NDPHS Expert Group on Social Inclusion, Healthy Lifestyles and Work Ability (SIHLWA)

Thematic Report

Country Reports on Occupational Safety and Health in the Northern Dimension Area

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Northern Dimension Partnership in Public Health and Social Well-being (NDPHS)

NDPHS thematic report: *Country Reports on Occupational Safety and Health in the Northern Dimension Area*

The views reflected in this paper are those of the members of the Occupational Safety and Health sub group of the NDPHS Expert Group on Social Inclusion, Healthy Lifestyles and Work Ability (SIHLWA) who have developed it and should not, therefore, be interpreted otherwise. If specific country data are not available in this report, this is because the authors were either unable to obtain it or did not receive permission to publish this data.

Editors: Timo Leino and Suvi Lehtinen
Tables: 34
Figures: 19

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1. Introduction

In spite of positive developments in safety and health at work during the past 20 years, the traditional safety and health hazards still constitute a substantial risk for worker's safety, health and work ability. A total of 22 to 47% of EU workers are exposed to traditional physical, chemical or ergonomic hazards. 5,000 EU workers die annually as a consequence of occupational accidents and high numbers of occupational diseases are caused by unhealthy conditions of work.

Poor working conditions, occupational accidents, and occupational diseases cause a great deal of human suffering and exclude people from work. In addition, they cost countries in the Northern Dimension area an estimated 4% of the Gross Domestic Product: a loss of up to EUR 225 billion every year.

In addition to the traditional burdens for safety and health, several new risks related to the rapid change of work life, the introduction of new working methods, new technologies, new materials and substances, and new work organizations bring new challenges to the field of safety, health and well-being. However, new technologies also provide good opportunities for better safety and health at work. An important background factor is the globalization process and associated growing competition. According to Dublin Foundation surveys, 23–60% of EU workers are exposed to psycho-social hazards such as high pace of work, time pressure, tight deadlines, stress and fatigue. In addition, insecurity of employment and short-term and precarious work contracts constitute a stress factor for a substantial part of the workforce.

Life style related health issues are a growing concern to work ability and employability. The European Health Report 2005 of the World Health Organization, using the Disability Adjusted Life-Years (DALYs) as a measure, found the most important causes of the burden of disease in the WHO European Region to be non-communicable diseases (NCDs – 77% of the total), external causes of injury and poisoning (14%) and communicable diseases (9%). Seven leading conditions – ischaemic heart disease, unipolar depressive disorders, cerebrovascular disease, alcohol use disorders, chronic pulmonary disease, lung cancer and road traffic injuries – account for 34% of the DALYs in the Region. Seven leading risk factors – tobacco, alcohol, high blood pressure, high cholesterol, overweight, low fruit and vegetable intake, and physical inactivity – account for 60% of DALYs.

The European Strategy for Health and Safety at Work 2007–2012 emphasizes a comprehensive approach in safety and health at work when aiming at the achievement of the Lisbon Strategy objectives of high quality of work. The development of adequate infrastructures is called upon to cover, in addition to the traditional occupational safety and health hazards, the problems and challenges of "new work life", including social and psychological risks, age and gender factors, and to promote health and well-being at work. The EU will also work on mainstreaming health and safety at work in other Community policies. The Strategy calls for the development of coverage and content of multidisciplinary preventive and protective services, and the promotion of safety, health and work ability constitutes an important element in the Strategy implementation. The Second EU Programme of Community Action in the Field of Health 2008–2013 deals with health aspects, including occupational health. The Luxembourg Declaration on Health Promotion emphasizes the role of the workplace as a forum for the promotion of health and work ability of the working-aged people. Workplace Health Promotion (WHP) is the combined efforts of employers, employees and the society to improve the health and well-being of people at work. This can be achieved through a combination of improving the work organization and the work environment, promoting active participation, and encouraging personal development.

New EU Member states strongly support the development of mechanisms for regional networking of stakeholders whose tasks could be, inter alia, generating information for evidence-based policy making, monitoring and evaluation as well as collaboration on the establishment of norms and standards for the health workforce, including internationally agreed definitions, classification systems and indicators.
Keeping in mind the above mentioned background the Northern Dimension Partnership in Public Health and Social Well-being (NDPHS) decided – through its Occupational Health and Safety sub group of the Expert Group on Social Inclusion, Healthy Lifestyles and Work Ability (SIHLWA) – to review the OHS situation in the NDPHS countries in collaboration with the Baltic Sea Network on Occupational Health and Safety (BSN) in November 2006.

The aim of this study was to analyse the status of occupational health and safety and responses to the current and forthcoming needs and demands for policy considerations and for further actions.

At this stage, six of the thirteen NDPHS countries participated in the study, which was based on systematic data collection and involving several experts and authorities in each participation countries. The reports have been reviewed in NDPHS SHILWA OHS sub group and BSN meetings.
2. Country reports

Estonia

1. Geography and demography

Area

The capital city is Tallinn (400,946 habitants), and the official language is Estonian. The country is divided into 15 counties and 205 municipalities. Estonia has been an independent republic since 24 February 1918, and regained its independence on 20 August 1991. The area of Estonia is 45,227.6 km\(^2\) (population density 30.3 per km\(^2\)).

Population

The population of Estonia on 1 January 2007 was 1.3424 million.

Table 1. Population by age groups, in 2006

<table>
<thead>
<tr>
<th>Age</th>
<th>Total population</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–14</td>
<td>202.7</td>
<td>104.1</td>
<td>98.6</td>
</tr>
<tr>
<td>15–74</td>
<td>1049.2</td>
<td>490.1</td>
<td>559.1</td>
</tr>
<tr>
<td>75–</td>
<td>92.9</td>
<td>25.2</td>
<td>67.7</td>
</tr>
<tr>
<td>Total</td>
<td>1344.8</td>
<td>619.4</td>
<td>725.4</td>
</tr>
</tbody>
</table>

Source: ILO labour force survey

Labour force

According to Statistical Office of Estonia (31.12.2006) there were:
- 65 000 employers and
- 627 000 employees.
Table 2. Labour force, employment and unemployment rate by sex, in 2006

<table>
<thead>
<tr>
<th>Age 15-74</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour force, thousands</td>
<td>344.2</td>
<td>342.6</td>
</tr>
<tr>
<td>Employment rate, %</td>
<td>65.9</td>
<td>57.8</td>
</tr>
<tr>
<td>Unemployment rate, %</td>
<td>6.2</td>
<td>5.6</td>
</tr>
</tbody>
</table>

Source: ILO labour force survey

2. Economy

According to the Ministry of Finance macroeconomic forecast, in 2007 and 2008 Estonian economy will grow 8.1% and 7.3%, respectively. Economic growth is based on domestic demand and exports, although their growth rates will decelerate.

Table 3. Gross domestic product at market prices

<table>
<thead>
<tr>
<th></th>
<th>At current prices</th>
<th>At reference year 2000 prices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>€/per capita</td>
<td>€/per capita</td>
</tr>
<tr>
<td>2000</td>
<td>4 456</td>
<td>4 456</td>
</tr>
<tr>
<td>2005</td>
<td>8 327</td>
<td>6 743</td>
</tr>
<tr>
<td>2006</td>
<td>9 851</td>
<td>7 512</td>
</tr>
</tbody>
</table>

Source: Statistics Estonia

3. E-policies and Digital Opportunity Index

The Government of Estonia approved the Estonian Information Society Strategy 2013 on 30 November 2006. It is a sectoral development plan, setting out the general framework, objectives and respective action fields for the broad employment of ICT in the development of knowledge-based economy and society in Estonia in 2007-2013. The Strategy comprises three objectives: Development of citizen-centred and inclusive society, which means broadening technological access to digital information and improving skills and widening opportunities for participation; Development of knowledge-based economy which means promotion of ICT uptake by enterprises and Increasing the competitiveness of the Estonian ICT sector; and development of citizen-centred, transparent and efficient public administration which means in practice improving the efficiency of the public sector as well as provision of user-friendly public sector e-services.

Table 4. The Digital Opportunity Index of Estonia

<table>
<thead>
<tr>
<th>Opportunity 2005/06</th>
<th>Infrastructure 2005/06</th>
<th>Utilization 2005/06</th>
<th>DOI 2005/06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>0.99</td>
<td>0.50</td>
<td>0.45</td>
</tr>
</tbody>
</table>


4. OHS legislation and actors
The Ministry of Social Affairs is the responsible body on occupational safety and health. The policies, strategies, and development programmes for occupational health and safety are discussed in the Advisory Committee of Working Environment, in which in addition to the representatives of the Ministry sits representatives from the trade unions and the employers' associations (Figure 1).

The policies on the development of OH&S in Estonia are aiming at:
1. Decreasing the number of occupational accidents and occupational diseases
2. Increasing the work ability and the employability of workers
3. Reducing human and economic losses due to health and safety hazards in the work environment
4. Promoting physical and psychosocial health and welfare at work.

Figure 1. Occupational health and safety system in Estonia (1)
A National Programme for the Development of Occupational Health, 2005 and 2010 has been set for achieving the aims for occupational health and safety. By 2010 the coverage of occupational health service should be 35–40% of Estonian employees, and the occurrence of work-related diseases decreased by 15%.

The area of working environment is regulated by the Occupational Health and Safety Act. (1998). The basic principle in the act is the employer’s responsibility to ensure safe and healthy working conditions. National enforcement of this act and the requirements prescribed in legislation based on this act is carried out by the Labour Inspectorate.

Figure 2 illustrates the health and safety activities and resources in Estonian companies based on evaluation of 7277 companies in 2000-2003. Seventy-eight percent of the companies had a safety manager and 63% had also a safety representative of the employees. Some 30% had a contract with an OH service, and in 39% had carried out risk assessment.

![Figure 2. Health and safety activities and resources in Estonian companies](image)

Source: Labour Inspectorate

5. Occupational accidents and occupational diseases

Even though a great deal of development and improvements of occupational health and safety legislation has taken place, Estonia still has no formal system of state insurance for occupational accidents and diseases. This has been one of the most important issues in the debate for promoting occupational health and safety. (5)

According to the Action Plan for Growth and Jobs 2005–2007, one of the key activities is improving the working environment through a more effective implementation of occupational safety requirements and developing the accident at work and occupational disease insurance system, as well as a system for preventing accidents at work and occupational diseases. (6)
Occupational accidents

The number of reported occupational accidents has been decreasing (Table 5), and was according to the Labour Inspectorate (Tööinspektsioon) only 564 per 100 000 employees in 2005. It is unlikely that the reduction is caused by better implementation and monitoring of safety requirements since the number of lost working days due to occupational accidents remains high, totalling 145 000 days in 2004. The most serious accidents and fatalities occurred in construction, agriculture and forestry, transport and industry.

Table 5. Reported occupational accidents in Estonia 2000-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Fatal accidents</th>
<th>Fatal accidents /100000 workers</th>
<th>All accidents</th>
<th>All accidents /100000 workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>26</td>
<td>4.5</td>
<td>2428</td>
<td>518</td>
</tr>
<tr>
<td>2001</td>
<td>30</td>
<td>5.2</td>
<td>2421</td>
<td>570</td>
</tr>
<tr>
<td>2002</td>
<td>35</td>
<td>6.0</td>
<td>3115</td>
<td>689</td>
</tr>
<tr>
<td>2003</td>
<td>31</td>
<td>5.2</td>
<td>3230</td>
<td>637</td>
</tr>
<tr>
<td>2004</td>
<td>34</td>
<td>5.7</td>
<td>3326</td>
<td>558</td>
</tr>
<tr>
<td>2005</td>
<td>24</td>
<td>4.0</td>
<td>3300</td>
<td>564</td>
</tr>
<tr>
<td>2006</td>
<td>28</td>
<td>4.3</td>
<td>3651</td>
<td>558</td>
</tr>
</tbody>
</table>

Source: Labour Inspectorate

In Estonia occupational accidents and occupational diseases are reported by employers. The number of accidents is clearly under-reported. Next graph (Figure 3) illustrates the statistics problem of Estonian reporting system of occupational accidents.

Figure 3. Occupational accidents per 100 000 workers in Estonia and EU-15

Source: Labour Inspectorate and Eurostat

The low registered number of accidents is partially due to the fact that accidents of the self-employed persons have been registered as domestic accidents. From January 2007 accidents affecting the self-employed while working together with other employees are registered as occupational accidents. The change of law is expected to increase the total number of accidents by 10%. (5)

Compared to the previous year, 2006 brought an increase in the number of fatal occupational accidents in Estonia. However, the year-to-year variation is quite big due to
the generally low number of fatal accidents partly related to the relative small size of work force in Estonia (Figure 4).

![Figure 4. Fatal accidents per 100 000 workers in Estonia and EU-15](image)

Source: Labour Inspectorate and Eurostat

The decrease in the figures since 2003 does not reflect an improvement in the situation, but rather stems from amendments to the law, according to which accidents happening on the way to or from work are since 1 July no longer considered occupational accidents.

The number of registered occupational accidents and workdays lost due to occupational accidents increased until 2002 (Table 6). This growth was caused by neglect of safety requirements, improved registration of accidents and an amendment to the law, according to which the benefit for temporary incapacity for work in the extent of 100% of average income is since 1999 paid for all occupational accidents (previously only for occupational accidents caused through the employer's fault).

![Table 6. Number of workdays lost due to occupational accidents](image)

Source: Estonian Sickness Fund

### Occupational diseases

Diagnosis of occupational diseases is aggravated by several factors: proving the presence of links between the disease and the risk factors in the working environment is particularly problematic. This indicator is also influenced by the availability of occupational health care services (incl. the insufficient number of occupational health
physicians in the county). Next graph (Figure 5) gives the time series of occupational diseases per 100,000 workers in 1993-2006 in Estonia.

![Graph showing occupational diseases per 100,000 workers in Estonia from 1993 to 2006.]

**Figure 5. Occupational diseases per 100,000 workers in Estonia**

Source: Labour Inspection

The number of reported occupational diseases is low, as seen from the table 7. One reason is the insufficient number of trained occupational health physicians at the outpatient clinics. More complicated cases can be diagnosed at the Clinic of Occupational Diseases in Tallinn.

