the State Labour Inspectorate could be designed similarly to that of the State Social Insurance Agency, when by entering necessary parameters it would be possible to search for information on-line (for example, fatal accidents in wood processing in 2002-2006);<br>5) Assessment of the database of the State Labour Inspectorate shows that it is impossible to analyse several parameters of the Study. The database should be improved to enable analysis of following parameters:<br>• Number or workplace accidents per types of trauma;<br>• Employers subject to administrative penalty;<br>• Penalties applied to employers;<br>• Inventory of dangerous equipment in dynamics;<br>• Accidents related to dangerous equipment;<br>• Analysis of the most typical violations of employers (per legislative document) in dynamics;<br>• Market supervision measures (for example, equipment, machines, personal protective equipment etc.).<br>6) Database of the State Labour Inspectorate should be improved (redesigned) to link it with other state databases (for example, Register of Enterprises, Population Register, Legislation database). At present there is no such a link, therefore, the database contains incomplete and incorrect data. The database of the State Labour Inspectorate includes enterprises, which have never existed or are closed, or persons with authority to sign, who never had such an authority, or legislation, which is outdated. Besides, existing information is nor used properly. For example, power of attorney (a senseless document authenticity of which is never checked) is demanded from persons, who have been registered as persons with authority to sign. No doubt that restructuring of the database should be started only after a new system for workplace accident investigation and registration is in place. |
| 1.5 | To ensure that the State Labour Inspectorate repeats inspection | Analysis of measures taken after workplace accidents show that employers most often repeat briefing and training of employees |

| No | Proposal | Justification/Description |
|---|---|---|
| | of establishments, where workplace accidents have taken place, to assess implementation and efficacy of occupational health and safety measures | (indicated by both employers and employees). However, many employers (almost 15%) do nothing to reduce or eliminate recurrent accident risk, and this is a big problem. Therefore, it is essential that the State Labour Inspectorate carries out inspection of establishments, where workplace accidents have taken place to assess implemented measures |
| 1.6 | To regularly spread information on causes of actual workplace accidents to raise awareness on this issue | Main causes of workplace accidents identified during the Study are the same as listed in annual reports of the State Labour Inspectorate, i.e., breach of occupational safety requirements by employees (this cause is indicated by both employees and employers; however, employers mention this cause more often than employees). It is remarkable that at the same time only 1.7% of employers admit that workplace accidents are related to imperfect work management (bad performance of employers themselves). This means that employers don't recognise themselves as being responsible for insufficient control over occupational safety instructions and job performance, deficient training of employees regarding occupational health and safety, wrong choice of technologies and imperfect workplace establishment, which all can increase risk of workplace accidents. Therefore, it is recommended to explain the main causes of workplace accidents in Latvia. The most appropriate form of such an explanation could be, for example, a monthly publication of workplace accidents registered in the previous month and their causes (an attractive and easy understandable publication available in printed and electronic format). This information should be initially published in mass media, especially TV, radio, most popular newspapers, which are the most effective ways of spreading information according to the results of the Study. |
| 1.7 | To improve cooperation of the State Labour Inspectorate with other public institutions to increase awareness of enterprises and to increase number of inspections in those groups of enterprises, where most accidents take place (for example, construction) | Cooperation of the State Labour Inspectorate with other public institutions should be optimised regarding both exchange of information and carrying out of inspections, for example:<br>• Register of Enterprises by offering consultations to newly established enterprises, as well as informing of enterprises on occupational health and safety requirements, including workplace accidents;<br>• Register of Construction Merchants, which includes information on occupational health and safety system in construction enterprises and helps in planning preventive inspections of these enterprises. |
| 1.8 | To reconsider legal requirements regarding causes of many severe workplace accidents | For example, legal requirements regarding scaffolding should be improved (and coordinated with market supervision requirements). Only 26.7% of occupational health and safety specialists consider that requirements regarding erection of scaffolding are being partially or completely followed. This means that supervision should be increased in workplaces and objects, where scaffolding is used, because |

| No | Proposal | Justification/Description |
|---|---|---|
| | | inadequate use of scaffolding is a mayor risk to safety of employees. |
| 1.9 | To establish a system that workplace accidents, which take place while going to or from the work or in the vehicle belonging to the employer, are investigated by the Traffic Police, which further informs the State Labour Inspectorate | At present up to 4 different institutions (Traffic Police, employer, insurance company, State Labour Inspectorate) investigate such accidents. This can't be considered reasonable use of resources. Therefore, it is recommended to establish a system that such accidents are investigates by the Traffic Police, which further informs the State Labour Inspectorate |
| 1.10 | To develop a flexible system, in the frames of which state labour inspectors or any other specialists can operatively report on gross violation of occupational health and safety requirements | At present there are situations, when occupational health and safety requirements are brutally violated, even in public areas and obvious to the State Labour Inspectorate (for example, construction sites in the city centre etc.). A system should be developed so that any interested person could take a photo of such a case and the State Labour Inspectorate could react effectively (in the best case by arriving on the same day or in the worst case – within 2-3 days to carry out a detailed inspection at the site). This would require additional resources, however, such a system could play a significant role in improving occupational health and safety situation. |
| 1.11 | To consider differentiated remuneration for a sick-list | To assess efficacy of changes regarding remuneration of sick-lists, i.e., differentiated remuneration depending on the cause of sickness – workplace accident or, for example, influenza (to raise remuneration rate, to decrease period paid by the employer etc.). |
| 2 | Improvement of occupational diseases diagnostics, registration, rehabilitation and analysis system | |
| 2.1 | To improve compulsory medical examination system | It is recommended:<br>1) To revise requirements of Cabinet Regulation No 527 to make them more simple and argumentative. For example, synchronize frequency of examinations to avoid examination of employees every year, to reconsider frequency of examinations for some risk factors (for example, employees exposed to vision exertion could be examined once in 5 years until age of 40, and then once in 3 years), review lists of contraindications and specialists related to some risk factors (for example, currently people having any form of coronary artery disease (even mild angina pectoris) are not allowed to work with a computer, however, such a problem in some extent affects most of employees over 50);<br>2) To improve control of enterprises regarding sending their employees to compulsory medical examination;<br>3) To raise qualification of occupational physicians (to carry out regular training and informing, as well as to elaborate specific state financed guidelines), to improve control over activities of medical practitioners (to carry out inspections not only |

| No | Proposal | Justification/Description |
|---|---|---|
| | | after complaints are received, but also as preventive measure) and to define responsibility of occupational physicians for imperfect medical examinations;<br>4) To define that only a certified occupational physician can conclude on compliance of a person's health status with the performed job (this suggestion appears also in the survey of occupational health and safety specialists);<br>5) To organise awareness raising campaigns for employees (providing easily understandable and available information) to explain that having an occupational disease is not a burden (almost one third of employees, who have undergone compulsory medical examination within the last 3 years, admit that they would avoid complaining on health disorders, of they were afraid that their health status could be recognised as being inadequate);<br>6) To reduce number of necessary specialist consultations, thus, increasing responsibility of the physician, who signs conclusion on compliance of a person's health status with the performed job;<br>7) To consider a possibility to define that health examinations should be repeated at the same physician or the new physician should demand information (anamnesis) from the previous physician. |
| 2.2 | To improve diagnostic mechanism to ensure more effective diagnostics of occupational diseases | In addition to already existing arrangements it is necessary:<br>1) To raise capacity of the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital (for example, calling on 27 December 2006 it was possible to register for the Commission of Occupational Physicians only on 21 February 2007) regarding both diagnostics and data input into the Register. A special informant/registrar should be hired to serve the Register (currently nurses deal with this responsibility). Besides, the Centre needs a rehabilitation specialist, who could consult on issues regarding rehabilitation;<br>2) To promote development of Regional Commissions of Occupational Physicians (they could be financed from the Workplace Accident Fund);<br>3) To promote education of occupational (Ministry of Health should finance post-graduate education (residents) of more occupational physicians; other specialists (for example, family physicians, dermatologists, neurologists etc.) should undergo compulsory education on occupational diseases both during resident studies and before re-certification;<br>4) To promote equal availability of occupational physicians in all Districts of Latvia (currently availability differs a lot among Districts);<br>5) To improve performance of the State Commission of |

| No | Proposal | Justification/Description |
|---|---|---|
| | | Physicians for Health and Work Capacity Examination to raise capacity, to improve level of servicing and informing clients);<br>6) To ensure direct access to occupational physicians (at present, for example, in Riga one could wait for a visit to family physician for about a month |
| 2.3 | To improve professional and medical rehabilitation of patients affected by occupational diseases and workplace accidents by ensuring early work ability expertise and consulting on retraining options in case of extended sickness | 1) Professional and medical rehabilitation of patients affected by occupational diseases and workplace accidents should be improved, because available information indicates that expenditure of the Special Budget for workplace accidents is rather allocated for medical treatment, than for medical and professional rehabilitation. It should be defined that prior to repeatedly receiving benefit for loss of work ability patients affected by occupational diseases and workplace accidents should undergo compulsory medical rehabilitation (if this is medically reasonable). Such a system should be developed in cooperation with the State Commission of Physicians for Health and Work Capacity Examination;<br>2) Existing procedure for issuing sick lists and control of work ability loss allows long-term sickness leave without an early retraining. It is recommended to set time limit, when the affected person should undergo expertise of physicians, who could consult on necessary rehabilitation measures and best options of retraining (if a person refuses to undergo medical rehabilitation, benefit for work ability loss could be reduced);<br>3) Training of rehabilitation specialists on special rehabilitation of occupational disease patients should be ensured in cooperation with the Rehabilitation Faculty of Riga Stradins University. |
| 2.4 | Database of occupational diseases should be improved: detailed analysis of diagnosed occupational diseased should be carried out every year to enable planning of specific activities for improvement of diagnostic, rehabilitation and working conditions and to increase availability of a widespread and easily understandable information | Recommendations:<br>1) Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital should prepare detailed annual reports on occupational diseases diagnosed during a year, analysis of the diseases per sectors, per hazards etc. In 2008 functions of the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital and of the State Labour Inspectorate regarding data analysis and informing on prevalence of occupational diseases could be delegated to the National Institute of Occupational Heath and Safety to be established soon (as Agency under Riga Stradins University). Considering planned functions of the new Institute, which include establishment of a united information and research centre, such a decision would ensure most effective use of information.<br>2) To restructure Section "Working environment" of the publication "Analysis of public health in Latvia" and define |

