An EU-OSHA perspective on the challenges of preventing work-related accidents and diseases

Elke Schneider, European Agency for Safety and Health at Work
A major challenge
EU OSH Strategic Framework 2014-2020

The European Commission has adopted a new Strategic Framework on Health and Safety at Work 2014-2020:
• key challenges;
• strategic objectives;
• key actions and instruments.

Framework has been prepared on the basis of:
• the findings of the evaluation of the previous EU OSH Strategy;
• the results of a public consultation;
• the contributions of relevant stakeholders.

EU continues to play a leading role in the promotion of high standards for working conditions.

One of the major challenge: to improve the prevention of work-related diseases.
Member states' policies on work-related diseases

- **2013 European Commission report on occupational diseases' systems**
  - 26 countries have a national list of occupational diseases (out of 29);
  - 13 countries have “complementary clause” (or “open clause”) that is a legal regulation allowing recognition;
  - The UK and Cyprus have two lists, one for compensation and one for prevention.
  - occupational disease lists mainly aid recognition and compensation;
  - difficulty in fitting multi-cause illnesses into their existing concept of compensation;
  - overlap between occupational accidents and diseases (e.g. MSDs, suicide).

- **2009 Advisory Committee on OSH scoreboard** structured around six topics, one of them is “work-related health problems and illnesses”.

  Only 15 of 27 countries used research results on emerging risks for labour inspection priorities.
Globally, 2.3 Million Deaths caused by Work

192,200 Work-related Deaths

There were 192,200 work-related deaths in the EU28, from years 2010 and 2011.

2.4% (or 4,692 deaths) were caused by workplace accidents. The remaining 97.6% were due to illnesses that were work-related.

Source: Takala et al, at EU-OSHA WS on costs

http://osha.europa.eu
In EU28, cardiovascular and circulatory diseases accounts for 28% and cancers at 53%. They were the top illnesses responsible for 4/5 of deaths from work-related diseases. Occupational injuries and infectious diseases together amount accounts for less than 5%.
Magnitude of non-fatal work-related illnesses and accidents
Eurostat LFS 2007

Main Findings

Accidents at work
- 3.2% of workers in the EU-27 had an accident at work during a one year period, which corresponds to almost 7 million workers.
- Approximately 10% of these accidents were a road traffic accident in the course of work.

Work-related health problems
- 8.6% of workers in the EU-27 experienced a work-related health problem in the past 12 months, which corresponds to 20 million persons\(^1\).
- Bone joint or muscle problems and stress, anxiety or depression were most prevalent.
Data from the 2007 LFS survey

- 3.8 Million (2.9%) workers off sick for more than one month due to work-related health problems
- 1.4 Million (0.7%) workers off sick for more than one month due to work-related accidents
- Among workers affected by MSDs, longest absences due to lower-limb disorders, currently not recorded

*Workers off work at least 1 month due to accidents at work and work-related health problems in the past 12 months*

Source: Eurostat, LFS 2007
The worker’s perspective
Health problems by sector and gender
(Eurostat - LFS ad hoc module 2007)

employed persons with one or more work-related health problems in the past 12 months in different sectors* in the EU 27(%)
For each of the following issues, please tell me whether it is of major concern, some concern or no concern at all in your establishment

% establishments, EU27

Source: 2008 European Survey of New and Emerging Risks
European Agency for Safety and Health at Work
http://osha.europa.eu
# Costs of accidents and work-related diseases

<table>
<thead>
<tr>
<th>Cost type</th>
<th>Stakeholder</th>
<th>Productivity costs</th>
<th>Healthcare costs</th>
<th>Quality of life losses</th>
<th>Administration costs</th>
<th>Insurance costs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Workers and families</strong></td>
<td></td>
<td>Loss of present and future income (net of taxes)</td>
<td>Direct and indirect medical costs</td>
<td>Physical pain and suffering</td>
<td>Cost of time claiming benefits, waiting for treatment, etc.</td>
<td>Compensation payments</td>
</tr>
<tr>
<td><strong>Employers</strong></td>
<td></td>
<td>Sick payments</td>
<td>Production losses</td>
<td></td>
<td>Administrative and legal costs</td>
<td>Impact on insurance premiums</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Production disturbances</td>
<td>Production disturbances</td>
<td></td>
<td>Cost for reintegration and re-schooling of (disabled) workers</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Damaged equipment</td>
<td>Damaged company image</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Government</strong></td>
<td></td>
<td>Sick payments</td>
<td>State benefits (disability, early retirement)</td>
<td></td>
<td>Administrative and legal costs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tax revenue losses</td>
<td>Tax revenue losses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Society (over and above all the previous)</strong></td>
<td></td>
<td>Loss of output (due to fatality or disability/early retirement)</td>
<td>Loss of output (due to fatality or disability/early retirement)</td>
<td>Loss of output (due to fatality or disability/early retirement)</td>
<td>Loss of output (due to fatality or disability/early retirement)</td>
<td>Loss of output (due to fatality or disability/early retirement)</td>
</tr>
</tbody>
</table>
Costs - diversity of estimates