**Table 7. Reported occupational diseases in Estonia**

<table>
<thead>
<tr>
<th>Main diagnosis</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vibration disease</td>
<td>137</td>
<td>117</td>
<td>45</td>
<td>15</td>
<td>30</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Hearing disorder</td>
<td>60</td>
<td>42</td>
<td>22</td>
<td>21</td>
<td>20</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>Repetitive strain injuries</td>
<td>128</td>
<td>97</td>
<td>48</td>
<td>55</td>
<td>66</td>
<td>61</td>
<td>79</td>
</tr>
<tr>
<td>Other occupational diseases</td>
<td>30</td>
<td>25</td>
<td>15</td>
<td>11</td>
<td>16</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>355</td>
<td>281</td>
<td>129</td>
<td>102</td>
<td>132</td>
<td>97</td>
<td>117</td>
</tr>
</tbody>
</table>

Source: Labour Inspection

On the first place are muscular-skeletal disorders, followed by vibration disease, noise-induced hearing loss and erysipelas among the meat processing workers. Hazardous substances, like asbestos, are still in use, but only incidental cases of asbestosis have been diagnosed. The socio-economic situation is the reason of the spreading of infectious diseases, like tuberculosis, which has been registered among medical personnel. There are also evidence of increasing psycho-social stress caused by harassment and threat of violence at work.

Among the cases diagnosed in recent years, the number of vibration syndromes has decreased and the number of repetitive strain injuries (caused by handling loads, incorrect working posture, and forced posture) has risen. While the vibration syndrome cases formed 39% of all diagnosed occupational diseases in 2000 and 23% in 2004, the proportion of repetitive strain injuries in the same years was 36% and 49% respectively.
6. Occupational health services

Occupational health services are organised on a free market basis. Bigger companies run their own clinics. Some private occupational health clinics also offer their services to enterprises. Government do not subside the costs of service in any way.

The coverage of service is low, an estimate is 30%. Postgraduate specialisation training for physician and nurses has been organised. Estonian occupational health and safety experts have also received postgraduate and upgrading training through several bi- and multilateral projects funded by EU, Finland and other countries.

7. Resources

The numbers of experts in various categories is described in Table 8.

Table 8. Occupational health and safety experts by category

<table>
<thead>
<tr>
<th>Professional group</th>
<th>No. involved including part-time workers</th>
<th>Value indicator</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational health physicians</td>
<td>42</td>
<td>0.07</td>
<td>/1,000 employed</td>
</tr>
<tr>
<td>Occupational health nurses</td>
<td>20</td>
<td>0.03</td>
<td>/1,000 employed</td>
</tr>
<tr>
<td>Occupational hygienists</td>
<td>2</td>
<td>0.003</td>
<td>/1,000 employed</td>
</tr>
<tr>
<td>Labour safety inspectors</td>
<td>90</td>
<td>0.15</td>
<td>/1,000 employed</td>
</tr>
</tbody>
</table>

8. Main problems on OHS

- low priority of occupational safety and health in politics
- no centre of excellence
- low coverage of service
- occupational accident and diseases insurance system not existing

9. Main priorities for the next 5 years

- raising awareness of the importance of occupational health and safety among employers and employees, and among general public
- starting new dialogue between the government and social partners on occupational health and safety (activating tripartite Advisory Committee on Working Environment)
- strengthening legislative base (Law on Occupational Health Services, Law on Occupational Accidents and Diseases Insurance system)
- competence building of occupational health service experts

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   http://www.eurofound.europa.eu/ewco/studies/tn0612036s/ee0612039q.htm,
   accessed on 20 October 2007.
1. Geography and demography

Area

Finland has been an independent republic since 6 December 1917. Its area covers 338,000 km² (population density 15 per km²). The capital city is Helsinki (540,000 habitants), and the official languages are Finnish (spoken by 93% of the population) and Swedish (6%). The country is divided into five provinces and some 400 municipalities.

Population

The population of Finland was 5.277 million in 2007. Sixty-three percent of the population lives in urban areas.

Table 1. Population by age groups, in 2006, in thousands

<table>
<thead>
<tr>
<th>Age</th>
<th>Total population</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–14</td>
<td>901</td>
<td>460</td>
<td>441</td>
</tr>
<tr>
<td>15–74</td>
<td>3972</td>
<td>1986</td>
<td>1986</td>
</tr>
<tr>
<td>75–</td>
<td>404</td>
<td>138</td>
<td>266</td>
</tr>
<tr>
<td>Total</td>
<td>5277</td>
<td>2584</td>
<td>2693</td>
</tr>
</tbody>
</table>

Source: ILO labour force survey
Labour force

Table 2. Key indicators in the labour force survey by sex 2007/09 - 2006/09

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Year/Month</th>
<th>Sex</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment rate</td>
<td></td>
<td></td>
<td>Per cent (%)</td>
</tr>
<tr>
<td>(population aged 15-64)</td>
<td></td>
<td>Both sexes</td>
<td>69.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Males</td>
<td>70.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Females</td>
<td>67.9</td>
</tr>
</tbody>
</table>

|                                              |            | Males     | 6.4  | 5.9   | 6.8   | -0.5   |
|                                              |            | Females   | 6.0  | 5.3   | 6.2   | -0.2   |

|                                              |            | Both sexes| 66.3  | 68.3  | 66.0  | 0.3  |
|                                              |            | Males     | 68.3  | 71.4  | 68.2  | 0.2  |
|                                              |            | Females   | 64.2  | 65.1  | 63.8  | 0.4  |

Source: Labour force survey 2007, September. Statistics Finland

2. Economy

Table 3. Gross domestic product at market prices

<table>
<thead>
<tr>
<th></th>
<th>At current prices</th>
<th>At reference year 2000 prices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>€ billion</td>
<td>€/inhabitant</td>
</tr>
<tr>
<td>2000</td>
<td>132,3</td>
<td>25 555</td>
</tr>
<tr>
<td>2005*</td>
<td>157,2</td>
<td>29 964</td>
</tr>
<tr>
<td>2006*</td>
<td>167,1</td>
<td>31 723</td>
</tr>
</tbody>
</table>

* preliminary data

Source: Statistics Finland, National Accounts

3. E-policies and Digital Opportunity Index

The Government will promote the development of the information society by:
- ensuring that citizens have access to fast broadband connections,
- improving citizens’ information society skills,
- promoting confidence in information society services,
- reforming operating models and structures, developing Government services and administration and putting them on an electronic basis,
- promoting similar developments in local authorities and the business sector,
• taking educational policy measures,
• investing in research and product development,
• supporting other actors in the information society,
• participating in important projects promoting the information society, and
• issuing relevant legislative measures.

The Information Society Programme consists of seven sub-sectors:
• telecommunication infrastructure and digital television
• citizens’ ability to utilise the information society and security
• training, working life, research and development
• utilisation of ICT in public administration
• electronic commerce and digital contents
• legislative measures
• international dimension.

Table 4. The Digital Opportunity Index of Finland

<table>
<thead>
<tr>
<th></th>
<th>Opportunity 2005/06</th>
<th>Infrastructure 2005/06</th>
<th>Utilization 2005/06</th>
<th>DOI 2005/06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>0.99</td>
<td>0.65</td>
<td>0.44</td>
<td>0.69</td>
</tr>
</tbody>
</table>


4. OSH legislation and actors

The leading occupational safety and health authority is the Ministry of Social Affairs and Health. It is responsible for policy making of occupational health and safety. The coordination of policies and activities at the national level takes place in ministerial groups at the government level: the ministers of neighbouring sectors coordinate their policy making. The OSH Department of the Ministry coordinates its activities mostly in negotiations with the other ministries and social partners, first of all in the Advisory Committees which constitute a broad consultative mechanism with social partners and other relevant stakeholders. The coordination mechanisms cover the whole OSH sector described in Figure 1. The workplace is considered to be the main focus and arena of the OSH activity.
5. Occupational accidents and occupational diseases

Occupational accidents

The statistics on occupational accidents are collected into the official statistics of Finland from notifications made by the employers to the accident insurance institutions on the basis of legislation, from the Farmers’ Social Security Institution and from Statistics Finland’s own labour force surveys. The Federation of Accident Insurance Institutions (FAII) collects its own statistics on the basis of notifications made by employers as stipulated by law.

All accidents that happen at work, in traffic work and in commuting traffic of all sectors of the economy, including industries, services, the private and public sectors, and the self-employed and entrepreneurs are registered. This results in higher absolute and relative figures than in many other countries, where only the accidents that happen at work may be registered. (Annex 1)

According to claims statistics filed by the FAII the total number of accidents was 128 000 and the accident rate 28.3 accidents per million hours worked in 2005. Sever injuries account for 10% of total. On average, five employees in every hundred were injured in occupational accidents. About 70% of all occupational accidents and diseases occur to men.

The registration of minor accidents leading to less than 3 days of disability explains about 30% of the total injury burden, commuting accidents about 13%, and the accidents of the self-employed and farmers about 7% of the total number of accidents. Thus, if only the accidents of wage earners at work, leading to an absence of 3 days or more, were to be registered, the figures would be almost 50% less than they are at present.
The total number of occupational accidents has declined substantially after the mid-70s. The total number of fatal accidents has fallen in the past 10-year period 43% and the rate 45%, respectively.

The risk occupations are in construction, food industry, wood working, machine and metal workshops, pulp and paper production, agriculture, road traffic, rubber and plastics product work, packing and storehouse work and stevedoring, which all show twice as high a risk for occupational accident as the average of all occupations.

**Occupational diseases**

The Act 1343/1988 on Occupational Diseases defines an occupational disease as a disease caused by physical, chemical or biological factor at work or by physical overload and poor ergonomics (e.g. repetitive strain). The statistics on occupational diseases is collected by the Finnish Institute of Occupational Health and FAlII.

The number of new and suspected occupational disease cases compensated was 5311 in 2005. The frequency of compensated occupational disease was at 1.4 paid claims per million hours worked. On average, 20 cases per 10 000 workers occurred in 2005. Both the number and the frequency of occupational disease claims paid out have declined 50% in the past 20 year's time.

Repetitive strain injuries, hearing loss, dermatoses, respiratory allergies, and asbestos-related diseases comprise 80% of all occupational morbidity.

The risk occupations are food workers, construction workers, farmers, forestry workers and fishers, metal foundry and engineering shop workers, wood workers, chemical industry workers, pulp and paper workers, who have three to six-times higher risk than on average among all occupations.

Altogether 152 claims for fatal occupational accidents and diseases were compensated in 2004. Most of the deaths (110) were caused by asbestos exposure in shipyards or on construction sites during the 1960s and 1970s. The fatality risk figure for men in occupational accident or illness was 14 deaths per 100 000 employees. The risk for men to have a fatal work accident was 13 times bigger than that of women.

**6. Occupational health services**

The occupational health services in Finland are based on four main laws: the Occupational Health Care Act (1383/2001), the Occupational Safety and Health Act (738/2002), the Act on Occupational Safety and Health Administration (16/1993) and the Act on the Supervision of Occupational Safety and Health (44/2006). In addition, the Sickness Insurance Act (1113/2005) provides detailed regulations on reimbursement and follow-up of occupational health services.

The purpose of the Occupational Health Care Act is to ensure a safe and healthy work environment, the prevention of work-related diseases and accidents, the promotion of the work ability and functional capacity of employees, and the provision of preventive occupational health services for the employees. The implementation of the Act is guided by the Government Decree 1484/2001, which gives more detailed requirements for the conditions of operation and for the content of services.

The current OH service has the following key elements:

- comprehensive services covering physical, medical, psychological and social aspects of work
- multidisciplinarity
- prevention and promotion
- quality-oriented and evidence-based
• integrated with other activities of the company
• collaborating with other services of the enterprise and those outside the company
• based on the principle of participation of workers and employers.

Each employer is obligated to organize services for his/her employees. The organization and content of services need to be based on a prioritized safety and health needs assessment, a company-wide occupational health action plan, and in the case of external service providers, on a formal contract between the employer and the service provider.

According to the Work and Health study, in 2006, employers had organized occupational health services for 92% of employees, for whom 93% also had medical treatment included in the service. The coverage of occupational health services is much lower in small companies (55%). The coverage among agricultural entrepreneurs (63%), and among other entrepreneurs and the self-employed (37% in 2006) is also quite low, but for them OH services are voluntary.

The model of service provision can be chosen by the employer in consultation with the workers (Figure 2). Municipal health care centres are responsible for providing occupational health services to employers who request them. Employers may also organize occupational health services themselves, or through private service providers. The farmers and most of the entrepreneurs are served by municipal health care centers. The trend among bigger companies is moving away from self-organized services to occupational health services organized by private providers.

The compliance of the employer is inspected by the OSH Authorities, whereas the content of the contract, as well as competence and activities of the health personnel are supervised by the health authorities.

The Social Insurance Institution reimburses employers 60% of the costs of preventive services and 50% of the expenses of medical care.

The content of the services stipulated in the legislation and the Government Ordinance is mainly preventive. Curative activities and the provision of general practitioner-level health services may also be included. The tasks of occupational health professionals in the provision of services include:
• Surveillance of the work environment
• Initiatives and advice on the control of hazards at work
• Surveillance of the health of employees including vulnerable groups
• Monitoring and provision of rehabilitation advice for handicapped workers
• Planning and follow-up of measures for maintaining the employees' work ability
• Adaptation of work and the work environment to the worker
• Organization of first aid and emergency response
• Health education and health promotion
• Collection of information on workers’ health
• Provision of curative services for occupational diseases
• Provision of general health care services
Figure 2. Organizational models of OHS in Finland
For improving the quality of service the Ministry of Social Affairs and Health and the Finnish Institute of Occupational Health produced the guide on ‘Good Occupational Health Practice’ for the first time in 1997. The new edition was published in 2007, and was distributed to all 1000 OHS units in the country. It was boosted with a promotional tour and its content is incorporated in the training programmes of OH experts. At the same time a ‘Quality Key’-tool for self-assessment of OHS was published and is now in use. The FIOH continues to produce the evidence based OHS practice guides and will coordinate the Cochrane Occupational Health Field and production of systematic reviews (www.cohf.fi).

7. Resources

The numbers of experts in various categories is described in Table 5.