| No | Proposal | Justification/Description |
|---|---|---|
| | | information sources, which could be used for development of annual reports, thus, ensuring publishing of qualitative and comparable data on working environment, safety and heath of employees. Section "Working environment" could be supplemented with data on workplace accidents, including, accidents affecting employees of the Ministry of the Interior and Ministry of Foreign Affairs. It is advisable that these reports summarise information of other health related institutions, which could be used for description of safety and health of employees from the public health viewpoint. For example:<br>• Data on morbidity and mortality regarding mesotheliomas collected by the Latvian Cancer Register;<br>• Data on morbidity regarding tick-born encephalitis (infection within the working environment or during job performance) collected by the Public Health Agency.<br>3) To link the Latvian Cancer Register with the Latvian State Register of Occupational Disease Patients and People Exposed to Ionising Radiation due to Chernobyl NPP Accident to ensure data exchange between these two registers. For example:<br>• Latvian State Register of Occupational Disease Patients and People Exposed to Ionising Radiation due to Chernobyl NPP Accident receives information, when a new case of mesothelioma is registered in Latvia;<br>• Latvian State Register of Occupational Disease Patients and People Exposed to Ionising Radiation due to Chernobyl NPP Accident receives information, when a person registered in it is diagnosed a malignancy, which is registered in the Latvian Cancer Register. |
| 2.5 | A system for annual defining of priorities (including financial sources) should be developed to enable implementation of corresponding (analysis based) informative and educational measures, as well as to prepare necessary guidelines for physicians and other specialists | For example, following occupational diseases prevail in Latvia during the latest years: musculoskeletal and connective tissue diseases, carpal tunnel syndrome, vibration disease, occupational hearing disorders etc. However, no governmental measures (drawing up of guidelines, training, and information) have taken place to build capacity of physicians and other specialists in dealing with this problem. |

# 5.2. Recommended amendments in occupational health and safety legislation and provisions

Analysis of the existing situation calls for amendments in a number of regulations to facilitate better solutions to some problems. These suggestions are based on problems identified during this Study in the area of occupational health and safety. Alternatives recommended by the experts are not always limited to simple changes in some formulations, in a number of cases they are related to more broad set of changes.

It should be noted here that the proposals presented here contain the most significant findings of the Study Team concerning required amendments of occupational health and safety legislation and the occupational health and safety system as such. The proposals presented here do not offer detailed specific formulations for amendments – drafting of such detailed texts for changes should be the next step. Drafting amendments to the existing legislation or new occupational health and safety documents will require work of specialised expert working groups - it should be kept in mind that in some cases the proposed changes will require subsequent amendments in a number of other pieces of legislation some of which may be outside the competency of the Ministry of Welfare.

The general improvements (proposals that relate to some specific regulation or the occupational health and safety system as such) proposed by the Study team are summarised in the Table 13. The Table also presents sets of measures / changes for the areas that currently are not regulated at all but which according to the Study team need to have a separate regulatory basis. Besides, the Study team analysed the current requirements for the compulsory occupational health and safety documentation (lists, journals, orders, others) and has prepared proposals for those – also these proposals are summarised in the Table 13.

**Table 13. Proposals to improve legislation.**

| Nr. | Proposal | Argumentation / Description / Comment |
|---|---|---|
| 1 | Increased awareness levels and information | |
| 1.1 | Elaborate a model for planning of occupational health and safety related information and awareness materials in such a way that they reflect the current problems and meet the needs of target groups, and incorporate the model in legislation. | The Study has found that employers and employees have considerably different opinions about the most significant risk factors at companies. This indicates that employers do not have sufficient understanding about real risks at their companies. This also suggests that planning of information materials and campaigns should take into account the differences in information levels and in opinions between employers and employees. Currently such a model is not defined by legislation, however, the Study Team considers that it would be appropriate to incorporate such a model into legislation, by, for example, |

| Nr. | Proposal | Argumentation / Description / Comment |
|---|---|---|
| | | designating a specific institution and setting a specific model for planning of such measures. |
| 1.2 | Establish a state supported mechanism (by elaborating and introducing in legislation a specific model and funding source) to offer / guarantee assistance to newly established companies in the area of occupational health and safety, and to inform employers about relevant provisions and requirements. | Higher rates of incompliance with occupational risk assessment requirements and requirements for occupational health and safety action planning at company level are among the more recently established companies. Employers at such companies do not have sufficient understanding about incidence rates of occupational risk factors. These findings indicate the need to carry out information and awareness building activities with those entrepreneurs who are in the process of starting their companies and with the potential future employers (for example, those studying economics and management sciences). This could include, for example, a simple, not specific, easily accessible information material that explains, step by step, the procedure how to ensure that a given company meets occupational health and safety requirements. The State Revenue Service or the Register of Enterprises could then distribute such material during registration of new companies. |
| 1.3 | Establish a state supported mechanism (by elaborating and including in legislation a specific model and funding source) to train and inform new employers on occupational health and safety issues. | It is necessary to:<br>• Include occupational health and safety as a mandatory subject in higher education study programmes related to entrepreneurship and business administration, human resources management and economics;<br>• Train staff of entrepreneurship support centre and / or similar organisations, which could provide consultations on occupational health and safety to people who are in the process of starting a new company. |
| 1.4 | Establish a state supported information dissemination strategy for interested members of general public on occupational health and safety. | Future information dissemination campaigns should address more diverse range of target groups (including general public, youth), they should be more accessible, use creative dissemination methods and accessories, which would all ease carrying out occupational risk assessments and other occupational health and safety measures:<br>• It is necessary to raise awareness and culture of work among employers on the issues related to occupational health and safety;<br>• Many of the prepared materials currently are not available electronically which is a major disadvantage, because some of the materials printed earlier are not available any more; besides, employers prefer to receive information on occupational health and safety via internet;<br>• New information distribution channels should be established (or the existing ones – updated). For example, 6.0% of respondents have indicated that they would prefer to receive information using a designated telephone number (call-in line), while currently only |

| Nr. | Proposal | Argumentation / Description / Comment |
|---|---|---|
| | | 0.3% of respondents have received information through this channel. |
| 1.5 | Prepare binding guidelines in the areas where no specific requirements for workplace environment parameters have been set (indoor air quality, lighting, others). | Currently for some working environment parameters there are no specific standards (requirements) set in the legislation. It is a major obstacle in the process of occupational risk assessment and in ensuring suitable work conditions in companies. It is necessary to introduce such a regulatory mechanism (not necessarily by means of legislation, but, for example, binding guidelines or accessible technical standards). In case of compliance to such guidelines the State Labour Inspectorate would recognise that the given company complies with legislation. |
| 2 | Occupational risk assessment | |
| 2.1 | Differentiate requirements for frequency of occupational risk assessments in case of lower risk companies. | According to the opinions of specialists having or still continuing higher professional education in the field of occupational health and safety, among the most urgent needs with the regards to legislation is the need to differentiate requirements for frequency of occupational risk assessments (less often in lower risks companies and more often – in higher risk companies). |
| 2.2 | Review the Annex 1 of the Cabinet Regulation No. 379 "Procedures for the Performance of Internal Supervision of the Working Environment" - to improve it and make it easier to use. | It is recommended to either review or remove fully the Annex 1 of the Cabinet Regulation No. 379 "Procedures for the Performance of Internal Supervision of the Working Environment". Currently several descriptions of occupational risk methodologies are available in Latvian (including lists of sector specific test questions). Therefore the occupational risk assessment method outlined in the Annex 1 is not sufficient and it is not easy to use. If the Annex 1 is not removed, it should be changed into and easy to use document (risk factors need to be specified, questions and their formulations in columns need to be specified, space for measures and comments have to be included). |
| 2.3 | Improve assessment requirements for psycho emotional risk and ergonomic risks - either in the Annex 1 of the Cabinet Regulation No. 379 or in some other relevant document and prepare guidelines for assessment of these risks. | Results of the employers' survey, the employees' survey and the survey of occupational health and safety specialists indicate that among the most significant risk factors are various psycho emotional risks (e.g., shortage of time, overtime work, long working hours, etc) and ergonomic risks. However, the current provisions do not pay specific attention to these risks; neither there are specific regulations or guidelines for assessment of these risks. |
| 2.4 | Review requirements for submission of information to the State Labour Inspectorate included in the Cabinet Regulation No 99. | If the employer has opted to carry out the risk assessment using his staff, currently, he (the employer) is required to submit the results of occupational risk assessment to the State Labour Inspectorate. Suitability of this requirement has to be reviewed, at least from the perspective of resource use efficiency of the State Labour Inspectorate (for example, resources required to |