Table 5. Occupational health and safety experts by category

<table>
<thead>
<tr>
<th>Professional group</th>
<th>N involved incl. part-time workers</th>
<th>Value indicator</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational health physicians</td>
<td>2,461</td>
<td>1.04</td>
<td>/1,000 employed</td>
</tr>
<tr>
<td>Occupational health nurses</td>
<td>2,615</td>
<td>1.10</td>
<td>/1,000 employed</td>
</tr>
<tr>
<td>Occupational physiotherapists</td>
<td>837</td>
<td>0.35</td>
<td>/1,000 employed</td>
</tr>
<tr>
<td>Occupational psychologists</td>
<td>343</td>
<td>0.15</td>
<td>/1,000 employed</td>
</tr>
<tr>
<td>Occupational hygienists</td>
<td>150</td>
<td>0.06</td>
<td>/1,000 employed</td>
</tr>
<tr>
<td>Labour safety inspectors</td>
<td>360</td>
<td>0.15</td>
<td>/1,000 employed</td>
</tr>
</tbody>
</table>

8. Main problems on OSH

The Finnish workforce is ageing rapidly making the work ability problems more prevalent. Differences in health according to education, occupation and income are large in Finland. Differences in mortality are growing especially fast. When the life expectancy of a 35-year-old male manual worker today is 74 years, can a same aged man in a leading position expect to live until 80.

New substances, new technologies and new work organizations are being introduced, and new flexible work time schedules are being implemented. Problems of light work ergonomics, psychological stress and information work load burden a growing number of workers. New biological hazards and organic materials are arising due to the growing mobility and from new biotechnology products.

At the national level, the enterprises are fragmented, work contracts are shortened, and the continuity of care from a single workplace may disappear. Surveillance of the work environment and of workers' health, assessment of their exposures and risks are becoming more cumbersome and demanding. Today more and more people are self-employed. Such challenges differ substantially from those of the traditional manufacturing industries for which occupational health services were originally designed.

The Finnish OHS model which is based on a wide societal consensus, special legislation, a well-established service infrastructure which to some extent is also a part of the municipal primary health care infrastructure, has good possibilities to adapt to the new conditions.
But much still remains to be done to tackle both the traditional and new problems of OHS. The substantive content and the methods, as well as the competence of the OHS staff need to be continuously evaluated and renewed.

New service models are needed to provide services for the increasingly fragmented work life, the micro-enterprises, the self-employed, distant and teleworkers and other home workers. Experiments are going on concerning several optional models at local and regional levels. The projects will be evaluated, and choices will be made on the basis of the experiences learned in the development projects.

9. Main priorities for the next 5 years

Within the working-age population there are still considerable health gaps between the different socioeconomic groups. The health gaps among the employed population are based - not only on factors related to work - but also on health behaviour. Apart from improving work, work environments and workplace organisation it is also important to focus on tackling health risks related to lifestyles. In occupational health care measures should be increasingly aimed at branches and occupations in which employees are most vulnerable to risks at work.

The main aim of Finnish healthcare policy is to prolong people's health and the lifespan of their functional ability. It aims to safeguard the possibility for everyone to enjoy a good quality of life, diminish health differences between population groups and reduce the rate of premature death. This demands that attention is paid to the health factor of all societal decision making. Health is integral to social policy.

The Programme of Prime Minister Matti Vanhanen’s second Cabinet includes three cross-sectoral policy programmes: 1) The policy programme for health promotion; 2) The policy programme for employment, entrepreneurship and worklife; and 3) The policy programme for the wellbeing of children, young people and families. All these policy programmes include elements that have to do with work life and wellbeing at work. The objectives of the policy programme on health promotion are to improve the general state of health of the population and to narrow the health gaps between individuals. The policy programme continues the development work along the lines of our “Health in All Policies” thinking – meaning that it cuts across the traditional boundaries between administrative sectors.

**Occupational Health 2015 – Development Lines**

The Government Resolution on Occupational Health 2015 came in force in 2004. It lines the development of occupational health care up to 2015. The Resolution was prepared by the tripartite Advisory Committee on Occupational Health Cares under the Ministry of Social Affairs and Health. The ten development lines are:

*Development line 1. Legislation*

The Ministry of Social Affairs and Health is responsible for the preparation and development of legislation on occupational health cares in collaboration with the labour market organizations and other partners important for occupational health cares.

*Development line 2. Content of occupational health care*

The Ministry of Social Affairs and Health, the Finnish Institute of Occupational Health, and the expert organizations in collaboration with the occupational health service units will develop the content of occupational health care and high-quality procedures to ensure good occupational health practice, taking different types of employment relationship into account.
A good deal of emphasis in occupational health care will be placed on activities at the workplace, and on strengthening cooperation between occupational health care and the workplace.

Practical methods will be developed, evaluated and verified, and training will be provided to support their adoption. Good evidence-based practices in occupational health care will be evaluated and developed.

**Development line 3. The occupational health service system**
The Ministry of Social Affairs and Health, the State Provincial Offices, the municipalities, the Occupational Safety and Health Inspectorates, the Finnish Institute of Occupational Health, occupational health service units, and other actors in the field of health care will collaborate to ensure that occupational health services are comprehensive and easily accessible for employers, employees, entrepreneurs, and self-employed persons.

Regional cooperation projects between municipalities and service providers will be launched within the occupational health service system.

When occupational diseases are suspected, access to examination will be guaranteed independent of industrial sector, trade or profession, or locality.

The support services needed to implement occupational health services will be of high quality and produced throughout the country on a comprehensive regional basis, using the network of the Finnish Institute of Occupational Health and other networks and partners that operate regionally.

**Development line 4. A funding and compensation system for occupational health care**
The Ministry of Social Affairs and Health and the Social Insurance Institution will collaborate with the labour market organizations to develop a funding and compensation system to promote the effectiveness of occupational health services in the workplace. The compensation side will be developed so that it supports a flexible provision of services.

**Development line 5. Human resources in occupational health care**
The extent of the range of services will be supported in collaboration with the Finnish Institute of Occupational Health, the universities and polytechnics, and other partners. Training programmes will be drawn up for all the experts required by the Act on Occupational Health Care.

The quality of the training and the qualification of the persons trained will be ensured by overhauling the training programmes, and by examinations and certificates. The training for instructors in the sector will be improved.

The Ministry of Social Affairs and Health and the Ministry of Education in collaboration with other partners will take care that the human resources for occupational health care are sufficient. They will also ensure that there is sufficient funding for occupational health service training so that occupational health services can be implemented according to good occupational health practice.

The professional skills of occupational health service personnel will be supported in accordance with the instructions on further education issued by the Ministry of Social Affairs and Health.

**Development line 6. Ethics of occupational health care**
The Ministry of Social Affairs and Health, the Finnish Institute of Occupational Health, the Finnish Association of Occupational Health Physicians, the Finnish Association of Occupational Health Nurses, and expert organizations in the field of occupational health services will cooperate with the labour market organizations to increase the effectiveness of continuous education on ethical issues and the dissemination of information.
The guidelines on professional ethics for occupational health service professionals and experts will be overhauled. There are provisions in the legislation on the use of information on the health of employees and on passing it on to another party. Instructions on the implementation of these provisions are now being drawn up. Although information on the health of private persons is protected, it will also be made available for use in occupational health services, if necessary. The right of employers to obtain information and the responsibility to provide information on health and on health hazards in the workplace will be secured in such a way that the privacy of the individual will not be endangered. The right of the employee to be made aware of the risks associated with occupational health and safety and the right to information on his/her own health will be guaranteed.

Development line 7. Cooperation
The Ministry of Social Affairs and Health, the Finnish Institute of Occupational Health, the State Provincial Offices and the Occupational Safety and Health Authorities in collaboration with the health services will support cooperation as required by the Act on Occupational Health Care.

Workplaces and occupational health service units will incorporate cooperation as a part of planning, and it will be taken into account in the assessment of operations. Cooperation between occupational health services and other health care providers, the labour administration, the education administration, the social insurance system, the social services and the Occupational Safety and Health Authorities will be made to collaborate more closely and more effectively.

Cooperation models will be developed for joint occupational health services in workplaces.

Development line 8. Information management systems in occupational health care
The Ministry of Social Affairs and Health will coordinate the development of information systems in collaboration with the institutions in the sector.

Information systems and tools to assist in the planning, implementing and monitoring operations will be introduced in occupational health services. Registration and the use of statistical material and databases in the sector will be promoted by increasing user-friendliness and cooperation in maintaining registers. Linking occupational health services with information technology and Internet projects in the social and health care sector will be supported. External expert services and information services that support occupational health care will be further developed as Internet services to be used by experts and workplaces.

Development line 9. Research and development in occupational health care
The Finnish Institute of Occupational Health, the Ministry of Social Affairs and Health, and the Social Insurance Institution in cooperation with the universities and other research institutes and key stakeholders will continue research and development work on occupational health care and agree on joint research programmes and cooperation with other programmes.

Research-supported experiments will be launched to develop occupational health services for special groups, small workplaces and self-employed persons. The impact of occupational health care on well-being at work and on remaining longer at work will be examined in an evaluation study. The economic impact of occupational health services will also be studied. The service system will be developed continuously with the aid of research interventions.

Development line 10. Monitoring and supervision
The Ministry of Social Affairs and Health will be responsible for monitoring the implementation of the development strategy in occupational health care.
The Finnish Institute of Occupational Health will produce information on more detailed monitoring of the Act on Occupational Health Care and the development strategy using the 'Work and health in Finland' and the 'Occupational health services in Finland' surveys, and research and statistics on work life and working conditions. The Social Insurance Institution will produce information on the operation of occupational health care using data obtained through the compensation system.

Wellbeing at work and remaining at work longer than before requires a sufficient supply of occupational health care professionals and experts and improvement of training, the occupational health care service system and occupational health care content so as to make sufficient high-quality occupational health care services available to all employees, entrepreneurs and other self-employed persons. It is also important to maintain the health and working capacity of the unemployed to help them find employment.

These targets require an increase in allocations from the State budget and investments on the part of occupational health care service providers in the development of the content and functioning of their services. The effectiveness and functioning of occupational health care require employers and employees to commit to a healthy and safe working life.

References

2. ILO. Labour force survey 2006.
Latvia

1. Geography and demography

Area

The capital city is Riga (760,000 habitants), and the official language is Latvian (spoken by 56% of the population). The country is divided into 26 regions and 473 municipalities. Latvia has been an independent republic since 18 November 1918, it regained independence on 4 May 1991. The area of Latvia is 65,589 km$^2$ (population density 38.1 per km$^2$).

Population

The population of Latvia was 2.4 million in 2007, and 68.1% of the population lives in urban areas.

Table 1. Population by age groups, in 2006

<table>
<thead>
<tr>
<th>Age</th>
<th>Total population</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–14</td>
<td>328.6</td>
<td>168.1</td>
<td>160.5</td>
</tr>
<tr>
<td>15–74</td>
<td>1809.8</td>
<td>848.5</td>
<td>961.3</td>
</tr>
<tr>
<td>75–</td>
<td>156.5</td>
<td>40.9</td>
<td>115.6</td>
</tr>
<tr>
<td>Total</td>
<td>2294.9</td>
<td>1057.5</td>
<td>1237.4</td>
</tr>
</tbody>
</table>

Source: ILO labour force survey 2006
Labour force

Table 2. Rates of economic activity, employment and unemployment in percentage, in 2006

<table>
<thead>
<tr>
<th></th>
<th>Rate of economically active population to the total population</th>
<th>Rate of employed to the total population</th>
<th>Rate of unemployed to the economically active population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rate</td>
<td>Total</td>
<td>Males</td>
</tr>
<tr>
<td>15-64</td>
<td>71.3</td>
<td>76.2</td>
<td>66.6</td>
</tr>
</tbody>
</table>

Source: Central Statistical Bureau of Latvia

2. Economy

Table 3. Selected economic indicators of Latvia

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross national product per capita, USD</td>
<td>2,846</td>
<td>6,770</td>
</tr>
<tr>
<td>Gross domestic product (GDP) per capita, purchasing power parity, USD</td>
<td>2,835</td>
<td></td>
</tr>
</tbody>
</table>

3. E-policies and Digital Opportunity Index

The National Information Society Strategy in Latvia has been prepared 'e-Latvia 2005–2009' (http://ec.europa.eu/idabc/servlets/Doc?id=23412). The main priorities are e-Government, e-Learning, e-Business and welfare, e-Health, Broadband and access to services, and Security. According to the EU Policy Brief, which is available and accessible at http://www.litta.lv/documents/konferences/05/mikelsons-niedra_brief_latvia.pdf, the key challenge for Latvia to expand the use of e-Government services is related to improved access for citizens to Internet. On-going investment in public internet access points is one obvious solution.

The Latvian Information Technology and Telecommunications Association, LIKTA, is a professional association, founded in 1998, that regroups over 60 important ITTE product and service providers and educational institutions, as well as over 150 individual professional members of the ITTE industry sector in Latvia (computer hardware and software, electronics, telecommunications infrastructure, and service providers). LIKTA member organizations employ over 15,000 people. The principal objective of LIKTA is to promote and further the development of Information Society in Latvia, so that all citizens may be given the opportunity to benefit from ICT and contribute to the Knowledge-based economy.

According to LIKTA, Latvia wholly endorses the objectives of e-Europe and intends to become a full partner of the knowledge-based global economy. It has elaborated its own e-Latvia strategy, as well as an e-government model. Crucial prerequisites for this mission are a knowledgeable, ITT-literate population and a well developed ITTE industry. http://www.litta.lv/en/about/.

LIKTA has taken the initiative of licensing and setting up the European Computer Driving License (ECDL) certification programme in Latvia and the development of applied informatics courses for schools, compatible with ECDL requirements.
This will improve the level of knowledge among the general population about information technologies, increase their computer and Internet usage skills, and enable people to benefit from modern technologies. All these activities are crucial from the point of view of the successful development of electronic information services in the country.

There is no single strategic policy document called "National e-Inclusion Strategy". The Latvian e-Inclusion policy is being implemented and will be developed in accordance with several policy planning documents, including:

- The Concept "e-Health in Latvia" (2005)
- Conception for e-Procurement System (2006)
- State Unified Library Information System Conception (2001)
- Policy Guidelines for Reduction of Disability and it's Consequences
- Conception on eServices Development (in drafting).

Table 4. The Digital Opportunity Index of Latvia

<table>
<thead>
<tr>
<th></th>
<th>Opportunity 2005/06</th>
<th>Infrastructure 2005/06</th>
<th>Utilization 2005/06</th>
<th>DOI 2005/06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latvia</td>
<td>0.98</td>
<td>0.42</td>
<td>0.23</td>
<td>0.54</td>
</tr>
</tbody>
</table>

4. OHS legislation and actors

The organizational structure of state authorities and services, responsible for occupational health and safety in Latvia is described in Figure 1.

The Ministry of Welfare is a state administration institution that creates and coordinates the social security policy of the State. The purpose of Ministry of Welfare is to develop a democratic, stable, responsible, and viable social security system that would enable the possibility to protect the social and economical rights of every person. Under the supervision of the Ministry are the areas of social assistance, social insurance, labor and gender equality. In order to achieve the goal set, the Ministry solves the following issues using political, economical, and legal means:

- Issues of social insurance, social care, and social assistance;
- Problems related to labour and labour protection, employment, and unemployment;
- Issues related to ensuring and implementation of principles of gender equality.

The Ministry of Welfare operates in accordance with the Law on Institution of Ministries and the Rules of Ministry of Welfare. The political priorities of operation of the Ministry are being set in accordance with the Declaration on the proposed activities of Cabinet of Ministers, and policy planning documents developed by the Ministry.

The central apparatus of the Ministry of Welfare comprises nine departments, as well as two independent departments.

The State Labour Inspectorate (SLI) is a state administrative and supervisory institution. Its activity is determined by the “State Labour Inspectorate Law”. The following persons and institutions are subjected to the supervision and control of the SLI: entrepreneurs, the state and municipal institutions, religious and nongovernmental organizations, employers and their representatives according to the mandate and responsibilities delivered to them, dangerous equipment and their owners, as well as workplaces and other places at the enterprises available for the employees during their work process. The main task of SLI is to take measures to ensure effective
implementation of State policy in the field of labour legal relations, labour protection and the technical supervision of dangerous equipment.

In implementing the above mentioned task, officials of the SLI perform the following functions:

- Control equipment at the work places, the usage of individual and collective protective means, the usage of dangerous and harmful substances, as well as the compliance of technological processes with the requirements of regulatory enactments.
- Control the fulfilment of obligations of employers and employees determined by employment contracts and collective agreements.
- Promote cooperation between employers and employees, as well as to take measures to facilitate the prevention of differences of opinion between the employers and employees.
- Deal with the matters of labour legal relations, labour protection and technical supervision of the dangerous equipment, as well as provide free consultations regarding the above mentioned issues.
- Carry out investigation and registration of occupational accidents, as well as participate in the investigation of occupational diseases.
- Control equipment and facilities at work places, utilisation of individual and personal protective means in conformity with regulatory enactments.
- Register the dangerous equipment, issue permits for the commencement of operation of such equipment, as well as investigate accidents with dangerous equipment in accordance with the procedures prescribed by the Cabinet.
- Issue licences and carry out repeated registration of certificates, extend the term of their validity or annul these certificates in the cases when entrepreneurs have intended to perform the following activities: industrial blasting, pyrotechnic services, production or maintenance of electronic shocking devices, storage of pyrotechnic products, explosive substances, detonators or their accessories in order to perform the previously mentioned activities or to provide services.

The Institute of Occupational and Environmental Health (IOEH) is a structural part of the Riga Stradiņš University. The main purpose of the IOEH can shortly be defined as generation and dissemination of information on the interaction of working and general environment and human health as well as provision of training in the field of occupational and environmental health. Its main purpose is to promote practical implementation of generated information in order to create healthier and safer working environment for everyone. Such goal certainly requires a wide range of activities in the field of Occupational and Environmental Health.

### 5. Occupational accidents and occupational diseases

#### Accidents at work

The State Labour Inspectorate (Valsts Darba Inspekcija, VDI), which is the state supervisory and control institution responsible for labour protection in Latvia, reports that both the number of workplace accidents and deaths arising from workplace accidents, have increased over the past few years.

According to the annual report of VDI, some 1,568 workers out of a total of 1.048 million employed people were victims of workplace accidents in 2005; some 56 of these persons died and 275 were seriously injured. In 2004, 1,402 workers were victims of occupational accidents, 61 of whom died and 254 of whom were seriously injured.

The table 5 below outlines the number of workplace accidents per 100,000 workers; these findings are also drawn from the VDI Annual Report 2006, which the inspectorate prepares for the International Labour Organization (ILO). If one compares the number of casualties per 100 000 workers given in the table with the data in the aforementioned paragraph, an obvious discrepancy emerges, despite the fact that both data come from
official sources. This discrepancy can be explained by the fact that different data sources were used to compile the workplace accident statistics.

Table 5. Occupational accidents per 100 000 workers, in 1995–2006

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>173</td>
<td>163</td>
<td>136</td>
<td>135</td>
<td>137</td>
<td>146</td>
<td>140</td>
<td>150</td>
<td>145</td>
<td>136</td>
<td>169</td>
<td>177</td>
</tr>
</tbody>
</table>

Source: VDI, Annual Report 2006, p.5

Table 6. Breakdown of accident victims by sectors according to NACE classifier

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Agriculture, hunting and forestry</td>
<td>82</td>
<td>78</td>
<td>19</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>B</td>
<td>Fishery</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>Mining and quarrying</td>
<td>9</td>
<td>10</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>D</td>
<td>Processing industry</td>
<td>534</td>
<td>587</td>
<td>83</td>
<td>86</td>
<td>9</td>
</tr>
<tr>
<td>E</td>
<td>Electric energy, gas and water supply</td>
<td>40</td>
<td>36</td>
<td>6</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>F</td>
<td>Construction</td>
<td>172</td>
<td>217</td>
<td>67</td>
<td>65</td>
<td>15</td>
</tr>
<tr>
<td>G</td>
<td>Wholesale trade and retail trade; repair of cars, motor-cycles, personal and household goods</td>
<td>107</td>
<td>147</td>
<td>15</td>
<td>21</td>
<td>2</td>
</tr>
<tr>
<td>H</td>
<td>Hotels and restaurants</td>
<td>20</td>
<td>13</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>Transport, storage and communication</td>
<td>261</td>
<td>285</td>
<td>39</td>
<td>33</td>
<td>10</td>
</tr>
<tr>
<td>J</td>
<td>Financial intermediation</td>
<td>9</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>K</td>
<td>Real estate transactions, renting, computer services, science and other commercial services</td>
<td>24</td>
<td>24</td>
<td>1</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>1582</td>
<td>1716</td>
<td>276</td>
<td>286</td>
<td>56</td>
<td>53</td>
</tr>
</tbody>
</table>

Source: VDI, Annual Report 2006, p.5

Occupational 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.

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
Figure 2. Dynamics of occupational diseases annually registered for the first time in Latvia per 100,000 employees, 1996 - 2005 (figures indicate total numbers).

Table 7. Number of occupational patients revealed for the first time during a year

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of occupational patients revealed for the first time during a year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Absolute numbers</td>
</tr>
<tr>
<td>1993</td>
<td>82</td>
</tr>
<tr>
<td>1994</td>
<td>185</td>
</tr>
<tr>
<td>1995</td>
<td>174</td>
</tr>
<tr>
<td>1996</td>
<td>109</td>
</tr>
<tr>
<td>1997</td>
<td>118</td>
</tr>
<tr>
<td>1998</td>
<td>149</td>
</tr>
<tr>
<td>1999</td>
<td>211</td>
</tr>
<tr>
<td>2000</td>
<td>232</td>
</tr>
<tr>
<td>2001</td>
<td>332</td>
</tr>
<tr>
<td>2002</td>
<td>433</td>
</tr>
<tr>
<td>2003</td>
<td>554</td>
</tr>
<tr>
<td>2004</td>
<td>786</td>
</tr>
<tr>
<td>2005</td>
<td>782</td>
</tr>
<tr>
<td>2006</td>
<td>589</td>
</tr>
<tr>
<td>Total</td>
<td>4147</td>
</tr>
</tbody>
</table>

Source: State register of occupational diseases
Table 8. Number of occupational diseases revealed for the first time during a year

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Absolute numbers</th>
<th>Per 100 000 employees</th>
<th>Men Absolute numbers</th>
<th>Per 100 000 employed men</th>
<th>Women Absolute numbers</th>
<th>Per 100 000 employed women</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>127</td>
<td>-</td>
<td>76</td>
<td>-</td>
<td>51</td>
<td>-</td>
</tr>
<tr>
<td>1994</td>
<td>284</td>
<td>-</td>
<td>110</td>
<td>-</td>
<td>174</td>
<td>-</td>
</tr>
<tr>
<td>1995</td>
<td>311</td>
<td>-</td>
<td>180</td>
<td>-</td>
<td>131</td>
<td>-</td>
</tr>
<tr>
<td>1996</td>
<td>194</td>
<td>20.4</td>
<td>94</td>
<td>19.0</td>
<td>100</td>
<td>22.0</td>
</tr>
<tr>
<td>1997</td>
<td>260</td>
<td>26.3</td>
<td>179</td>
<td>35.2</td>
<td>81</td>
<td>16.8</td>
</tr>
<tr>
<td>1998</td>
<td>346</td>
<td>35.1</td>
<td>196</td>
<td>38.3</td>
<td>150</td>
<td>31.6</td>
</tr>
<tr>
<td>1999</td>
<td>434</td>
<td>44.8</td>
<td>223</td>
<td>44.3</td>
<td>211</td>
<td>45.3</td>
</tr>
<tr>
<td>2000</td>
<td>760</td>
<td>80.8</td>
<td>344</td>
<td>71.7</td>
<td>416</td>
<td>90.2</td>
</tr>
<tr>
<td>2001</td>
<td>891</td>
<td>92.6</td>
<td>392</td>
<td>80.7</td>
<td>499</td>
<td>104.8</td>
</tr>
<tr>
<td>2002</td>
<td>1150</td>
<td>116.3</td>
<td>483</td>
<td>95.6</td>
<td>667</td>
<td>137.8</td>
</tr>
<tr>
<td>2003</td>
<td>1520</td>
<td>150.9</td>
<td>601</td>
<td>116.2</td>
<td>919</td>
<td>187.6</td>
</tr>
<tr>
<td>2004</td>
<td>1847</td>
<td>181.4</td>
<td>750</td>
<td>143.7</td>
<td>1097</td>
<td>221.2</td>
</tr>
<tr>
<td>2005</td>
<td>1693</td>
<td>163.4</td>
<td>734</td>
<td>137.4</td>
<td>959</td>
<td>191.0</td>
</tr>
<tr>
<td>2006</td>
<td>1111</td>
<td>115.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>9817</td>
<td></td>
<td>4362</td>
<td></td>
<td>5455</td>
<td></td>
</tr>
</tbody>
</table>

Source: State register of occupational diseases

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.

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 (Vanadzinš, 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 number of examinations carried out most probably has increased. Unfortunately, there are no reliable data on this issue.
6. Occupational health services

At present, the leading role in the operation of the occupational safety and health protection system is played by the Ministry of Welfare responsible for development, planning and co-ordination of the labour protection system and policy and by the State Labour Inspectorate, which is the main supervisory and control institution in the field of labour protection, under the supervision of the Ministry.

In order to promote co-operation with social partners (social dialogue) in the field of occupational safety and health, the National Tripartite Co-operation Council–Tripartite Co-operation Sub-Council for Labour Affairs (TCSLA) – was established covering issues of both labour legal relations and labour protection. The Sub-Council comprises representatives of the Ministry of Welfare, Ministry of Justice, State Labour Inspectorate, Latvian Free Trade Union Confederation (LFTUC) and Latvian Employers’ Confederation (LEC).

The structure of the institutional system of occupational safety and health is presented in Figure 3.
Figure 3. Institutional system of occupational safety and health in Latvia
7. Resources

The numbers of experts in various categories is described in Table 6.

Table 9. Occupational health and safety experts by category

<table>
<thead>
<tr>
<th>Professional group</th>
<th>No involved including part-time workers</th>
<th>Value indicator</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational health physicians</td>
<td>410</td>
<td>0.41</td>
<td>/1,000 employed</td>
</tr>
<tr>
<td>Occupational health nurses</td>
<td>50</td>
<td>0.05</td>
<td>/1,000 employed</td>
</tr>
<tr>
<td>Occupational hygienists</td>
<td>40</td>
<td>0.04</td>
<td>/1,000 employed</td>
</tr>
<tr>
<td>Labour safety inspectors</td>
<td>139</td>
<td>0.14</td>
<td>/1,000 employed</td>
</tr>
</tbody>
</table>

8. Main problems on OHS

In general, motivational levels are very low and, because organised labour is almost non-existent in small and medium sized enterprises (SMEs), collective agreements rarely cover occupational health and safety issues. VDI has been unable to promote social dialogue in these companies. In addition, economic incentives for employers to invest in occupational health and safety issues simply do not exist.

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.

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.

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.

9. Main priorities for the next 5 years
The Ministry of Welfare (Labklājības ministrija, LM) decided in 2006 of developing a National Action Plan (NAP) for the occupational health and safety strategy, strengthening of institutions in the field of occupational health and safety at work, capacity building of the State Labour Inspectorate and enhancing social dialogue.

Experts from the German Federal Ministry of Economics and Labour (Bundesministerium für Arbeit und Soziales, BMAS) and the Finnish Institute of Occupational Health (FIOH), as well as from Latvian organisations, namely the VDI, the Work and Environmental Health Institute of Rīga Stradiņš University (Rīgas Stradiņa universitātes Darba un vides veselības institūts), the Latvian Employers’ Confederation (Latvijas Darba Devēju konfederācija, LDDK) and the Free Trade Union Confederation of Latvia (Latvijas Brīvo Arodbiedrību savienība, LBAS) have been involved in the planning process (7).

Development of the National Action Plan

The objective of the NAP on occupational health and safety is to facilitate the implementation of the national strategy on occupational health and safety. The main quantitative targets are to reduce the number of accidents at work by 3% a year, as of 2009, along with the occupational sickness rate by 3% starting from 2012.