| Nr. | Proposal | Argumentation / Description / Comment |
|---|---|---|
| | | ensure storage of all these materials). |
| 2.5 | Work with chemical and cancerogenic substances | |
| 2.6 | It is necessary to include in the list of the Cabinet Regulation No 539 all those chemical substances that are known to be group 1, or 2, or 3 cancerous substances. | Currently the Cabinet Regulation No 539 mentions only 5 processes and 3 chemical substances with occupational exposure limit values. |
| 2.7 | It is necessary to increase information levels among employers, occupational health and safety specialists, labour inspectors and employees regarding dangerous chemical factors, including dust in the working environment, their health and safety impacts, and technical measures to reduce and prevent adverse effects. This could be achieved using specific information materials, and by preparing specific guidelines to assess and prevent risks from chemical substances, that take into account, among others, also synergy effects from simultaneous presence of different chemical substances in the working environment. | According to the surveys' results, only 15.4% of the employers recognise that their employees are exposed to chemical substances, but majority of the employers are not aware that chemical substances are occupational hazards (84.4% of employers indicate that none of their employees are exposed to chemical substances), while 40.3% of employees recognise that in some or other way they are exposed to smoke, dust or dangerous chemical substances. Also general population (49% of respondents) indicate that they are either currently exposed or have been exposed earlier to air pollution (dust, chemical substances) at their work places. Particularly low awareness levels are among employers in wood processing and metal processing – according to the survey results only 32.6% and 52.1% respectively consider that their employees are exposed to chemical substances, even though production processes in majority of such companies inevitably cause presence of chemical substances in working environment. Analysis of the database indicates that in majority of workplaces different solvents are present simultaneously. Solvents are monodirectional agents therefore the actual impact of a mix of different solvents is higher than indicated in exposure index assessment for each solvent individually (as it is usually required by the contracting agency – the employer). A solution could be introduction of operating standards, and including them also in legislation. |
| 2.8 | Amend legislation to specify responsibility of suppliers of chemical substances and products to disclose information on hazardous substances – introduce specific requirements for disclosing information on hazardous substances to the users, and introduce more significant consequences for failure to do so (improvement of market supervision measures). Improve training of occupational health and safety specialists and labour inspectors on these issues (introduce specific mechanisms) – introduce changes in training and education standards, and in training | While collecting information on additional laboratory measurements it was found that there is insufficient information on chemical substances and particularly – products used in production process. This is mainly due to insufficient information presented in the safety data sheets of chemical substances / products. On a one hand this is because the safety data sheets are not complete. On the other hand, an issue requiring particular attention is the fact that the latest amendment to the Cabinet Regulation No 107 "Classification, labelling and packing of chemical substances and chemical products" (the regulation was adopted on 12.03.2002, the amendments – Cabinet Regulation No 274 - on 19.04.2005) allow not to disclose full information on all ingredients. Hence, feasibility to prepare precise and objective occupational risk assessment has been significantly impaired. A confirmation to this conclusion is also submissions of companies for laboratory |

| Nr. | Proposal | Argumentation / Description / Comment |
|---|---|---|
| | system of the State Labour Inspectorate. | measurements and attempts made by the Study Team to obtain complete information on chemical substances and chemical products used during production process. |
| 2.9 | Improve the sampling system for laboratory measurements of chemical substances. Possibly, introduce a specialised training for specialists who take samples or introduce other mechanisms, as well as pay more attention to these issues during training and education of occupational health and safety specialists. | Laboratory measurements within work environment are not carried out sufficiently often. As the result, in most of the cases, occupational risk assessments are biased. Besides, according to the survey of the occupational health and safety specialists, majority of such measurements are not carried out by certified laboratories, hence the measurements carried out are just indicative. According to the standard LVS EN 689:2004 "Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy", unbiased and complete assessment of exposure levels is based on a correct measurement procedure carried out at working environment. By applying indicative measurements these requirements are not fulfilled and the results are not representative. Results of this Study indicate that even specialists having or still continuing higher professional education in the field of occupational health and safety do not fully comprehend the importance of measurements to ensure correct and complete risk assessment. Of all respondents in this group 5.8% indicate that measurements are not required, 2.4% find it difficult to answer, but 26.7% - have never applied laboratory measurements in the process of occupational risk assessment. |
| 2.10 | Improve mechanisms for employers to involve and inform employees on risks from the existing chemical substances and their presence in work environment (by setting specific tasks and methods for information of employees). | Quite often employees are not informed about the results of laboratory measurements even if employers have ensured that they are carried out. Possibly this is the reason why substantially lower number of employees mentioned laboratory measurements within work environment – as compared to employers. A confirmative answer was given by only 5.3% of the employees – which is very low. Explanation to so low rate is not only low number of companies who have carried out laboratory measurements within work environment, but also low awareness levels among employees about measures carried out within companies. When weighing employees survey results against those of employers (in order to find out the number of companies where laboratory measurements within work environment have been carried out), it was concluded that employees of only 1.7% of companies have mentioned laboratory measurements within work environment. Comparing this number with the number of employees who mention that they are exposed to chemical substances or risks is shockingly low indeed. |
| 3 | Noise in work environment | |
| 3.1 | Review requirements for specialists and institutions who can measure noise levels in work environment. | Currently, according to the legislation (Cabinet Regulation No 66) measurements can be carried out by "specialists and competent specialists", while the Directive 2003/10/EC says |

| Nr. | Proposal | Argumentation / Description / Comment |
|---|---|---|
| | | that "assessment and measurements are carried out by competent institutions…". Besides, the legislation also provides that accredited laboratories authorised by the Cabinet of Ministers can carry out the measurements.<br>It would rather make sense to require that specifically trained specialists can carry out measurements and accredited laboratories (whose specialists could be assessed during the process of accreditations). Training of specialists could still be carried out by the Latvian Acoustics Association (after adjustments and improvements in the training system). |
| 3.2 | Review requirements for frequency of noise measurements. Possibly introduce a requirement to carry out noise measurements not less than once in 3 years if noise level exceeds 80 dB(A), or after changing work environment in such a way that it can significantly change the noise level. | Currently, the Cabinet Regulation No 66 requires to carry out noise measurements once a year if noise levels exceed 85 dB(A); and once in three years, if noise levels exceed 80 dB(A). The Directive 2003/10/EC requires that assessment and measurements are carried out by competent authorities with a reasonable frequency – i.e. – no specific frequencies are set. It would be more practical to require such measurements less often, but at the same time – to enforce that measurements are indeed carried out. Requirement to carry out noise measurements once a year if noise levels exceed 85 dB(A) is a rather formal one – because it is unlikely that noise levels will reduce unless specific measures are carried out. It is more imperative to carry out measurements around the limit value of 80 dB(A) – when it is important to decide if specific protective measures are required. Of course, these issues have to be seen in a light of monitoring and control capacities of the State Labour Inspectorate – if the proposed changes are introduced then their implementation will really need to be monitored and enforced. |
| 3.3 | Change the requirement that the employer has to test efficacy of protective equipment. | Currently, the Cabinet Regulation No 66 (Section 37) requires the employer to test individual protective equipment in order to ensure that employees' health and safety are not exposed to noise risks.<br>The Directive 2003/10/EC requires that the employer uses all effort to ensure that noise protection equipment is used and is responsible to test effectiveness of measures carried out in accordance to that Section (of the Directive). The Directive talks more in universal terms – about ensuring effectiveness of measures aimed at reducing or preventing noise levels, rather than just testing the protective equipment. The producer and distributor guarantee performance of individual protective equipment. |
| 3.4 | Review and improve the system how the employer can obtain more detailed information on recommendations for those employees whose hearing (according to hearing tests) has been impaired by noise at work environment. Such system should not | Both the Directive and the Regulations require the employer to take into account specialists' recommendations, but in reality doctors mostly limit themselves to the phrase "suitable / not suitable for the job". |

| Nr. | Proposal | Argumentation / Description / Comment |
|---|---|---|
| | violate human rights on confidentiality of medical history. | |
| 3.5 | Review required frequency of compulsory hearing tests for employees. | Required frequency of tests has to be reviewed. Possibly it should be required that employees exposed to more than 80 dB(A) need a hearing test once in 3 years (as it is currently), to remove the requirement for tests once every two years if noise levels at work environment exceed 85 dB(A), but leave requirement for tests once a year if noise levels exceed 87 dB(A). |
| 4 | Vibration in work environment | |
| 4.1 | Review requirements for specialists and institutions that can measure vibration levels in work environment, as well as review requirements for registration of equipment. | Currently, according to the legislation (Cabinet Regulation No 284) measurements can be carried out by "certified specialists", but certification of specialists has not been set clearly in legislation. The Directive 2002/44/EC says that assessments and measurements have to be carried out by competent institutions with appropriate frequency.<br>It would be more practical to set similar requirements as in case of measurements of noise at work environment – quite often these two measurements require use of the same equipment. That is – the measurements can be carried out by trained specialists and accredited laboratories (whose specialists could be assessed during the process of accreditations). Training of specialists could still be carried out by the Latvian Acoustics Association (after adjustments and improvements in the training system). |
| 4.2 | Review requirements for frequency of vibration measurements. Possibly introduce a requirement to carry out vibration measurements not less than once in 3 years if vibration level exceeds limit value, or after changing work environment in such a way that it can significantly change the vibration level. | According to the Cabinet Regulation 284, vibration levels are measured if there is reason to think that vibration levels have increased compared to the results of the last tests of work environment and it creates or can create risks to employees' health and safety. The Directive 2002/44/EC says that assessments and measurements have to be carried out by competent institutions with appropriate frequency. It would be more practical to require that vibration levels are measured during the first occupational risk assessment in places where vibration can be expected and thereafter – not less than once in three years, or after changing work environment in such a way that it can significantly change the vibration level. |
| 4.3 | Review and improve the system how the employer can obtain more detailed information on recommendations for those employees whose health (according to medical examination) has been impaired by vibration at work environment. Such system should not violate human rights on confidentiality of medical history. | Both the Directive and the Regulations require the employer to take into account specialists' recommendations, but in reality doctors mostly limit themselves to the phrase "suitable / not suitable for the job". Possibly, frequency of medical examinations has to be changed – by relating them to vibration exposure (if exposure values exceed limit values – once a year, if not – once in 3 years). |