The Ministry of Welfare has issued two important strategy documents outlining the ‘Conception of the development of labour protection from 2007–2013’ and ‘The programme for development of labour protection from 2007–2010. The panel of experts has recommended several improvements for the existing legislation, especially with regard to clarifying the functions of the public organisations involved and the introduction of a new instrument – namely, the standard of the labour protection practice. The latter practice encompasses a labour protection model created on the basis of the existing legislation. This has been deemed a necessary step in order to help employers and labour protection specialists interpret and apply labour protection legislation, while at the same time not forcing them to commit to anything more concrete.

Strengthening current institutional setting

In an effort to strengthen the current institutional arrangements, the panel of experts has suggested reorganising the Work and Environmental Health Institute into a National Institute for the Working Environment. This institute would serve the state information strategy in the field of labour protection.

Capacity building of State Labour Inspectorate

Capacity building of VDI includes introducing new training models for companies and workers, as well as the implementation of a client’s oriented and sectoral approach.

Enhancing social dialogue

Enhancing social dialogue at company level and in the field of labour protection is necessary, especially in small and medium-sized enterprises (SMEs). A curricula for a training programme for SMEs’ on occupational health and safety and training aids were prepared, and 16 national trainers were trained to run this programme.

In March 2007, VDI organised seminars on ‘Social dialogue – gain for all’ in three Latvian cities. In these seminars, international experts reported on the economic impact of an efficient labour protection strategy and the benefit of social dialogue in companies. Linda Matisane presented the results of the study on ‘Working conditions and risks in Latvia’. This study is one of the research projects from the labour market research programme, subsidised by the EU Social Fund.

References
2. ILO. Labour force survey 2006.
Lithuania

1. Geography and demography

Area

The capital city is Vilnius (550,000 inhabitants), and the official language is Lithuanian. Lithuania has been an independent republic since 16 February 1918 till the soviet occupation in 1940. Lithuania regained its independence on 11 March 1990. The country is divided into 10 districts and 60 local administrations. The area is 65,300 km$^2$ (population density 52 per km$^2$).

Population

According to statistical data of 2006, the population of Lithuania was 3.40 million people, and 66.47% of the population live in urban areas. The population is composed of Lithuanians (84.6%), Russians (5.1%), Poles (6.3%) and people of other origin (4%).

Table 1. Population by age groups, in 2006

<table>
<thead>
<tr>
<th>Age</th>
<th>Total population</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–14</td>
<td>560.3</td>
<td>287.4 (51.3%)</td>
<td>273.0 (48.7%)</td>
</tr>
<tr>
<td>15–74</td>
<td>2621.9</td>
<td>1235.7 (47.1%)</td>
<td>1386.1 (52.9%)</td>
</tr>
<tr>
<td>75+</td>
<td>220.9</td>
<td>63.6 (28.8%)</td>
<td>157.3 (71.2%)</td>
</tr>
<tr>
<td>Total</td>
<td>3403.1</td>
<td>1586.7 (46.6%)</td>
<td>1816.4 (53.4%)</td>
</tr>
</tbody>
</table>

Source: ILO labour force survey 2006

Labour force

The labour force is 1.5883 million people, of which 1.4990 million are employed. The gender distribution is 70.5% men and 64.6% women. The unemployment rate has decreased from 17.4% in 2001 to 5.6% in 2006.
2. Economy

The expansion of the Lithuanian economy is very dynamic with growth rates being among the highest ones in Europe. In 2006, the GDP went up by 7.5% as compared to the year 2005.

The real GDP per capita amounted to EUR 6,996 in 2006, by purchasing power standards GDP per capita amounted to EUR 15300.

Table 2. Selected economic indicators of Lithuania

<table>
<thead>
<tr>
<th></th>
<th>1998/2000</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross national product per capita, USD, in 2005</td>
<td>2,886</td>
<td>7,210</td>
</tr>
<tr>
<td>Gross domestic product (GDP) per capita, purchasing power parity, USD</td>
<td>3,227</td>
<td></td>
</tr>
</tbody>
</table>

Source:

3. E-policies and Digital Opportunity Index

According to a study (Digital Lithuania 2001) carried out in 2001, 73.8% of Lithuanian citizens related the future of Lithuania to the need for an information society, almost as many (72.3%) expected a better life in relation to the development of the information society. Among the barriers to the spread of Internet, according to the respondents, were the high costs and difficulties related to access. A total of 69.2% of the respondents thought that the government was not paying the necessary attention to the issues of the development of information society.

Since then, Lithuania has made a considerable progress in the area of the Information Society and Knowledge Economy development. Many important legal acts regulating and stimulating processes of the Information society were passed, and institutions responsible for coordination of this sector were established.

State’s investments in the information and knowledge society sector have been gradually growing. In 2001 state investments in information society development projects amounted to LTL 80.5 million; 2002 – LTL 90.5 million; 2003 – LTL 99.2 million; 2004 – LTL 114 million; 2005 – LTL 137.5 million. Additional EU funds allotted to these projects in 2002 totalled LTL 9.8 million, 2003 – LTL 47.5 million, 2004 – LTL 61.7 million, 2005 – LTL 63.7 million. In 2006, planned state investments in information society development projects amount to LTL 124.6 million, additional EU funds – LTL 30.7 million. Since 2002, the establishment of public Internet access points has been implemented under the private business initiative Window to the Future. Public Internet access points were established in the most frequented places: libraries, recreation centres, ward offices, community centres and similar. It was aimed at ensuring the maximum distance of 8 to 10 km of the nearest public Internet access point for the rural population.

Table 3. The Digital Opportunity Index of Lithuania

<table>
<thead>
<tr>
<th></th>
<th>2005/06</th>
<th>2005/06</th>
<th>2005/06</th>
<th>DOI 2005/06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithuania</td>
<td>0.99</td>
<td>0.46</td>
<td>0.38</td>
<td>0.61</td>
</tr>
</tbody>
</table>

4. OHS legislation and actors

The organizational structure of state authorities and services, responsible for occupational health and safety in Lithuania is described in Figure 1.

**Figure 1. Occupational health and safety system in Lithuania**

**Public institutions and establishments, implementing the state policy in the field of occupational safety and health**

*Ministry of Social Security and Labour* within its competency implements the state policy in the field of occupational safety and health (together with *Ministry of Health*), following provisions of Constitution of the Republic of Lithuania, laws, Governmental resolutions and other standard acts. Minister of Social Security and Labour (on his/her own or in conjunction with other minister or ministers) approves relevant standard acts on occupational safety and health, establishes the procedure of their enforcement and application, represents interests of the Republic of Lithuania in the field of occupational safety and health in other countries and international organizations.
State Labour Inspectorate under Ministry of Social Security and Labour controls compliance with requirements of standard acts on occupational safety and health, other labour relations legislation in enterprises. It also provides consultations to employees, trade unions, employers, safety services in enterprises on issues of safety, occupational hygiene, and compliance with labour laws, also collective agreements and contracts, as well as labour disputes.

The State Labour Inspectorate investigates accidents at work, occupational diseases, applications and requests of employees, participates in investigation of industrial accidents, attestation of employees on issues of occupational safety and health. It also controls the compliance with procedure and terms of inspection of technical status of potentially dangerous equipment as well as performance of permanent supervision, organizes drafting of standard acts on supervision of equipment, performs the functions of the institution responsible for maintenance of state register of potentially dangerous equipment. In addition, it also approves occupational safety and health rules and standard instructions and provides consultations to employers, employees on issues of application of labour laws and prevention of accidents at work and occupational diseases.

Lithuanian Labour Market Training Authority under Ministry of Social Security and Labour performs functions of labour market vocational training, orientation and consultations management and implements state policy in these fields. It organizes development and approval of training programmes of labour market vocational training, including issues of occupational safety and health. Performs expertise of material training basis in enterprises, organizations, educational establishments and submits recommendations to the Ministry of Education and Science on issuance of permits (licences) to provide labour market vocational training.

Technical Supervision Service is a control institution for inspection of various potentially dangerous equipment, accredited by the Lithuanian National Accreditation Bureau in November 2000, following the requirements of the standard LST EN 45004.

Institute of Labour and Social Research is a research institution founded by the Ministry of Social Security and Labour undertaking both theoretical and applied research on the issues of labour and social policy formation and implementation.

Ministry of Health - within its competency implements the state policy in the field of occupational safety and health (together with Ministry of Social Security and Labour) and analyses the population’s health needs, state of health and its forecasts, health care resources, acceptability, accessibility as well as suitability of health care and plans health promotion activities on the state level.

Occupational Medicine Centre of Institute of Hygiene carries out scientific research, upgrading and requalification of occupational health specialists, expert research of environmental impact upon human health and compiles relevant information, develops criteria for diagnosing of occupational diseases, manages state register of occupational diseases.

Central Occupational Medicine Expertise Commission deals with expertise of complicated cases when establishing the diagnosis of occupational diseases.

Institutions of safety and health management at the regional level

County administration
Delegates are representatives of municipalities to the regional occupational safety and health commission.

Council of municipalities (administration)
On the consent of enterprises, has the right to develop and approve joint occupational safety and health improvement programmes or measures and commit funds for their implementation. Has the right to establish a vacancy of municipal inspector-consultant on safety and health in compliance with Model regulations on municipal safety at work inspector – consultant.
Regional occupational safety and health commissions in counties
(Their Regulations are approved by the Decree No. 137/573 of 29 October 2001 of the Minister of Social Security and Labour)
Following the principles of tripartite cooperation of social partners of state, employees and employers participate in delivery of state policy on occupational safety and health.

Safety and health at work in enterprises, institutions and organizations

Occupational safety and health services at enterprises
Carry out prevention of industrial injuries and occupational diseases, supervision and control of safety and health at work, provide consultations to employees on issues of occupational safety and health following provisions of Model regulations on safety at work services in enterprises (approved on 10 June 2002; No. 77/262, Official Gazette 2002, No. 69-2850).

Occupational safety and health committees in enterprises
Analyse and evaluate activities of employers, units of the enterprise, services in the field of occupational safety and health, develop measures to improve safety and health at work, proposals to collective agreements, analyse causes and circumstances of accidents at work and occupational diseases, following the provisions of General regulations on occupational safety and health committees in enterprises (approved by the protocol of Occupational Safety and Health Commission No. 65; 11 March 2002).

System of tripartite institutions

Safety and Health Commission of the Republic of Lithuania adjusts interests of state, employees and employers in the field of safety and health on the tripartite cooperation principle of social partners. Safety and Health Commission of the Republic of Lithuania – established in 1994 – implements the provisions of the then-in-force Law on Safety and Health at Work. The Commission participates in the formulation and delivery of safety at work policy; analyses status of safety at work and proposes improvement measures, develops relevant recommendations and draft measures; discusses and submits proposals regarding laws and other standard acts on issues of safety at work, etc. The Commission is made up of 15 equal members: 5 representatives of employees, employers and public administration institutions. The Commission is headed by chairman, elected from members of the Commission following the principle of rotation.

The system of tripartite institutions in Lithuania is made up of a group of tripartite structures, majority of which are specialised. Majority of these institutions function on the national level, some – in regions.


Organisations of social partners

Trade unions and their organisations
Lithuanian laws provide for only one legitimate form of organised workers’ representation – trade unions. Four trade unions function on the national level in Lithuania:

Lithuanian Workers Union – formed as a branch of the grass-root movement "Lietuvos atgimimo sąjūdis". The first group of Workers Union was established in 1988 in Kaunas, and in
summer 1989 the first congress was held, during which political and economic requirements were raised. After reestablishment of independence of the Republic of Lithuania, during the congress held on 1 July 1990 the political objectives were renounced and Lithuanian Workers Union was declared to be an organisation of trade unions. Currently Lithuanian Workers Union unites 25 towns/regions, i.e., regional workers unions and 12 industrial – trade federations and in total has about 52,000 members;

**Lithuanian Labour Federation** – was functioning from 1919 till 1941. Its activities were re-established in 1991. Lithuanian Labour Federation in 1995 merged with Lithuanian Association of Trade Unions, and in 1997 joined the Lithuanian Federation of Regional Trade Unions. Currently the Labour Federation unites 10 branch trade unions, functioning on different production, industry and regional levels and has more than 20 thousand members. Since 1996, the Lithuanian Labour Federation is a full-pledged member of the World Labour Confederation;

**Lithuanian Centre of Trade Unions** – established on 23 March 1993 and unites 14 branch trade unions with more than 90 thousand members. This organisation actively participates in the activities of the Baltic (Lithuanian, Latvian, Estonian) Board of Trade Unions and strives to establish cooperation with trade unions of other European countries and the Baltic Sea Region states. As the other three above mentioned trade unions, Lithuanian Centre of Trade Unions actively participates in the process of drafting laws and tripartite dialogue in formulation of labour and social policy;

**Lithuanian Confederation of Trade Unions** – a confederation of trade unions, uniting 11 independent branch trade unions. Lithuanian Amalgamation of Trade Unions was established in 20 February 1992 on the agreement of free trade unions and is a constituent part of Lithuanian movement of trade unions. In 1994 this organisation of trade unions joined the International Confederation of Free Trade Unions (ICFTU), and in 1998 became an associated member of European Confederation of Trade Unions (ETUC). It also maintains relations with trade unions in Sweden, Denmark, Finland, Germany and other countries.

**Employers’ organisations**
Two large confederations of employers are functioning on the national level: **Lithuanian Confederation of Industrialists;** and **Lithuanian Confederation of Business Employers**
These confederations unite smaller branch and regional associations and separate enterprises.

### 5. Occupational accidents and occupational diseases

**Accidents at work**

Accidents at work in the undertakings of Lithuania in 2005:
- 112 fatal,
- 216 serious, and
- 3,003 minor labour-related accidents at work.

There were 17.7 serious and 9.2 fatal accidents at work per 100,000 employees. The numbers of both serious and fatal accidents at work have been increasing during the period of 2001-2005. In 2005, the majority of fatal (23%) and serious (17%) accidents at work occurred as a result of traffic offences, while the majority of minor accidents at work (46%) were as a result of violations of safety and health legislation.