| Nr. | Proposal | Argumentation / Description / Comment |
|---|---|---|
| 4.4 | Review required frequency of compulsory medical examinations. | The Directive requires regular medical supervision. |
| 5 | Biological risk factors | |
| 5.1 | Replace the work "substances" with "agents" in the name and Points 1 and 2 of the Cabinet Regulation No 189. | The Directive 2000/54/EC talks about biological agents, not "biological substances". This change would also mean that there is no need to explain in the Point 2 that biological substances are biological agents –such as microorganisms. |
| 5.2 | Elaborate normative standards (in form of guidelines or technical standards) to set limit values for indoor air pollution with micro organisms, as well as limit values during certain work operations. | Currently there is no legislation (Cabinet Regulations, or standards / guidelines) providing standards for microbiological pollution (limit values for biological substances) at different work places or during different processes (for example, offices with high human pressure, schools, kindergartens; services, such as hairdressers, reception centres for laundry, carpet cleaners, etc.) where biological risk factors are more likely to be present. In practice various recommended values from literature or publications are used. The only example where such requirements have been set is the Cabinet Regulation No 183 "Hygiene requirements in hospitals", which provide permitted and not permitted number of microorganisms. |
| 6 | Asbestos in work environment | |
| 6.1 | Review provisions for cases when the State Labour Inspectorate has to be informed about work with asbestos. | The Directive allows not informing the State Labour Inspectorate about work with asbestos, if the exposure is sporadic and low intensity – during minor maintenance works, encapsulation of undamaged asbestos containing materials, control of air and sampling, and similar activities. Unfortunately, currently even major works, such as asbestos demolition are not reported. It is therefore necessary to elaborate binding guidelines/technical standards explaining what types of work can be regarded as sporadic and with low intensity; as well as to amend legislation in order to specify when the State Labour Inspectorate ahs to be informed. |
| 6.2 | Elaborate a system how to assess competency of occupational health and safety specialists, competent institutions or specialists, and companies who are do dismantling works to carry out dismantling work with asbestos containing materials. Elaborate requirements for training of staff (preparing guidelines or information materials) and frequency. | Current legislation requires the employer to ensure that occupational health and safety measures are planned, managed and supervised by occupational health specialist with higher professional education in occupational health and safety, or by a competent institution, or by a competent specialist. However, there are no competency and qualification requirements for companies carrying out dismantling works. |
| 6.3 | Instructions and training of employees | |
| 6.4 | Specify contents of workplace safety instructions, training in first aid, and training of staff servicing dangerous | The Study results indicate that two thirds of specialists having or still continuing higher professional education in the field of occupational health and safety fully or partly agree that it is |

| Nr. | Proposal | Argumentation / Description / Comment |
|---|---|---|
| | equipment and machinery. | necessary to specify contents of workplace safety instructions in legislation. The contents could be specified within the operating standard. |
| 7 | Occupational health and safety for self-employed | |
| 7.1 | Draft a normative document containing occupational health and safety requirements specifically for self-employed, which would provide minimum requirements for self-employed. Such a normative document would specify in a greater detail the provision of the Labour Protection Law for self-employed persons to take care of their own health and safety at work, as well as the safety and health of persons who are or may potentially be affected by their work. | The Labour Protection Law (adopted on 20.06.2001., effective since 01.01.2002.) provides that self-employed persons have a duty to take care of their safety and health at work, as well as the safety and health of those persons who are affected or may be affected by their work. Currently two Cabinet Regulations related to occupational health and safety include provisions/duties also for self employed:<br>• Cabinet Regulation No 434 "Labour protection requirements in forestry" (adopted on 21.06.2005.);<br>• Cabinet Regulation No 92 "Labour protection requirements when carrying out construction works" (adopted on 25.02.2003.).<br>Other laws and regulations do not include occupational health and safety provisions specifically for self-employed.<br>The results of the Study reflect that some self-employed persons are not aware that occupational health and safety is also something of their concern and it is their duty to take care of their occupational health and safety. Self-employed persons pay less attention to their own health and safety than employers – this is revealed by the fact that they do not take as many occupational health and safety measures. This demonstrates that provisions of laws and regulations stimulate improved occupational health and safety conditions at companies (as compared to self-employed). |
| 8 | New legislation | |
| 8.1 | Safe practices when using electric appliances and installations | Currently none of the laws or regulations provides requirements for safe practices when using electric appliances and installations at companies. Latvia Energy Standard (LEK) can be used as guidelines, but they are not binding. |
| 8.2 | Training in first aid and first-aid sets. | Latvia lacks regulations providing requirements for training in first aid and defining the minimum of necessary medical supplies when providing first aid. |
| 8.3 | Legal requirements for microclimate | Currently none of laws or regulations provides legal requirements for microclimate of work environment. This is one of the most significant gaps in the national occupational health and safety legislation. For some types of workplaces / types of work a voluntary standard can be used (for example, the standard LVS EN ISO 7730:2003 " Moderate thermal environments - Determination of the predicted mean vote (PMV) and predicted percentage of dissatisfied (PPD) indices and specification of the conditions for thermal comfort" |

| Nr. | Proposal | Argumentation / Description / Comment |
|---|---|---|
| | | recommends parameters for deskbound workplaces). But, the same as all other standards, also this standard cannot be accessed free of charge, hence employers are faced with additional difficulties if they would like to know the recommended values. It is therefore recommended to include such parameters in the Cabinet Regulation No 125 "Requirements for labour protection in workplaces". |
| 8.4 | Legal requirements for workplace lighting and illumination | Currently none of laws or regulations provides legal requirements for lighting and illumination at workplaces. Such regulations could be drafted by amending the Cabinet Regulation No 125 "Requirements for labour protection in workplaces" (adopted on 19.03.2002.). It is recommended to use the standard LVS EN 12464-1:2003 "Light and lighting – Lighting of work places – Section 1: Indoor workplaces", which includes recommended values for different sectors and specific types of work, as the basis for setting the required values.<br>It is therefore recommended to include such parameters in the Cabinet Regulation No 125 "Requirements for labour protection in workplaces" as an annex. |

The Study also analysed the provisions in legislation for the documentation, which the employer has to prepare, maintain and store. Results of the analysis, as well as proposals for possible changes aimed at reducing the number of occupational health and safety documentation and reducing the flow of documentation are reflected in the Topical Annex „Analysis of sectoral policy planning documents".

# 5.3 Changes in compulsory insurance against workplace accidents and occupational diseases

## 5.3.1 General idea of the Alternative

The main objective of this Alternative is to find an option for balancing the Special Budget for workplace accidents (expenses exceed income; see Section 3.4.4. "Costs of occupational diseases and workplace accidents"). A subordinate target of the Alternative is to improve system of compulsory social insurance against workplace accidents and occupational diseases to promote preventive approach to development of occupational health and safety system in enterprises.

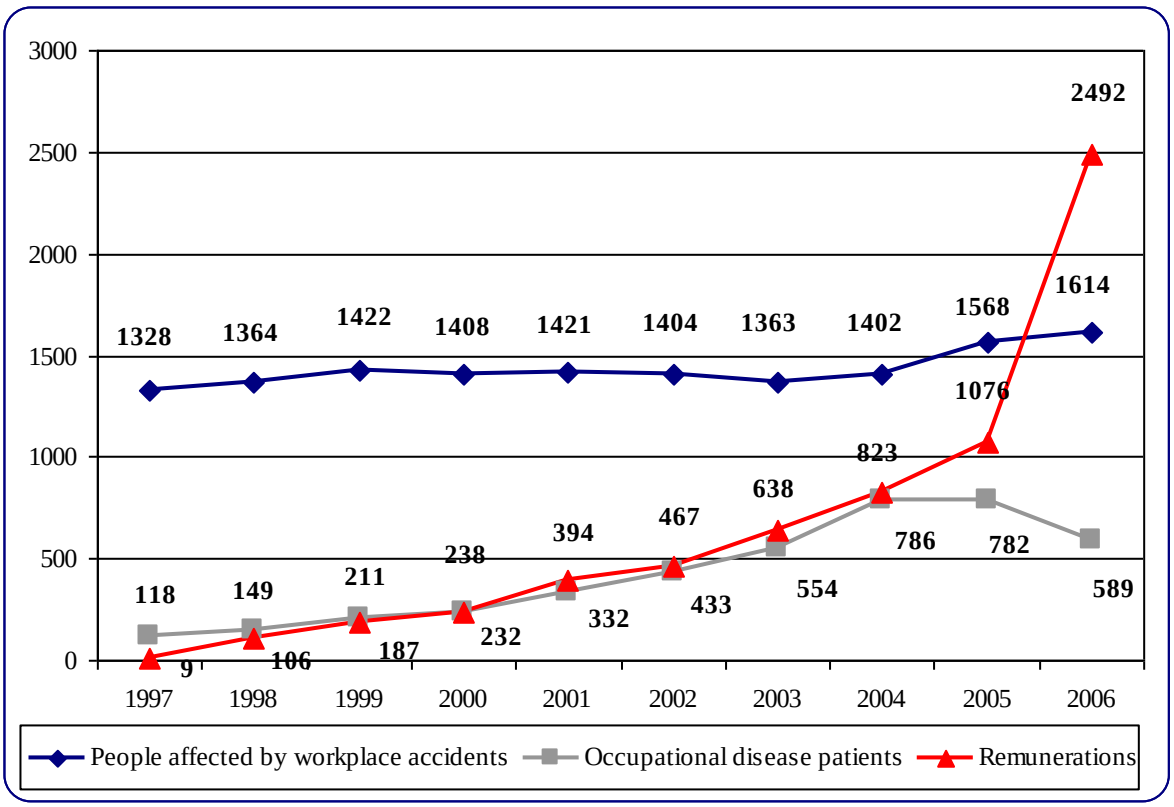
Analysis of the Special Budget for workplace accidents from 1997 to 2005 shows that insurance costs exceed insurance contributions. Therefore, in 2005 a short-term solution for balancing the budget was found: insurance premium rate to the Special Budget for workplace accidents was raised from 0.09% to 0.25%. However, analysis of occupational diseases in dynamics, of registration of workplace accident and of awareness of residents on their rights indicates that such a measure is only a short-term solution.

Initially it was intended to develop expenditure forecast for the Special Budget for workplace accidents. However, when the Study Team assessed available data on workplace accidents, on occupational diseases and on allocation of supplementary compensations for the 10 year period since compulsory social insurance against workplace accidents and occupational diseases is in force, it came to a conclusion that elaboration of a well-grounded forecast is impossible. The main reasons are as follows:

- Growth of compensations paid between 1997 and 2006 is not linear (especially, in 2006, when there was a rapid growth of compensations due to changes in compensation administration system, as well as large number of applications for compensations, see Figure 57);
- It is expected that number of occupational disease patients will rise due to improved procedure of occupational diseases diagnostics (Cabinet Regulation No 908 "Procedure for investigation and registration of occupational diseases", adopted on November 6, 2006) and implementation of the Alternative "Improvement of registration of workplace accidents and early diagnosis of occupational diseases, as well as early rehabilitation of patients affected by occupational diseases and workplace accidents". However, development of accurate prognosis is impossible regarding both time and numbers. Number of applications for remunerations will most probably increase along with increase of registered occupational diseases and awareness of occupational disease patients.

- Number of occupational diseases, which are the most costly to insurance companies in Europe (musculoskeletal diseases and noise induced diseases), is rapidly increasing in Latvia (see Topical Annex "Occupational diseases in Latvia, 1993 – 2005") (Eurogip, 2004);
- It is expected that number of registered workplace accidents will rise because of better registration of workplace accidents (improvement of workplace accident investigation and registration is one of the priorities defined at national level; therefore, Alternative "Improvement of registration of workplace accidents and early diagnosis of occupational diseases, as well as early rehabilitation of patients affected by occupational diseases and workplace accidents" was elaborated). Number of applications for remunerations will most probably increase along with improving registration of workplace accidents;
- In Latvia no data are available on number of people, who could apply for additional compensations from the Special Budget for workplace accidents that is managed by the State Social Insurance Agency (according to existing legislation, damage compensations can be applied for even by people affected in 2000; at the same time there is no database, which could show whether these people are alive or dead; therefore, is impossible to forecast maximum people, who could apply for compensations);
- Number of applications to the State Social Insurance Agency for additional compensations will most probably increase along with increasing public awareness;
- Due to increasing awareness and health care quality, most probably applications for additional compensations regarding rehabilitation will also rise. This would lead to a dramatic increase of expenses, because compensations for rehabilitation exceed those for medical treatment. Besides, as mentioned above, increase of musculoskeletal diseases prevails, and rehabilitation for this group of diseases is the most costly.

**Figure 57. Total numbers of first-time occupational disease patients, of people affected by workplace accidents and of remunerations paid, 1997-2006.**

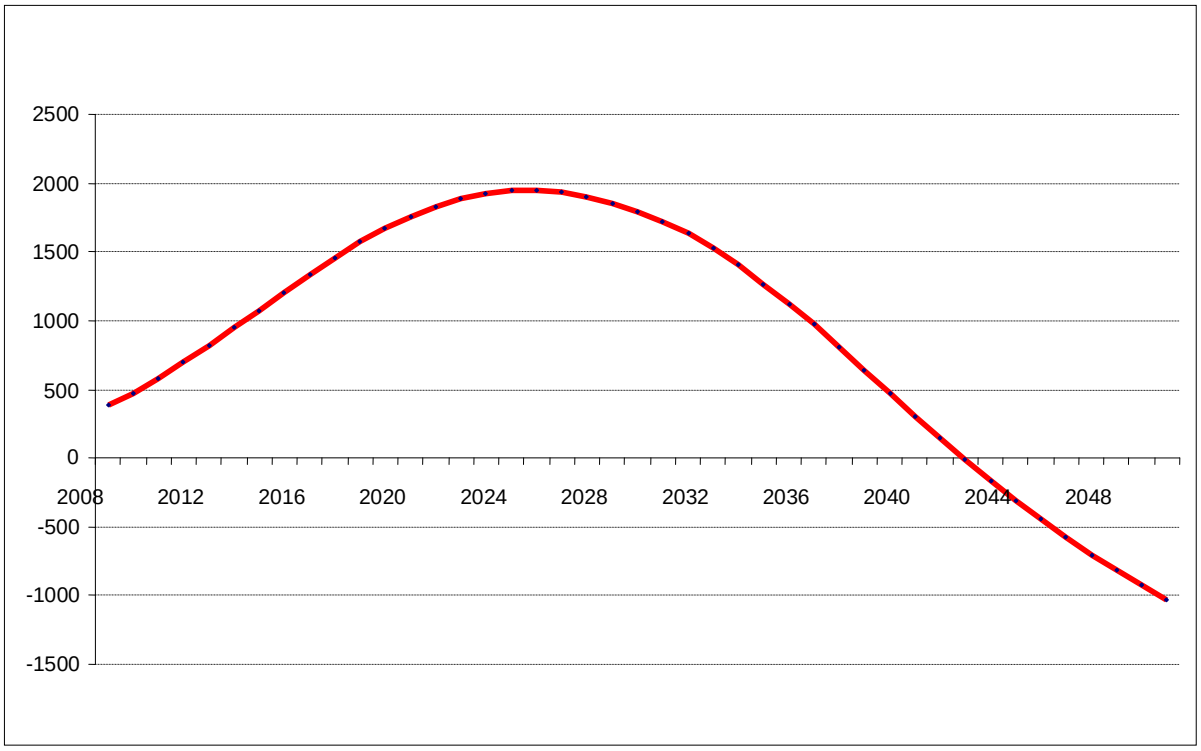



Sources:

- Number of people affected by workplace accidents – unofficial data of the State Labour Inspectorate for 2006;
- Number of occupational disease patients – data of the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital;
- Number of additional compensations (remunerations) – unofficial data of the State Social Insurance Agency for 2006.

Researchers prognosticate that number of people registered as persons affected by workplace accidents and occupational diseases in Latvia will rise within the nearest future, thus, necessity for compensations will also increase. On the other hand, Social Insurance Department of the Welfare Ministry of the Republic of Latvia informs that total reserve of the State Social Insurance budget will reach several million LVL, and there is a tendency for further increase (see Figure 58).

**Figure 58. Reserve/deficit of the State Social Insurance Budget in prices of 2005 for time period from 2008 to 2050.**




Source: Social Insurance Department of the Ministry of Welfare of the Republic of Latvia

**Potential measures.** Experts recognise two alternative scenarios, which could help to increase income of the Special budget for workplace accidents:

1. Insurance premium rate regarding workplace accidents and occupational diseases is relatively raised, if compared to other social insurance premium rates;
2. Compulsory insurance premium rates regarding workplace accidents and occupational diseases are differentiated considering working conditions, implemented occupational health and safety measures and/or other parameters within the company (implementation of „*bonus – malus"* or discount – surcharge system):
   - Using a simple differentiation method;
   - Using a sophisticated differentiation method.

**Scenario 1. Insurance premium rate regarding workplace accidents and occupational diseases is relatively raised, if compared to other social insurance premium rates.** Due to studied information, insurance premium rates in Latvia are one of the lowest in the European Union (0.25% in Latvia, while in Germany it is 1.3% of total income of employees, in Sweden – 0.68%, in Austria – 1.40%, in Portugal – 0.5%, in Belgium – 1.1%) (Eurogip, 2004). However, rates set within European Union countries cannot be directly applied to Latvia, because these rates have developed gradually and considering social-economic development and legislation of the respective country (for example, in some countries reserves are accumulated, money is allocated for preventive measures etc.). For example, in Germany between 1996 and 2002 the Premium rate has decreased from 1.51% to 1.33%procentiem (HVBG, 2007). Besides, studies carried out within European Union indicate that in

case premium rate exceeds 3% employers try to avoid payments and, thus, insurance system is not working effectively (EASHW, 2004).

This scenario would lead to the primary target – to increase the Special Budget for workplace accidents. However, it is unclear, if it will also facilitate development of a prevention-minded occupational health and safety system. Thus, secondary target of the Alternative could not be reached, i.e., social insurance system would not motivate employers to invest in occupational health and safety. The State Social Insurance Agency should calculate how and when it is possible to change the social insurance premium rates, considering state pension insurance, unemployment insurance, disability insurance, maternity insurance and sickness insurance.

Advantages of the scenario:

- A simple solution for supplementing the Special Budget for workplace accidents, thus, reaching the target – to balance the Special Budget for workplace accidents;
- Previous experience of the State Social Insurance Agency allows avoiding additional administrative costs (except those related to recalculations of social insurance premium rates and their application period).