In 2005, the majority of serious accidents at work occurred in construction undertakings, viz. 83.9 accidents per 100,000 employees. The number of serious accidents at work was also high in undertakings engaged in forestry, production of construction materials, chemical industry, transport and agriculture, viz. approx. 40 accidents per 100,000 employees. In 2005, the highest number of fatal accidents at work occurred in forestry undertakings, viz. 55.2 accidents per 100,000 employees. The number of fatal accidents at work per 100,000 employees was high in undertakings engaged in the production of construction materials (40), chemical industry (38.2) and construction (37.9).
**Occupational diseases**

In Lithuania occupational diseases are registered in the National Registry of Occupational Diseases at the Institute of Hygiene Occupational Medicine Centre. During the period 1995-2006 the number of the registered occupational diseases increased from 370 to 1447 cases (Figure 2). Morbidity of occupational diseases is almost twice higher in Lithuania than in the old European Union countries. Contrary to the EU, most of occupational diseases are diagnosed in the employees of pre-retirement age (55-64 years of age) and in young workers (25-34 years of age) they are nearly not diagnosed at all.

![Figure 2. Occupational diseases in Lithuania in 1995-2006](image)

Up to 2003, the structure of occupational diseases in Lithuania was dominated by vibration disease and occupational hearing impairment, which made 70-80% of all registered occupational diseases annually (Figure 3). From 2004 the registration of separate syndromes has been introduced instead of vibration disease, therefore the number of occupational musculoskeletal disorders and nervous diseases augmented. The structure of occupational diseases in the EU countries is also dominated by occupational musculoskeletal disorders, but differently from Lithuania, the number of diagnosed occupational respiratory, cutaneous and tumorous diseases is considerably higher. Not a single case of occupational cancer was registered over the period 1995-2006.

![Figure 3. Changes in the structure of occupational diseases in 1995-2006](image)
6. Occupational health services

Occupational safety and health comprises all preventative measures aimed at protecting functional capacity, health and life of employees at work which are used or planned at all operational stages of the company to protect employees from occupational risks or minimize these risks.

Every employee must be provided with secure and healthy working environment irrespective of the activities of the company, type of employment contract, number of employees, profitability of the company, work place, working environment, nature of work, duration of the working day or shift, citizenship, race, nationality, gender, sexual orientation, age, social background, political or religious beliefs of the employee. Creation of secure and healthy working conditions in all work-related aspects is the duty of the employer. Occupational safety and health measures in the company are funded by the employer.

The state of occupational safety and health in companies is measured to the extent that work equipment and working conditions in the company and its units meet occupational safety and health requirements laid down in legal acts. Measurement of the state of occupational safety and health involves assessment of the occupational risks, i.e. the likelihood of injury or any other deterioration of the employee's health due to the impact of the harmful and/or hazardous work environment factor(s).

Occupational risks must be assessed in every company. The procedure for occupational risk assessment in companies is established in the Occupational Risk Assessment Regulations. Occupational risk assessment is carried out with the help of the occupational safety and health service of the company, bodies measuring the risk factors certified by the State Public Health Service and licensed occupational safety and health experts. The assessment includes measurement of risks to employees posed by every factor (chemical, physic, biological, ergonomic, psychosocial, physical) of the work environment. When the risks are assessed, Occupational Risk Assessment Cards are completed for each risk assessment object. Information in the Occupational Risk Assessment Cards must be summarised and the Document of Occupational Safety and Health Status in the Company must be completed in the established form. When the occupational risks are assessed, the company has to draw up a risk elimination and mitigation action plan which is used for implementation of risk prevention measures.

Key indicators of the occupational safety and health status are the number of accidents at work and incidence of occupational diseases.

From 2006, the companies may receive funds from the State social insurance fund budget for implementation of risk prevention measures.

In Lithuania, the companies’ in-plant services (integrated model) is used for occupational health services:
Figure 4. Occupational health service model in Lithuania

7. Resources

The competent occupational health and safety personnel is important for the implementation of the National occupational safety and health programmes and strategies, and for the provision of occupational health and safety services to the workplaces. The further development of the multidisciplinary approach is also crucial.

The numbers of experts in various categories (2001) is described in Table 4.

Table 4. Occupational health and safety experts by category (1)

<table>
<thead>
<tr>
<th>Professional group</th>
<th>No. involved including part-time workers</th>
<th>Value indicator</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational health physicians</td>
<td>22</td>
<td>0.015</td>
<td>/1,000</td>
</tr>
<tr>
<td>Occupational health nurses</td>
<td>349</td>
<td>0.24</td>
<td>/1,000</td>
</tr>
<tr>
<td>Occupational hygienists</td>
<td>32</td>
<td>0.02</td>
<td>/1,000</td>
</tr>
<tr>
<td>Labour safety inspectors</td>
<td>162</td>
<td>0.11</td>
<td>/1,000</td>
</tr>
</tbody>
</table>

8. Main problems on OHS

During the recent years the number of occupational diseases and traumas has increased as well as the number of deaths at workplaces. However, only a small part of occupational diseases is diagnosed, preventive medical examinations of workers are inefficient, recognition procedure of occupational diseases is very complicated, there are no diagnostic criteria for the use of general practitioners. In order to satisfy better the occupational safety and health needs in the country, it is firstly necessary to develop institutional capacities and to ensure appropriate training for all participants of this sector. Besides, it is necessary to restructure the health care system, changing the structure of provided services and strengthening the components of primary health care. Moreover, an important problem is the implementation of non-governmental occupational safety and health function.

In Lithuania there is a lack of occupational medicine services; they are available only in big companies. Then again, there is no legislation regulating the activities of occupational health services for small and medium-size enterprises. Currently, the regulations for occupational health services inside enterprises establish that occupational medicine doctors, general practitioners as well as public health and nursing professionals licensed for this type of activity shall work in the enterprises. However, the enterprises lack a lot such professionals (occupational medicine doctors in particular).

Both material and human resources are insufficient too. Complex measures as well as complex funding are necessary.

9. Main priorities for the next 5 years

The main aim of Lithuanian healthcare policy is to prolong people’s health and the lifespan of their functional ability. It aims to safeguard the possibility for everyone to enjoy a good quality of life, diminish health differences between population groups and reduce the rate of premature deaths.

Directions for strengthening of occupational health:
- coordination of occupational health activities (legalisation of a coordinating authority and creation of occupational health services network);
- strengthening of occupational health services and development of human resources (setting of competence requirements for occupational health professionals and their continuous training).

Strategic research activity priorities are:
- research on the efficiency of implementation of the occupational health policy; and
- creation of the national occupational health information network.

This priority is based on the experience of Occupational Medicine Centre (OMC) gained through the participation in the Northern Dimension Partnership project, coordinated by the Ministry of Health, the aim of which is to enhance occupational health services both in Lithuania and other countries of the region, as well as its contribution to the creation of the telematic information network of the Baltic Sea Region.

- Research on the effects of asbestos and other carcinogens in working environment and on the impact of psychosocial risk factors.

This priority is based on the competence of the OMC and Laboratory of Chemical Hazards Investigation of Institute in carrying out research on the effects of asbestos and stress on workers’ health as well as implementing the measures planned in the Government’s Annual Programme for 2006-2008.

- Research on the prevalence of occupational diseases and elaboration of diagnostic criteria.

This priority is based on the data and the experience of the National Register of Occupational Diseases at OMC in research and plans to participate in the elaboration of diagnostic criteria.

- Research and assessment of occupational risks due to chemical and physical factors in working environment.

This priority is based on the experience and expertise of the OMC Laboratory of Chemical Hazards Investigation of the Institute in performing expert tests for companies, institutions and organisations in compliance with the requirements set forth in the Rules for Occupational Risk Assessment.

References

2. ILO. Labour force survey 2006.

Norway

1. Geography and demography

Area

The area of Norway is 385,155 km$^2$ (population density 12 per km$^2$). 63% of the population lives in urban areas. The capital city is Oslo (500,000 habitants), and the official language is Norwegian.

Population

The population of Norway was 4.681 million 01. January 2007.

Table 1. Population by age groups, in 2006

<table>
<thead>
<tr>
<th>Age</th>
<th>Total population</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–14</td>
<td>906</td>
<td>464</td>
<td>442</td>
</tr>
<tr>
<td>15–74</td>
<td>3419</td>
<td>1727</td>
<td>1692</td>
</tr>
<tr>
<td>75–</td>
<td>356</td>
<td>135</td>
<td>221</td>
</tr>
<tr>
<td>Total</td>
<td>4681</td>
<td>2326</td>
<td>2355</td>
</tr>
</tbody>
</table>

Source: ILO labour force survey 2006

Labour force

The labour force was 2,501 million in August 2007. The unemployment rate stood at 2.5 per cent.

Source: Statistics Norway, 2007

2. Economy
Table 2. Selected economic indicators of Norway

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross national product per capita, USD</td>
<td></td>
<td>76750</td>
</tr>
<tr>
<td>Gross domestic product (GDP) per capita, purchasing power parity, USD</td>
<td></td>
<td>85585</td>
</tr>
</tbody>
</table>

Source: Statistic Norway, 2007

3. E-policies and Digital Opportunity Index

The e-policy is built on justice and community. The public welfare will be renewed and developed further and differences in the society will be reduced. The public responsibility and role regarding health, care and education shall be strengthened.

- Full coverage of kindergartens.
- Reinforce building of roads and railways. Improved maintenance.
- Steps to reduce poverty, increase integration and including of the immigrant population.
- Educational policy measures
- Better public health and reduced social differences.
- Improved the economy in the hospital sector
- Restructuring of the energy and the environmental profile
- Investments in the Northern areas.
- More to cultural activities
- Priority of research and development
- A policy in favor of regional and local area development
- Reduced crime and more safety

Table 3. The Digital Opportunity Index of Norway

<table>
<thead>
<tr>
<th></th>
<th>Opportunity 2005/06</th>
<th>Infrastructure 2005/06</th>
<th>Utilization 2005/06</th>
<th>DOI 2005/06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway</td>
<td>1.00</td>
<td>0.66</td>
<td>0.41</td>
<td>0.69</td>
</tr>
</tbody>
</table>


4. OHS legislation and actors

The occupational safety and health is based on Work Environment Act from 1977 amended in 2005. Although no formal tripartite body exists, all-important labour matters are discussed between social partners. There is no National Program on the promotion of safety and health. Improving the health and work ability of working people in Norway is mentioned in the National Health Plan for 2007-2010.

The Ministry of Labour and Social Inclusion

The leading occupational safety and health authority is the Ministry of Labour and Social Inclusion. It is responsible for policy making. The coordination of policies and activities at the national level takes place in ministerial groups at the government level: the ministers of neighbouring sectors often coordinate their policymaking. The Working Environment and Safety Department of the Ministry coordinates its activities mostly in ad hoc negotiations with the other ministries and social partners. The coordination mechanisms cover the whole occupational safety and health sector described in Figure 1. The workplace is considered to be the main focus and arena of the occupational health and safety activity.
Working environment and safety work is organized under the Working Environment and Safety Department in the Ministry of Labour and Social Inclusion. The operative supervisory authority rests with the Labour Inspection Authority and the Petroleum Safety Authority.

The National Institute of Occupational Health (STAMI) The Institute and the Department of Occupational Medicine Institute of Public Health at the University of Bergen and five regional departments of occupational medicine at the main hospitals are an integral part of the national system for protection of workers. The Institute collaborates with government agencies, workers’ and employers’ organizations and directly with enterprises.
5. Occupational accidents and occupational diseases
**Occupational accidents**

Occupational accidents are reported by the employers to the Norwegian Labour and Welfare Organization (NAV) and forwarded to the Labour Inspection (Arbeidstilsynet), the Petroleum Safety Authority and other inspecting bodies.

The department for National Surveillance of Work Environment and Occupational Health (NOA) at National Institute of Occupational Health has estimated the number of occupational accidents leading to sick-leave of one day or more to 78,000. However, only some 25,000 were reported. Agriculture, forestry and building and construction were the top three most accident-prone industries. The number of fatal accidents at work was on average 58 cases per year in the 1990s, 87 in 2000 falling to 62 in 2005 (Figure 2). In 2000-2005, fisheries had the relative highest risk of fatal accidents, followed by sea transport, energy and mining, and agriculture and forestry (Figure 2). Almost all fatal accidents occurred to men.

![Figure 2. The number of fatal occupational accidents per year in 2003-2005](image)

Source: Statistics Norway, 2007

**Occupational diseases and work related disorders**

The Work Environment Law obliges every doctor to report work related disorders to the Labor Inspection and the other inspection Authorities. However, there is a huge under reporting. Thus the register is not suitable for common analysis.

In 2006, the number of reported work related disorders was 3392. The four largest diagnostic groups were noise-induced hearing loss (1987), diseases of respiratory organs (398), skin diseases (239) and musculoskeletal disorders (210).

In order to qualify for compensation a disease must, as the main rule, fall within the legal definition of an occupational disease. The compensation systems are run by NAV and insurance companies. It should be noted that occupational musculoskeletal and psychological diseases legally are exempted from compensation.

In Figure 3 is presented the compensated occupational diseases in 2005:
6. Occupational health services

There are several different ways in which occupational health services are organized at the enterprise level. Some large companies have their own private in-company service. Another type of arrangement is that several companies have a joint arrangement and establish an occupational health services company, which then service the group. A third type of arrangement is an independent occupational health service enterprise selling their services in the market. Certain industries/trades are deemed by the government to have greater health and safety risks than others, and are required by law to hire the assistance of an occupational health service. These industries/trades are specified in a separate regulation. About 40% of the occupational health services’ volume is internal services in the enterprises, the rest are external services of which about 50% are owned by the enterprises and 50% privately owned. The coverage of service is approximately 60% (1.2 million) of the workforce.

There is no official registration, but it is estimated that some 400-500 occupational health service units are in operation. The content of the assistance from the occupational health service is based on the risk assessments and needs of the enterprise. Enterprises are in a specific regulation informed on how they should use the assistance of the occupational health service. The occupational health service legally has a purely advisory role. The responsibility for the health and safety situation in the enterprise rests solely with the management. The regulation inform the enterprises to ask for preventive and advisory services from the occupational health service, but, to some extent, also other health concerns of employees might be attended to. The occupational health services are encouraged to follow good occupational practice guidelines, which are just recently renewed. There are yet no formal governmental post-graduate qualification requirements for medical and other personnel occupied in occupational health service.

The average cost of occupational health service amounts to 150 Euros per employee per year, a total cost of 180 million Euros per year. The amounts of services purchased by the enterprises are highly variable, from less than 50 Euros up to more than 1000 Euro per
employee per year. The government is not compensating the costs of occupational health services.