Deficiencies of the scenario:

- Resources of other social insurance funds are decreased;
- The principle of uniformity is maintained, i.e., the same premium rates for all enterprises regardless their occupational health and safety culture. The only factor that affects payments is salary. Thus, the secondary objective of the Alternative is not reached, i.e., establishment of preventive occupational health and safety system in enterprises is not facilitated.
- Establishment of preventive occupational health and safety system in enterprises is not facilitated as payments to social insurance economically motivates employers to invest in occupational health and safety;
- It is probable that premium rates will have to be recalculated again in the nearest future, because it is not clear for how long the increased rates would keep the Special Budget in balance.

**Scenario 2. Compulsory insurance premium rates regarding workplace accidents and occupational diseases are differentiated („*bonus – malus*" system).** This scenario considers two possible differentiation levels (EASHW, 2004):

- Simple differentiation. In this case all companies are divided in several groups by their economic activities (for example, low risk companies, medium risk companies, high risk companies according to the NACE classifier). Insurance premium rates for enterprises within one group are the same, but they differ among groups: the higher the risk, the higher the social insurance premium rate for workplace accidents (Ouwe, 2007; AISAM, 2007);
- Sophisticated differentiation. For premium calculation occupational health and safety situation and on compliance with existing legislation of every enterprise are considered, thus, an individual insurance premium rate is applied for each enterprise (EASHW, 2004).

Efficacy of „*bonus – malus*" system differs among European Union countries. Besides, insurance systems are specific to each country and, thus, it is hard to directly transpose any of them in Latvia. At the same time „*bonus – malus*" system is one of the most notable motivating factors that could raise occupational health and safety culture in enterprises leading to a safe and healthy working environment. This system is a particularly motivating mechanism, if sophisticated differentiation

method is used. In case of simple differentiation activities of individual enterprise have only indirect effect on the premium rate, as occupational diseases and workplace accident statistics of the whole sector are considered for calculations (EASHW, 2004). On the other hand, global studies reveal that this economic motivating factor is strong enough only in cases, when insurance premium rates are high (at least 1% of income of employees). Thus, it becomes obvious that with current premium rates implementation of the sophisticated differentiation method will not be effective in Latvia and will not lead to the secondary target – to establish preventive occupational health and safety culture in enterprises (EASHW, 2004).

Besides, it should be noted that sophisticated differentiation is most effective (could be effective) in respect of workplace accidents, because enterprises, where workplace accidents have taken place can be identified (the guilty should pay more). However, it should be considered that implementation of sophisticated differentiation in Latvia right now could have a negative impact on workplace accident registration (could stimulate employers to avoid reporting on accidents).

Sophisticated differentiation is not as effective regarding occupational diseases, because:

- The latency period (between exposure and clinical manifestation with following diagnosis) of occupational diseases is long, and during this period the affected employer can switch to another job and sector;
- Several risk factors could lead to similar clinical signs (for example, low back pain can be induced by handling of heavy objects, working in awkward postures and whole-body vibration); besides, non-occupational trauma or health disorders can aggravate the course of occupational diseases or even induce their manifestation; ,
- New occupational diseases are recognised, which were not considered as being occupational during exposure (for example, in some countries burnout syndrome caused by psycho-social risks is a recognised occupational disease).

In all above-mentioned cases there is always a problem to identify the enterprise, which is responsible for the particular occupational disease. If several enterprises could be related to development of an occupational disease, it is hard to assess contribution of each enterprise (Ruck, 2004). To solve this problem, different approaches are used in different countries. For example, in Belgium and Portugal insurance against workplace accidents is separated from that against occupational diseases. In Denmark acute occupational diseases (for example, acute back pain) are more often diagnosed, and insurance premiums are calculated considering number of diagnosed occupational diseases in the respective enterprise within the last three years (Eurogip, 2004). In some other countries, where several insurers exist, mutual agreements are concluded to avoid controversy regarding payments in case an insured person is diagnosed an occupational disease (Ruck, 2004). The current workplace accident investigation procedure focuses on the last employer, following the principle that the last employer pays. If such a principle would be used regarding insurance, it would preclude establishment of preventive culture in enterprises and would not be fair.

After auditing of the State Labour Inspectorate and evaluating cooperation between the State Labour Inspectorate and the State Social Insurance Agency, experts of the International Labour Organisation have also indicated that there is a necessity to implement „*bonus – malus*" insurance system regarding workplace accidents and occupational diseases in Latvia (ILO, 2006). Researchers of the Study came to a similar conclusion, however, it should be noted that effective implementation of this system is resource-consumptive and complicated. 55.6% of employers surveyed in the frames of the Study "Work conditions and risks in Latvia" consider that differentiated premiums should be implemented.

This means that one of interested parties supports this idea. Existing legislation already includes such a system, i.e., Cabinet defines dangerousness groups and corresponding compulsory social insurance premium rates (Section 10 of the Law on Compulsory Social Insurance in Respect of Accidents at Work and Occupational Diseases).

In case of simple differentiation the State Social Insurance Agency could maintain functions of an insurer, but additional resources (financial resources, staff and their training, software etc.) for development and maintenance of the new system would be necessary. The advantage of such a system is that only one insurer would operate in Latvia and, thus, would:

- Maintain a united database, summarise and analyse costs arising to the state in case of a workplace accident or an occupational disease. This would ensure that economic indicators are used for setting priorities;
- Prevent any disputes between insurers in case of an occupational diseases;
- Obviate a necessity to separate insurance against workplace accidents from insurance against occupational diseases, because compensations would be paid from the same budget; this would also preclude disputes between insurer and enterprises, whether respective occupational disease is related to work in the respective enterprise, which could affect insurance premium rate;
- Allow non-benefit administration of the Special Budget for workplace accidents, thus, ensuring that surplus is allocated to preventive measures;
- In long-term allow definition of a mechanism for planning and financing preventive measures from the Special Budget for workplace accidents (currently there is no mechanism for planning of financing such measures).

On the other hand, it should be emphasized that the State Social Insurance Agency lacks experience in development of a differentiated insurance system, while private insurers have such an experience (for example, dealing with OCTA - Compulsory Third Party Insurance). Besides, classification of enterprises by their activities would only partially reach the secondary target – implementation of preventive approach, because enterprise will not be able to affect its premium rate directly. Thus, simple differentiation could be initially applied as a transition to sophisticated differentiation, when performance of each individual enterprise would be considered.

Development of differentiated insurance system is complicated, and public sector lacks experience in this regard. Therefore, private insurers should be involved. Competition and European experience of private insurers would promote system development. Consultations with several private insurers in the frames of this Study showed that, to avoid lobbyism of some insurance companies, public institutions should organise a work group involving Latvian Insurers Association, who would help to elaborate *„bonus – malus*" insurance system regarding workplace accidents and occupational diseases. It should be noted that in most European Union countries such a private insurance system exists (for example, Finland, Denmark, Belgium, Portugal). Besides, in some countries (for example, the Netherlands) transition to currently effective private insurance system was started only 15 years ago (Eurogip, 2004; CEA, 2005; Faure, 2002).

Advantages of the scenario, if simple differentiation is applied:

- Principle that premium rate differs among enterprises is implemented. Thus, it is possible to ensure that enterprises with significant occupational risks and, thus, higher workplace accident or occupational disease risk pay more than enterprises with less occupational risks and accordingly lower workplace accident or occupational disease risk. As a result the secondary

target of the Alternative – to promote preventive approach to occupational health and safety system in enterprises - is reached;

- Implementation of the principle will need relatively few preparatory measures and only some specific statistical data;
- Administrative expenses of simple differentiation are lower than of sophisticated differentiation;
- No amendments in existing legislation are necessary;
- Recommendations of experts of the International Labour Organisation are followed;
- The State Social Insurance Agency acts as insurer, and it is socially better acceptable (dominant public opinion is that public business is "more reliable" than private one).

Deficiencies of the scenario, if simple differentiation is applied:

- Simple differentiation would be only partially effective, because there will be enterprises with low preventive culture and with significant occupational risks, which would contribute to the Special Budget for workplace accidents less that enterprises with higher preventive culture (this especially regards medium and large enterprises). Thus, the secondary target of the Alternative – to promote implementation of preventive approach to occupational health and safety system in enterprises - would not be reached.

In case sophisticated differentiation is selected, some new system elements should be developed:

- A system for assessing occupational health and safety situation within enterprises, which would help to define specific insurance premium rates;
- Consultation/control service, which would assess efficacy of implemented occupational health and safety measures (for example, in Belgium insurers act also as consultants, i.e., recommend necessary preventive measures).

Several systems for assessment of occupational health and safety situation in enterprises exist in European countries. It should be noted that the main problem in Latvia is high prevalence of small enterprises.

In large enterprises of some European Union countries (for example, French enterprises with 200 and more employees) insurance premium is calculated directly considering number of workplace accidents and occupational disease patients in the enterprise (in Poland number of exposed employees is also considered). For small enterprises (with 10 and less employees) a united premium rate is defined for the whole sector, because this facilitates development of the whole sector (for example, adoption of united occupational health and safety standards (*soft-law*) for the sector, long-term planning of occupational health and safety measures within the sector etc.). For example, in Poland implementation of differentiated insurance system was started in 2003, but small enterprises are not yet subject to sophisticated differentiation. In some countries, for example, France, in medium size enterprises a combined method for calculation of insurance premiums is used (EASHW, 2004).

At the same time it should be kept in mind that employers of both small and medium size enterprises, as well as the State are interested in building an insurance system, which would motivate companies to implement occupational health and safety measures, because small enterprises of Latvia are under risk regarding occupational health and safety. Experience of United Kingdom could be used, i.e., if small and mediums size companies want to get a better premium rate, which differs from that applied to the respective sector, they can fill in a questionnaire, according to which a special index is calculated for companies. Such questionnaires include data on workplace accidents that have occurred within the

company and occupational risks (for example, handling of heavy objects, repetitive movements, work with chemical substances, work with equipment, stress, internal transportation, noise, vibration, stumble risk). This questionnaire is voluntary, short, free of charge and available on the Internet. Therefore, filling in the questionnaire takes little time. Periodic inventories of enterprises, which have filled in the questionnaire, are carried out to check on conformity of provided information with the real situation in the company. For enterprises, which have not filled in the questionnaire, sectoral insurance premium rate is applied (EASHW, 2004). Besides, it should be noted that similar system is already in place in Latvia – according to Cabinet Regulation No 99 of 8 February 2005 "Regulations regarding the types of commercial activities in which an employer shall involve a competent authority" a company is allowed to not involve a competent authority, when it fulfils specific requirements or submits to the State Labour Inspectorate a special notification on establishment of occupational health and safety system within the company. Such a system gradually becomes functional, which confirms that with adequate control mechanisms voluntary self-assessment systems can be effective.

Second optional mechanism includes inventories of enterprises carried out by so-called insurance inspectors. Such inventories provide objective information on situation within the company. However, in this case insurers should have a department of experts, who could adequately assess occupational health and safety situation in companies. Such an assessment is a time consuming activity, and knowing that there is shortage of qualified occupational health and safety experts in Latvia, it could be also an expensive activity (for example, to train specialists, who would have experience regarding both insurance and occupational health and safety, as well as to ensure adequate salary for these experts). This can be implemented by developing preventive departments in the frames of insurance companies (as in Belgium) and by cooperating between insurance companies and competent occupational health and safety authorities (EASHW, 2004; AISAM, 2007). Experience of some countries indicates that financial auditing of enterprises should be carried out to reveal false salaries (Rudin, 2003). This is a problem also in Latvia, as there is high prevalence of so called "envelope salaries".

Advantages of the scenario, if sophisticated differentiation is applied:

- Principle that contribution of an enterprise to the Special Budget for workplace accidents is calculated considering probability of a workplace accident or occupational disease in the enterprise is followed: the higher the probability, the higher premium rate. Thus, target of the Alternative - to promote implementation of preventive approach to occupational health and safety system in enterprises - is reached.
- Recommendations of experts of the International Labour Organisation are followed.

Deficiencies of the Alternative, if sophisticated differentiation is applied:

- Implementation of the Alternative needs specific preparatory measures and specific statistical data;
- Amendments in existing legislation are necessary;
- Specific supervision and control mechanism will have to be established, which probably will need considerable financial and human resources.

Summary of advantages and deficiencies of all alternatives leads to a conclusion that gradual transition from united premium rate to „*bonus – malus*" system, involving private insurance companies, is the best scenario for development of compulsory social insurance against workplace accidents and occupational diseases in Latvia. Initially, simple differentiation should be applied, but later steps towards sophisticated differentiation should be taken. This would lead to a balanced Special Budget for workplace accidents, as well as would promote preventive approach to development of

occupational health and safety system in enterprises. Only this scenario will be analysed in further Sections.

## 5.3.2 Political and economic feasibility of the Alternative

**Alternative is politically feasible.** Most of employers surveyed in the frames of the Study "Work conditions and risks in Latvia", as well as involved policy planners and executors, have indirectly expressed their support to implementation of „*bonus – malus*" system. Policy planners do not favour involvement of private insurance companies, because they think that this will result in higher insurance costs to employers. Additional expenses and more stringent control could be the reason, why employers of high-risk companies could deny their support to the Alternative.

Opinion of another significant interested party – employees – is obscure. However, it is expected that employees would rather support such an alternative, if it would not negatively affect their income. The expected increase of occupational health and safety level would most probably be highly acceptable to employees and general public. The opinion regarding the Alternative depends on explanations and information provided, as well as specific features of the new system.

Policy planners should follow several conditions while implementing the Alternative:

- Preparatory work should be carried out to develop a united database of people affected by workplace accidents and occupational diseases, as well as respective costs (databases of following relevant institutions should be consolidated as much as possible: the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital, the State Labour Inspectorate, The State Social Insurance Agency, the Office of Citizenship and Migration Affairs, the State Revenue Service). This database would support analysis of costs per sectors, per groups of diseases/traumas etc. This would ensure economically justified definition of occupational health and safety priorities.
- Institution, which would ensure maintenance and administration of the database, should be selected. It should be secured that other relevant institutions (Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital, State Labour Inspectorate) supplement the database with their data;
- To require that, considering summarised data, the State Social Insurance Agency carries out necessary calculations and forecasts probable date for transfer to differentiation system, i.e., date, when income and reserves will cover the expenses;
- To establish a working group, which includes representatives of the above-mentioned institutions, as well as representatives of insurers, employees and employers. Keeping in mind the summarised data and calculations, this working group should develop „*bonus – malus*" system for insurance against workplace accidents and occupational diseases. The working group should consider several issues regarding enterprises – sector, duration, existing working environment supervision system, number of employees etc.

Long-term **economic feasibility** of the Alternative is high, although during transition period (from the state managed insurance system to the private one) additional resources will be necessary from both sides. In general the Alternative relieves the State Social Insurance Agency. However, additional responsibilities could arise for the State Social Insurance Agency, the State Revenue Service, the Health Statistics and Medical Technologies State Agency and other state institutions dealing with

registration and information aggregation. These functions could be delegated to private insurance companies or non-governmental organisations.

### 5.3.3 Financial analysis of the Alternative

Several types of costs are related to implementation of the Alternative:

- Preliminary study costs (meetings, data aggregation, development of recommendations);
- Development and implementation costs (development of supervisory and control system, training, informative campaigns, legislation etc.);
- Maintenance costs (maintenance of supervisory and control system, data aggregation, training, informative campaigns etc.).

Implementation of the new system will take several years, and significant changes in existing system and development of new elements will be necessary. Therefore, active involvement of all interested parties is essential. It was not possible to carry out accurate financial calculations, because:

- Opinion of governmental institutions regarding involvement of private companies in insurance against workplace accidents and occupational diseases is obscure;
- Some private insurers are not very interested in participation in insurance against workplace accidents and occupational diseases. The main reasons for such disinterest are the unclear position of the state, which does not motivate private insurers, and shortage of human resources;
- Accurate statistical data are not available, therefore, it is hard to estimate number of people affected by workplace accidents and occupational diseases, who could apply for additional compensations (reliable data are essential for carrying out accurate calculations, (CEA, 2005)).

Due to the above-mentioned reasons researchers of the Study could not obtain economic calculations regarding implementation costs of "*bonus – malus*" system. Researchers recommend establishing a working group of state and private insurers, who could develop and decide upon the most acceptable scenarios, as well as to calculate related costs. Latvian Insurers Association could represent the private insurance companies, thus, avoiding lobbyism of any particular private insurer. This working group would ensure that decisions of the state are based on economic calculations. The European Insurance and Reinsurance Federation (CEA), member of which is the Latvian Insurers Association, indicates that private insurers of European Union countries are ready to cooperate with governmental sector, to participate in a constructive dialogue and to consult governmental institutions on issues related to insurance (CEA, 2005).

It is clear that the new system will be more effective, because assessment of the real situation and economic motivation of employers will be its cornerstones. Relative inefficacy is probable in the very beginning. To preclude losses, the State should accurately evaluate, which functions could be kept under governmental institutions and which could be delegated to private sector in the implementation phase.

## 5.3.4 Socio-economic analysis of the Alternative

Keeping in mind that the Alternative would reach the primary target to balance the Special Budget, as well as the secondary one to promote development of preventive culture, this Alternative should be acceptable for general public. It should be noted that rather progress of preventive culture would be the main benefit for all parties than a balanced Special Budget.

Globally it is known as a "*win-win-win*" situation. Simplicity is the key to this system, where employees, employers and general public are the winners (EASHW, 2004; AISAM, 2007).

Probable benefits to employers would be as follows:

- Economic motivation to invest in occupational health and safety system of the company;
- More effective occupational health and safety system that would reduce workplace accident and occupational diseases risk correspondingly reducing direct and indirect costs related to workplace accidents and occupational diseases;
- Safer and healthier working environment will motivate employees and rise their work ability, which will, in its turn, increase quantity and quality of performed job rising productivity of all the company;
- Free market will ensure better and cheaper services.

There are no direct and significant benefits to employees. Changes are expected in case an employee is affected by a workplace accident or an occupational disease. The new system should be more effective than the state insurance system, because the free market would ensure competition among private insurers, thus, rising quality of provided services. Another benefit could be that private insurers would probably pay more attention to early diagnosis and rehabilitation of occupational diseases to promote early returning of employees to the labour market. Experience of Finland and Germany shows that in such a way guarantee fund can be accumulated to ensure compensations in case employer has not made insurance payments.

The main benefit to general public would be decreased number of people killed or in other way affected during workplace accidents. In more distant future number of occupational disease patients would also decrease. Improved working environment will improve relations between employer and employees both in individual enterprises and in the national labour market, which would decrease existing stress.

## 5.3.5 Probable risks to implementation of the Alternative and their prevention

Two types of risks could preclude implementation of this Alternative:

- Lack of social responsibility;
- Lack of information.