7. Resources

The estimated numbers of experts in various categories is described in Table 4.

Table 4. Occupational health and safety experts by category in Norway

<table>
<thead>
<tr>
<th>Professional group</th>
<th>N involved incl. part-time workers, 2007</th>
<th>Value indicator</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational health physicians</td>
<td>355</td>
<td>/1,000 employed</td>
<td></td>
</tr>
<tr>
<td>Occupational health nurses</td>
<td>670</td>
<td>/1,000 employed</td>
<td></td>
</tr>
<tr>
<td>Occupational physiotherapists /ergotherapists</td>
<td>340</td>
<td>/1,000 employed</td>
<td></td>
</tr>
<tr>
<td>Occupational hygienists /safety engineers</td>
<td>390</td>
<td>/1,000 employed</td>
<td></td>
</tr>
<tr>
<td>Psychologists</td>
<td>30</td>
<td>/1,000 employed</td>
<td></td>
</tr>
<tr>
<td>Administrative personnel and other</td>
<td>470</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2295</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Secretariat for the Occupational Health services, National Institute of Occupational Health

8. Main problems on Occupational Health Service

The following problems can be mentioned:

- The occupational health service has been little backed by government, but through law and regulations. The services have been left to survive in the market as best they can.
- There are gaps in coverage, especially in small and medium sized enterprises. Too many enterprises obliged to associate occupational health service have not done so.
- Too many enterprises do not properly ask for preventive and advisory services from the occupational health services.
- Quality of service from the occupational health services varies too much.
- Competence of the service providers varies too much.
- Occupational health services might be more adjusted to and focused on the customers’ needs.
- The statistics regarding occupational accidents and occupational diseases could be improved.

9. Main priorities for the next 5 years

Getting all enterprises under the regulation to associate occupational health service.

Getting all enterprises to use the assistance of the occupational health service in accordance with the regulation.

Directing the development of occupational health services so that the structure and contents are in line with the health and social policy objectives; renewing regulations (A possible regulation on Occupational Health Service)

Meeting the challenges of the aging workforce, health inequities and exclusion from the workforce, the reduction of sickness absence and early retirement and promotion of early
return to work and the employment of functionally disabled (The National Campaign on Inclusive Working Life).

Improving collaboration between occupational health services and enterprises; micro companies and SMEs, in particular.

Improving the quality of occupational health service; a mandatory certification and quality control system for occupational health service and personnel is needed.

Establishing a good quality national surveillance system for work environment and – health.

References


2. ILO. Labour force survey 2006.


**The Russian Federation**

1. Geography and demography

**Area**

From 1991 Russia is a federative presidential republic with two chambers parliament. Council of Ministers is chaired by the Prime Minister.

The area of the country is 17,075,400 km$^2$ (population density 8.5 per km$^2$). The capital city is Moscow (8,546,000 habitants), and the official language is Russian. The country accounts 89 administrative areas and 1,865 regions.

**Population**

The population of the Russian Federation was 144,964 million in 2003 and 142,200 million in 2007. About 73% of population is concentrated in urban areas. 80% of the population are Russians, 4% Tatars, 2% Ukrainians, and in addition there are more than 100 ethnic minority groups. The population growth rate from the year 1992 has a well seen negative character due to high rate of mortality, which is for working population related to unnatural causes of premature death and it is as 2.5 higher than in developed countries. During last years birth rate was growing, mortality rate was diminishing year by year. However life expectancy for men is still low and it is about 60 years. Life expectancy for women is 71 year. It is still very big gap between men and women life expectancy.

### Table 1. Population by age groups, in 2006

<table>
<thead>
<tr>
<th>Age</th>
<th>Total population</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
</table>

60
Labour force

The labour force was approximately 73 million in 2005. According to data of Rosstat, the working population in 2006 was about 68.7 million. The standardized unemployment rate was 7.5% in 2006. Unemployment is highest among women and young people.

Table 2. Labour force in 2006

<table>
<thead>
<tr>
<th>Category</th>
<th>Number (2006)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economically active and employed</td>
<td>74 261 000</td>
<td></td>
</tr>
<tr>
<td>Standard and regular</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>63 425 000</td>
<td>92.3%</td>
</tr>
<tr>
<td>Part-time</td>
<td>1 308 000</td>
<td>1.9%</td>
</tr>
<tr>
<td>Non-standard or irregular</td>
<td>No data</td>
<td>______%</td>
</tr>
<tr>
<td>Self-employed</td>
<td>3 986 000</td>
<td>5.8%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>5 542 000</td>
<td>7.5% from number of economically active population (74 261 000)</td>
</tr>
<tr>
<td>Should-be-non-employed but employed – child labour</td>
<td>No data</td>
<td>______%</td>
</tr>
<tr>
<td>Total Population by Employment</td>
<td>68 719 000</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

2. Economy

Russia has a market economy. The new conception of the industry development forms the main three groups. In the first group, the following branches of economy are included: oil and gas industry, forestry and wood felling, mining and energy production. Aviation and space, atomic industry, all branches of the military industry, machine-tool construction, biotechnology, wood processing industry, cellulose and paper production industry are included into the second group. The third group consists of cars production industry, light industry, food industry, agriculture and machinery for agriculture.

Table 3. Selected economic indicators of the Russian Federation

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1999</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross national product per capita, USD</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Gross domestic product (GDP) per capita, purchasing power parity, USD</td>
<td>6,912</td>
<td>12,420</td>
</tr>
</tbody>
</table>

3. E-policies and Digital Opportunity Index

Table 4. The Digital Opportunity Index of Russian Federation
4. OHS legislation and actors

The right on healthy work is constitutional. Article 37 of the new Constitution of the Russian Federation says that every citizen has a right to work under conditions which meet demands of safety and hygiene.

Constitutional rights are further developed by Labour code which is a comprehensive legislative document and it includes occupational safety and health, work organization and other aspects related to this subject. Article 213 of this code prescribes obligatory preliminary and periodical medical examination and defines category of workers and type of industry which is under these conditions. Federal law on Obligatory social insurance from accidents and occupational diseases was approved in 1998. In accordance to this law an employer has an obligation to insure his employees against occupational accidents and occupational diseases.

Special attention should be given to the law: “Sanitary-epidemiological well being of the population” (№ 52-ФЗ, approved on 30 March 1999).

The law on Sanitary-epidemiological well being of the population describes the major activities of the Federal Service for Surveillance in the Field of Consumer Rights' Protection and Human Well-being (“Rospotrebnadzor”), which also includes occupational safety and health. This law covers all kinds of occupational hazards including potentially toxic chemicals and biologically active substances, which can be used after the state registration in the Federal Registry of potentially toxic and biologically active substances (Article 14). Article 22 of this law deals with toxic wastes and article 25, 26 and 27 deal with occupational health and prescribing hygienic standards, norms and rules.

The rights and proxies of Labour Inspection of RF are described in the Article No. 356 of the Labour Code of RF. If the hygienic or technical safety requirements are not met this law gives permission to Chief Sanitary Officer or Labour Inspector to stop production or other activity, or to punish responsible person financially or administratively or to bring the matter to the court.

The Chapter No. 35 of the Labour Code defines what kind of health and safety services should be provided for people at work. In particular, it requires that in the company with more than 50 employees specialist with appropriate background and experience in Occupational Safety and Health should be in the staff. In company with less than 50 employees employer himself makes decision to employ an appropriate specialist or to have an agreement with specialist or with company, available in the market, which provides Occupational Safety and Health service.

A committee or commission dealing with health and safety should be created at an enterprise. Thus the law on Sanitary-epidemiological well being of the population relates mainly to health but another law mentioned above (Labour Code) defines the basic requirements of occupational safety. According these laws employers are responsible for occupational safety and health matters. Three partite approach is required by the Labour Code. Collective agreement is one the main instruments of Occupational Safety and Health practice.

Alone the same line the system of Occupational Safety Standards is being developed by All Russia Institute for Standardization. For example, the new Interstate standard GOST 12.0.230-2007 on OSH management system was issued in 2007. The standard which fully corresponds to ILO-OSH-2001 Guidelines, has got a status of national standard for RF. The standard will come into force since 1st of July 2009, but enterprises are entitled to implement this standard in advance. Prevention of occupational accidents and diseases with the help of risk assessments and management procedures is the basic principle of the document.
Federal Service for Surveillance in the Field of Consumer Rights' Protection and Human Well-being ("Rospotrebnadzor") of Ministry of Public Health and Social Development of the Russian Federation (before 2004 – Department of State Sanitary and Epidemiological Surveillance of Ministry of Public health of Russian Federation – "Gossanepidnadzor") is mainly responsible for providing of occupational health regulations and control of preventive measures realization. Until 2002 practically all documents contained regulations concerning safety and health in the use of harmful and dangerous substances were worked out by "Gossanepidnadzor", justified by Ministry of Justice and were obligatory for execution. After adopting in 2002 of Federal Law No. 184-FZ "About technical regulation" only general safety requirements adopted as federal laws ("Special Technical Reglament") became obligatory, other regulations worked only as recommendations. In 2007 this law was corrected and questions of occupational health and safety was moving out from the Law No. 184-FZ area.

Economically active population is exposed to different type of occupational health hazards. Therefore, the functions of the preventive health service is seen as to control of occupational hazards, minimize exposure to them, health protection and promotion, prevention of occupational diseases and other illneses. There is an administrative structure to deal with this task. In Russia Hygienic standards and norms are established for most of occupational hazards. National Commission on Occupational Exposure Limits of the MHSD has sections dealing with certain occupational hazard. Commission consists of leading specialists in the area. Accepted by Commission the proposed by research Institutions value of Occupational Exposure Limit is to be presented to the MHSD for approval. As far as toxic chemicals concerned there is Maximum Allowable Concentrations (MAC) for more than two thousand hazardous substances (chemical and biological) in the air at workplace. For those substances which are highly accumulative the Time Weighted Average (TWA) concentrations is to be established. Carcinogens, allergens and substances with other specific effects are marked in the list of MACs or TWAs.

Carcinogenic substances are listed in special document which has been developed by commission on carcinogenic factors at MHSD. This list of substances, products, technological processes carcinogenic for the human being is based on the list published by International Agency for Research on Cancer. Enterprises which are defined as carcinogenic are under special observation. On the basis of toxicity indicators including MAC values chemicals are divided into four classes. An appropriate safety measures are defined for each class. These standards and norms are quite often lower than in other countries therefore process of MACs harmonization is going on.

Hygienic standards "Maximum permissible concentrations of harmful substances in the ambient air" GN 2.1.6.1338-03; "Approximately safe levels of exposure to contaminants in the ambient air" GN 2.1.6.1339-03 (for substances that have no thresholds established on the strong scientific data); "Maximum permissible concentrations of harmful substances in the working zone air" GN 2.2.5.1313-03; "Approximately safe levels of exposure to contaminants in the working zone air" GN 2.2.5.1314-03 (for substances that have no thresholds established on the strong scientific data) are established as federal law.

State centres of occupational medicine are in charge of occupational health in Russia. They provide OHS both in state and private sectors of economy. They can be divided into the municipal located on the basis of regional and interregional hospitals. Those are located on the basis of specialized research institutes. The latter are designed for occupational medical aid to the workers of different administrative territories. These OH centres differ in their functions and structure. Coordination is done by the Center of Occupational Medicine of the Ministry of Health of the Russian Federation that has a great volume of expertise. Only centres of occupational medicine have the right to diagnose work-related and occupational diseases in Russia. Centres of occupational health have been developed lately. Some of them are designed to give occupational health services to the workers and their family members at big enterprises. The example of such a centre is the Centre of occupational health at Volzhskiy Automobile Plant. No private curative occupational health centres exist in Russia.
Due to economic problems in the country high percentage of working population still work under conditions which do not comply with national safety and health standards, norms and rules particularly in the industries which difficult to regulate. Unfavourable situation is observed in the coal mining, ferrous and nonferrous metallurgy, cellulose and paper production industry and energy generation. In 2005 22.2% of all employees and 14.3% of working women and in the beginning of 2006 – 20.8% of all employees in basic industries (mining and milling; manufacturing industries; production and distribution of energy, gas, water; construction; transport; communication) were working under conditions which did not meet the Occupational Health and Safety national standards and regulations. In the year 2003 these indicators were 19.9 and 13.2 accordingly. The annual economic losses caused by poor working conditions, are estimated in 407.8 billion roubles.

5. Occupational accidents and occupational diseases

From the beginning of current century annually about 200,000 workers are injured, more than 10 thousand cases of occupational diseases are detected, and more than 14 thousand workers become invalids owing to occupational accidents and diseases. During last years the situation in occupational safety and health has been slowly improving as can be seen from the health indicators given below (Figure 1 and Figure 2).
Figure 1. Dynamics of occupational accident rate (per 1000 workers) in the North-West federal district (NWFD) and in the Russian Federation.

Source: Rosstat

Figure 2. Dynamics of occupational diseases rate (per 10000 workers) in the Russian Federation.

Source: Rospotrebnadzor

Of the registered occupational illnesses in 2005 were
98.41% (98.42% in 2006) chronic;
0.17% (0.14% in 2006) acute;
0.95% (1.45% in 2006) acute intoxications; and
0.50% chronic intoxications

Occupational diseases by cause in 2006 were as follows:
(numbers in 2005 in brackets):
39.0% (38.6%) caused by physical factors;
19.7% (18.2%) caused by overload and repetitive stress;
7.7% (8.1%) caused by chemical factor;
5.2% (6.3%) causes by biological factor;
3.3% (1.4%) caused by allergic diseases; and
0.6% (0.4%) caused by tumors.

69.1% of chronic occupational diseases were revealed in medical periodical examinations.

In 2006 26.05% of total registered occupational diseases in the country were coming from coal mining, 21.52% from aviation transport, 13.3% from nonferrous metallurgy, 7.83% from ferrous metallurgy, and 6.58% from machine-building.

The number of fatal cases has decreased from 6194 cases in 2001 to 4604 cases in 2005.

Persons of economically active age are 0.57 million from total 1.8 million established in 2005 cases of disablement (it is 32% higher than in 2004). 11,6 thousands cases of disablement were compensated as occupational injures or diseases. This can be an indicator of pure quality of early diagnostics of occupational diseases.