Social responsibility is a cornerstone of social insurance. In countries, where effective private insurance systems are in place, social responsibility level is traditionally higher. Inadequately low number of registered workplace accidents in Latvia, which means high level of non-reporting, is one of indicators showing low social responsibility (see thematic Annex "Workplace accidents"). Other indicators of low social responsibility in Latvia are high illegal employment rate and notable

prevalence of "envelope salaries". These problems would motivate insurers to establish additional control mechanisms, which would raise their costs. However, these additional costs would be still covered by fair employers. Repressive measures and more stringent control mechanisms (including fight of the State with illegal employment and "envelope salaries") could somehow improve the situation. However, it would rather be elimination of consequences than promotion of responsibility.

Lack of information or its inaccuracy is one of the main conclusions of this Study. Most of recommendations were also drawn up regarding information. Experts of many countries indicate that accurate information and effective database are both essential parts for functioning of the system (CEA, 2005). Current accounting of workplace accidents, occupational diseases, as well as insurance compensation applications and payments is ineffective. Exchange of information among different state owned registers and databases are also insufficient. Available information is not enough to carry out an accurate analysis on an enterprise, sector or profession. Such analysis is essential for risk assessment, which could support decision-making on application of differentiated insurance premium rates.

# THANKS

The research teams wishes to thank all the employees of Ministry of Welfare of Republic of Latvia, and especially the ones from Labour Department, for their cooperation, diligence, support and involvement in the execution of the study „Work conditions and risks in Latvia".

The following people took some part in the study and helped the research team in one way or another:

- Maija Anspoka (Zygon Baltic Consulting Ltd);
- Maranda Behmane (Central Statistical Bureau);
- Astrīda Bule (Head of Riga Regional State Labour Inspectorate);
- Jolanta Cīrule (Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital);
- Elvīra Čurbakova (Chernobyl NPP accident register at the Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital);
- Evita Česka (State Social Insurance Agency);
- Dr. Janīna Danusēviča (scientific editor);
- Rita Elce (State Labour Inspectorate);
- Jana Feldmane (Social Health Agency);
- Jānis Ieviņš (Riga Technical University);
- Andris Jaško (Ministry of Defence of Republic of Latvia);
- Valdis Jemeļjanovs (Riga Technical University);
- Vladimirs Kabanovs (State Labour Inspectorate);
- Valdis Kaļķis (University of Latvia);
- Edgars Korčagins (Employers' Confederation of Latvia);
- Dace Krievkalne (Central Statistical Bureau);
- Sandra Magone (Social Health Agency);
- Aldis Pauliņš (FACTUM Ltd);
- Daiga Piebalga (Ministry of Internal Affairs of Republic of Latvia);
- Egita Pole (State Agency for Compulsory Health Insurance);
- Maija Putniņa (Science Council of Latvia);
- Jeļena Reste (Centre of Occupational and Radiation Medicine of P.Stradins Clinical Hospital);
- D.Sīkais (State Revenue Service);
- Māris Skujenieks (State Social Insurance Agency);
- Jānis Staša (University of Agriculture of Latvia);
- Aivars Stengrevics (Cancer Register of Latvia);
- Arnolds Šķēle (University of Agriculture of Latvia);
- Valentīna Turovska (State Labour Inspectorate);
- Oksana Žabko (FACTUM Ltd);

- Timo Leino (Finnish Institute of Occupational Health, Expertise Centre Good Practices and Occupational Skills);
- Kari Kurppa (Finnish Institute of Occupational Health, Department of Epidemiology and Biostatistics);
- Kaidi Kandla (AS EMOR, Estonia);
- Annie Rice (International Labour Organisation);
- Pekka Ylostalo (Ministry of Labour of Finland);
- Charles Woolfson (Marie Curie Chair, Eurofaculty, University of Latvia).

# REFERENCES


1. AISAM, 2007. *Worker's compensations insurance Activities 2004 – 2006.* Association Internationalle des Societesd Assurance Mutuelle. Report by the Worker's Compensation Insurance Taskforce, led by R.Rosseel. http://www.aisam.org/upload/documents/AISAM_WCI_report_2006.pdf
2. Antila J., Ilestalo P., 2003. *Darba dzīves barometrs Baltijas valstīs 2002.gadā*. Darba ministrija, Somija, 271 p.
3. AS „Izstrādājumu bīstamības novērtēšanas aģentūra", Riga, 2002., *Latvijas uzņēmumu gatavība ieviest jaunās darba aizsardzības prasības*. http://www.osha.lv/research/index_lv.stm.
4. AS „Izstrādājumu bīstamības novērtēšanas aģentūra", Riga, 2002., *Darba devēju viedoklis par darba likumu.* http://www.osha.lv/research/index_lv.stm
5. CEA, 2005. *Between public and private insurance solutions for a changing society*. The European Insurance and Reinsurance Federation http://www.ania.it/rel_internazionali/attivita/MU5128eAnxPublicPrivateFinaldraftreport20April2005_new.doc.
6. Central Statistical Bureau, 2000. *Dzīves apstākļu apsekojums Latvijā 1999.gadā*. Informative brochure. 189 p.
7. Central Statistical Bureau, 2001. *Dzīves apstākļu apsekojums Latvijā 1999.gadā*. Series of analytical columns. 233 p.
8. Central Statistical Bureau, 2004., *2003.gada Latvijas iedzīvotāju veselības apsekojuma rezultāti*. Statistical data. 187 p.
9. Central Statistical Bureau. *Starptautiskā standartizētā ekonomisko darbības veidu klasifikācija*. http://www.csb.lv/Satr/nace_saraksts.cfm.
10. EASHW, 2004. *Effectiveness of economic incentives to improve occupational safety and health.* Summary of a workshop organised by the European Agency for Safety and Health at Work as part of a European conference held during the Dutch Presidency in 2004. European Agency for Safety and Health at Work, Forum 14. http://osha.europa.eu/publications/forum/14/forum14_en.pdf .
11. European Foundation for the Improvement of Living and Working Conditions, 2003. *Darba apstākļi valstīs pirmspievienošanās posmā un kandidātvalstīs.* http://www.eurofound.eu.int/publications/files/EF0306LV.pdf
12. Eurogip, 2004. *Costs and funding of occupational diseases in Europe.* http://www.europeanforum.org/pdf/Eurogip-08_E-cost.pdf.
13. European Foundation for the Improvement of Living and Working Conditions, 2006. Riedman A, Bielenski H., Szczurowska T, Wagner A. W*orking Time and Work Life Balance in European companies.* Dublin, 70 pp. http://www.eurofound.eu.int/publications/files/ef0627en.pdf
14. Faure MG, 2002. *Insurance and competition law: balancing the conflicts.* Paper presented at the conference Global issues in insurance regulation, London, 17-18 April 2002. http://www.nottingham.ac.uk/business/cris/papers/Grif%20-%20Michael%20Faure.pdf.
15. FIOH, 2002. *Work and health country profiles of twenty two European countries*.

16. HVBG, 2007. *Hauptveband der gewerblichen Berufsgenossenshaften.* http://www.hvbg.de/e/pages/untern/index.html.
17. ILO, 2006. *Tripartite Audit of the Labour Inspection System of Latvia 3-14 October 2005.* International Labour Office, Development of Labour Inspection Systems, Safe Work, Geneva, Switzerland, June 2006. p.40-41. http://www.vdi.lv/admin/files/dokumenti/LatviaAuditFinal27July2006.pdf.
18. Karnite R. *Temporary agency work in an enlarged EU – case of Latvia.* http://www.eiro.eurofound.eu.int/2005/06/word/lv0506104t.doc.
19. Oslands O., Behmane M., Jakobsena B., Priede A., Švarckopfa A., Vasaraudze I., 1996. *Dzīves apstākļi Latvijā: LR Valsts Statistikas komiteja*, 352 p.
20. Ouwe, 2007. *More prevention, less compensation.* Seminar IV: Occupational diseases: Monitoring, recognition and compensation. Kribi, Cameroon, 13-15 March, 2007. International Social Security Association. http://www.issa.int/pdf/kribi07/2ouwe.pdf .
21. World Health Organisation, 1995. *Global Strategy on Occupational Health for All*. 14 p.
22. Ruck M., 2004. *Occupational diseases Are they insurable? Discussion paper prepared by worker's compensation centre of competence*, Munchen, Germany, pp. 16. http://www.munichre.com/publications/302-04280_en.pdf .
23. Rudin, 2003. *The system of Accident Insurance in Switzerland.* The Swiss National Accident Insurance Fund. https://www.kli.re.kr/AttachFile/emate-gw/seminar/4427F1D1B093F72049256D250042C67A/%BD%BA%C0%A7%BD%BA%28%BF%B5%B9%AE%29-Peter%20Rubin.pdf.
24. Tuomi K., Ilmarinen J., Jahkola A., Katajarinne L., Tulkki A., *Work ability index*, Finnish Institute of Occupational Health, Helsinki, 1998, 34.p.
25. State Labour Inspectorate, 2005., *Sabiedriskās domās pētījums par Valsts Darba inspekcijas darbību*. http://www.vdi.lv/aktual/atskaite_SKDS.pdf
26. Vanadziņš I., Eglīte M., Roja Ž., Mangule R., Sečina J., Borherte L. *Veselības un sociālās aprūpes darbinieku arodveselība Latvijā*, Latvijas ārstu žurnāls, 2003, 2, 26-30.
27. *Working Environment Survey*, 2000. http://osh.sm.ee/research/emor_report.htm
28. World Health Organisation. *International Statistical Classification of Diseases and Related Health Problems* http://www.who.int/classifications/icd/en/

# APPENDIXES