The premature deaths and diseases due to occupational exposure impact are seriously diminishing Russian working population and adding to the imbalance of the demographic structure.

6. Occupational health services

Until year 2005 occupational health was under the responsibility of Ministry of Health, and occupational safety under the Ministry of Labour and Social Development. In the 2005 reform these two Ministries were merged into a new Ministry of Health and Social Development (MHSD) with the following federal functions:
- development of the state policy and legal regulations in the public health
- social development;
- labour and consumers' right protection including medical prevention aspects as well as prevention of infectious diseases such as HIV\AIDS;
- medical service and medical rehabilitation;
- pharmaceuticals and drugs quality;
- sanitary and epidemiological wellbeing;
- quality of life and population income;
- policy on demography;
- health services provision for each branch of economy with dangerous conditions of work;
- risk assessment related to the noxious occupational factors of physical and chemical nature;
- health resorts;
- labour payment;
- provision of pension and social insurance;
- conditions of work and labour safety;
- social partnership;
- employment and unemployment;
- labour migration; and
- social defense of population, family, women and children.

Many of the above listed functions of MHSD have direct or indirect relationship to Occupational Health and Safety.

MHSD works through three Federal services and three Federal agencies:
- Federal service on supervision in the sphere of consumers' right protection and wellbeing of human being;
- Federal service on supervision in the sphere of public health and social development;
- Federal service on labour and employment (Labour inspection is attached to this service);
- Federal agency on public health and social development; and
- Federal medicine and biology agency.

The frame of work is defined for each Federal service and each Federal agency (see an appropriate cite: www.government.ru). Occupational Safety and Health department at MHSD is located within Federal service on supervision in the sphere of consumers' right protection and wellbeing of human being. Each administrative region (they are 89) has territorial Centre of Federal service on supervision in the sphere of consumers' right protection and wellbeing of human being. Each such Centre has an Occupational Safety and Health department covering the whole country.

There are bodies on of executive power on Labour in the local governments of each administrative territory which also deals with occupational health and safety.

Occupational health and safety in Russia is very much the component of public health. However, absence of national specialized agency makes occupational safety and health less visible and less efficient in the development of national policy and strategy in this important area.

MHSD has its own mechanism and vertical structure for control of occupational safety and health legislation and standards, norms, rules and other regulations implementation into practice. MHSD with its territorial centers provides preventive and curative occupational health services. Department of Occupational Health at the Federal Territorial Centre is responsible for these services. This department has a net of scientific institutions (centers) reporting to it. These institutions make also research in Occupational health, and develop hygienic standards, norms and rules. Inspection of the working conditions, compliance with the above mentioned hygienic standards, norms and rules is carried out by the net of territorial centers (Rocpotrebnadзор). These centers have equipped laboratories and properly trained staff. They report to the occupational health department at the MHSD.

The structure of occupational health services in Russia have changed during the recent years together with the changes in economy and public health. Now it is not as strict as it was before 1990s.

According to active legislation employer is responsible for preventive measures implementation, organization and funding of current control of dangerous and hazardous factors at the enterprise, organization and funding of preliminary and periodical medical examinations of workers if necessary, under supervising and control of federal and regional competent authorities.

The first level is health monitoring of the employees of the hazardous enterprises. According to the Governmental Decree there are compulsory pre-employment and periodical medical examinations. The medical examination of the employees can be carried out either by municipal or private medical institutions. Such kind of examination is paid by the employer directly or through insurance company. Periodical medical examination of the employees also can be carried out in the medical unit of the enterprise itself. Some of the biggest plants still have their own well-equipped medical centers that can provide all kinds of examination and treatment. After working in hazardous conditions for 5 years the employee has to pass through in-depth physical examination at the specialized Occupational Medicine Center. It can be rather difficult because many regions and cities have no such centers.

Occupational Medicine Center is the second level of occupational health services. It is the only institution that has the right to decide on the occupational origin of the disease. If the physician in the course of periodical medical examination suspects occupational origin of a
disease he has to inform the surveillance center (Rospotrebnadzor) and the employer. The surveillance center investigates the work place and fills the “Sanitary-hygienic Characteristic of the Work Place”. With this document the patient goes to the Occupational Medicine Center where after in-depth examination the commission of the physicians decides if occupational hazards led to occupational disease development in this patient. Another function of the Occupational Medicine centers is to summarize the results of all periodical medical examinations and reveal the problems of occupational health in their regions. There are several occupational medicine research institutes in the country, they have their own clinics and carry out both scientific and practical tasks.

In 2006 started mass health examination of all employees of the state and municipal institutions, including educational, cultural, sporting etc. This work is financed by the Social Insurance Fund and is the part of the national project “Health” and it was directed by the special Decree of the Government.

Medical service for big enterprises is provided by its own occupational physician or medical department, which may have outpatient department and hospital. Medium size and small enterprises are covered by territorial medical centres (policlinic). There is occupational physician responsible for workers health. Usually occupational physician of this department provides medical service to the group of such enterprises. Recently the concept on healthy company as a new approach, recommended by the World Health Organization has been considered for implementation into practice. According to this concept the company itself should develop program on health and safety and health education including healthy lifestyle. This concept foresees that the produced product should be safe for human being and for the environment.

In accordance with decree N12 workplace attestation (comprehensive assessment of potential workplace hazards) is obligatory in every five years. On the basis of the results of workplaces attestation conditions of work are classified as optimal, allowable, dangerous, or extreme. Results of attestation are used for the development of preventive measures and also by insurance companies. The new Decree No.569 on workplace attestation has been adopted by the MHSD in 2007. The Decree is to come into force since 1 of September 2008. This new document contains requirements on risk assessments and management, i.e. it may be used together with GOST 12.0.230-2007 mentioned above.

Preliminary and periodical medical examination are carried out following the requirements of the Decree N90, which defines what type of specialists should be involved in this process. Depending on the health risk this decree defines periodicity of medical examination and what kind of laboratory investigation should be done. There is also a list of common contraindications and list of occupational diseases. The list of occupational diseases is open and diagnosis of occupational disease is established and registered if the relationship between clinical picture and conditions of work is proven. Diagnosis of occupational disease can be established only by a specialized clinic or as it was mentioned above by center of occupational pathology. Diagnostic criteria of occupational diseases are described in great details in handbooks. The main objectives of occupational safety and health services is defined as improvement of working conditions, strengthening of workers health through the improvement of health protection and health promotion.

7. Resources

There is no comprehensive national statistics on the numbers of all experts of various categories in occupational health services in Russia. However, since occupational health is under the responsibility of the Federal Centers of Hygiene and Epidemiology (Rospotrebnadzor), which cover all territories of the country, some numbers can be given. According to the annual report of 2006 the numbers of various specialists working in these Centers were:

- total number of staff (working) 50654, of which:
- physicians 14834;
- another type of specialists with high level of education 2234; and
8. Main problems on OHS

Today the state is granting compensation on occupational accidents (employers are involved indirectly by centralized insurance system). Indemnification is given on the fact of a labour mutilation, an occupational trauma of the suffered worker, instead of owing to presence guilty. Such scheme leads to absence of economic interest of the involved parties to carry out preventive actions to improve working conditions, health protection and social protection.

The introduction of the country into WTO is connected with the obligations to reduce norms and standards which are not in conformity with the international rules of management and safety of work. If the Russian enterprises are not prepared to change their ways when there is a risk that they will be finally superseded in the market by foreign competitors.

The occupational safety and health system operating now is in major part constructed on the principles of reaction to insurance cases, instead of the principle of prevention.

The normative base, including the order of carrying out attestation of workplaces, recommendations on planning actions for occupational safety, systems of accreditation and certification, the order of occupational safety and health training, is also not adapted for small and medium-sized enterprises.

Planning of special advanced measures in occupational diseases prevention is under responsibility of Ministry of Health and “Rospotrebnadzor” on the base of annual survey named “State report on sanitary-epidemiological situation in Russian Federation” (this survey made by Federal Centre on Hygiene and Epidemiology and contain analysis of data collected from regional departments of “Rospotrebnadzor”, included occupational and environmental hygienic measurements data).

In 2006 “Rospotrebnadzor” provided complex of proposals in different areas:
- changes in “Labor Code of Russian Federation” for legislative limitation of maximum period of work in conditions of exposure to dangerous or harmful occupational factors based on risk assessment in different occupations,
- developing of economical measures for employers motivation to provide safety measures,
- education programs for workers and responsible persons,
- renewal of legislative documents (in areas of medical examinations of workers, list of occupational diseases, risk assessment, occupational diseases statistics, etc).

9. Main priorities for the next 5 years

The Russian Health and Social Development Ministry has drafted a programme aimed at improving working conditions and occupational safety and health in the country until 2025. Under the document an OSH system based on professional risks assessment will be introduced in Russia in 2011. The programme is aimed to change the Soviet time occupational safety and health system as a part of the government’s new demographic programme.

Its end goals are to reduce the high death rate, occupational accidents and diseases (Russia’s occupational death rate exceeds the EU’s by 4.5 times) and to improve workplace quality and working conditions.


The overall objective of the Program is to protect health of the worker and to provide safety of work by introduction of professional risks control system at each workplace and involving in management of these risks of the basic parties of social partnership — employers and workers.
The primary goal of a new occupational safety and health system is transition from reaction to insurance cases to management of occupational risks.

The main tasks are the following:
- to lower risks of occupational accidents and occupational diseases;
- to raise quality of workplaces and working conditions;
- to lower death rate;
- to increase life expectancy and to improve health of the working population;
- to give special attention to health promotion component at work;
- to develop programme on HIV/AIDS prevention at workplace.

The basic directions are the following:
- Modernization of legal basis on occupational safety and health;
- Perfection of the organization of occupational safety and health systems, creation of a professional risks management system;
- Information-technical support;
- Strengthening of a role of social partnership;
- Modernization of system of social insurance;
- Propagation of healthy and safe work;
- Corporative programs on occupational safety and health.

As a result the programme aims at reaching the safety and health level of the EU countries - to lower quantity of workplaces with harmful and dangerous working conditions to 3-5 %, and to reduce serious occupational accidents and fatalities to a level of no more than 0,05-0,08.

The costs of the reform could be drawn from several resources:
2. Federal and regional budgets;
3. Budgets of State foundations;
4. Municipal budgets; and
5. International funding.

References

   http://www.itu.int/osg/spu/publications/worldinformationsociety/2007/report.html,
9. www.government.ru
    Moscow, 2007.
3. Conclusions

The Northern Dimension Partnership in Public Health and Social Well-being has – through its Occupational Health and Safety sub group of the Expert Group on Social Inclusion, Healthy Lifestyles and Work Ability (SIHLWA) – reviewed the situation in six NDPHS countries and found great variations in health status, working conditions and access to preventive occupational health services. This situation is detrimental to the health and wellbeing of the citizens and unfavourable to the economies of the NDPHS countries. Immediate actions are needed to turn around the negative trend of polarization of health.

Many NDPHS countries seem to focus more on population at risk instead of a more holistic approach. It seems, however, that the strategies are gradually moving towards promotion of health and work ability, and reducing consequences of bad life style and risks and strains at work simultaneously.

National actions plans on OHS are existing in some of the NDPHS countries. Unfortunately these plans are not always implemented very effectively. Part of the problem is the lack of reliable statistics and surveys, and follow-up indicators making it difficult to show the effects. There is a need to improve statistics and do more surveys to guide health policy actions.

Awareness and knowledge of occupational health and safety issues among employers and employees as well as among general public is still in many respect low. The governments leading role in raising public awareness of OSH and setting national targets and resources for corrective and preventive actions at workplaces and generally is recognized. However, streamlining labour unions' and third sector preventive health organisations' actions are needed, too.

A focus on small and medium size enterprises (SMEs) is crucial, as they are the main job creators and have only limited resources to deal with OSH issues compared to big enterprises. The OHS systems are not well equipped to serve micro-companies and SMEs. New, simple and inexpensive methods in risk management are needed.

The relevance and quality of OSH services is an issue in all NDPHS countries. Better integration of OSH into the work place management systems and primary health care is in order. This should be backed with a large scale training of staff in OHS, primary health care clinics, safety inspection services and in work place safety organization.

At the multi-national level, EU, ILO, and WHO should cooperate to support the initiatives taken by the Northern Dimension Partnership in Public Health and Social Well-being and the Baltic Sea Network on Occupational Health and Safety in their efforts to implement their OSH strategies consistently, effectively and efficiently.

The national OSH profiles and programs will form a part of the NDPHS data base and will be produced so that they are usable for the ILO and WHO data bases on OSH.

The importance of OSH as part of public health and workplace as an arena for workers' health promotion is gaining ground in Europe. Functional basic and advanced level occupational health services are asked for and seen as an investment not only for health, safety and well-being but also for stable labour markets, better productivity, and improved quality of services and products.
### Population and health indicators

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<tr>
<td>Population (million) 2003</td>
<td>1.454</td>
<td>5.213</td>
<td>2.325</td>
<td>3.454</td>
<td>38.195</td>
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<td>Labour force (% of population) 2002</td>
<td>47.9</td>
<td>50.6</td>
<td>47.9</td>
<td>47.0</td>
<td>44.3</td>
<td>73.2 (2005)</td>
<td>51.9</td>
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<td>Life expectancy at birth in years 2003</td>
<td>71.78</td>
<td>78.72</td>
<td>70.95</td>
<td>72.24</td>
<td>74.74</td>
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<tr>
<td>New cases of occupational diseases per 100 000 in 2003</td>
<td>11 (2005)</td>
<td>231</td>
<td>61</td>
<td>35</td>
<td>16</td>
<td>115</td>
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<tr>
<td>Injured in work-related accidents per 100 000 in 2003</td>
<td>239</td>
<td>2226* (2004)</td>
<td>57</td>
<td>77</td>
<td>211</td>
<td>523</td>
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<tr>
<td>Deaths due to work-related accidents per 100 000 in 2003</td>
<td>2.29</td>
<td>2.47 (2005)</td>
<td>1.68</td>
<td>3.27</td>
<td>1.37</td>
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<td>% of population self-assessing health as good in 2002</td>
<td>35.87</td>
<td>54.70</td>
<td>32.48</td>
<td>43.50</td>
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<td>source: data collected from several international databases and publications</td>
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<td>* causing over four days absence from work</td>
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