- ILO: 4% of the world’s annual GDP is lost as a consequence of occupational diseases and accidents = € 490 billion for EU27
- EU-OSHA (1997): range from 2.6% to 3.8% of GDP – variety of cost factors included.

<table>
<thead>
<tr>
<th>Country</th>
<th>Estimate % share GDP</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>3.0</td>
<td>2004</td>
</tr>
<tr>
<td>Finland</td>
<td>2.0</td>
<td>2000</td>
</tr>
<tr>
<td>Spain</td>
<td>1.7</td>
<td>2004</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1.0</td>
<td>2010</td>
</tr>
<tr>
<td>Slovenia</td>
<td>3.5</td>
<td>2000</td>
</tr>
<tr>
<td>Australia</td>
<td>4.8</td>
<td>2009</td>
</tr>
<tr>
<td>New Zealand</td>
<td>3.4</td>
<td>2006</td>
</tr>
<tr>
<td>Germany</td>
<td>3.1</td>
<td>2011</td>
</tr>
<tr>
<td>Austria</td>
<td>2.7</td>
<td>2008</td>
</tr>
</tbody>
</table>

Source: Takala et al, at EU-OSHA WS on costs
The major part of the cost is borne by the workers

Australia, Estimating the cost of work-related injury and illness to the Australian economy
Distribution of total costs ($b)

Source: Presentation at EU-OSHA WS on costs
Facts and figures – EU-OSHA risk observatory studies addressing the main diseases and health problems

- Skin diseases
- Stress
- MSDs
- Hearing loss and other noise related health effects
EU-OSHA approach: A new look at old diseases
EXAMPLE: work-related cancer

- **Member States survey and report on OELs for CMRs (published 2009)**
- **Seminar (Summary published in 2012)**

**Gaps:**
- **Research:** Cover more groups, long-term population studies
  - Current data/recognised diseases only cover industry but not services
  - Vulnerable workers (e.g. young, migrant female, in maintenance)
  - Work organisational factors (e.g. shift work and breast cancer)
  - Lifestyle factors often influenced by the way work is organised (e.g. static work, access to healthy food, culture/norms of the sector)
- **Monitoring:** approach occupation → health effect, use multiple data sources, e.g. job/exposure matrices, link to employment trends
- **Workplace solutions:** collect case studies of successful prevention, examples of company policies, successful interventions by preventive services and labour inspections
- **Policy level:** need for back-to-work strategies for workers affected by cancers (currently hardly any in place)

- **2013-2014:** State-of-the report on exposure assessment methodologies, focusing on existing exposure and disease assessment & examples of national policies

A printing company, > 225 workers,  
2 main workshops: Printing & Finishing  

**The Problem:**  
• Women’s absenteeism high, MSDs  

**The process: gender-sensitive assessment**  
• Women got stuck in one occupation – finishing assistant, also the one by far most affected  
• Thereby they had longer exposure to repetitive tasks and bad ergonomic conditions  

**Solutions, targeted measures:**  
⇒ **Workplace and work organisation:**  
- Upstream with the suppliers (internal & external) to limit upper limbs stress et heavy lifting  
- Rethinking the design of workstations  

⇒ Building on **recognition and career paths:**  
- Recognize the skills held by finishing assistants
OSH in figures – Musculoskeletal disorders

- Highlights issues for women, migrant and young workers
- Lower limb disorders
- Combined and multiple exposures, incl. in service professions
- Diverse recognition practices make it impossible to identify trends
- High impact on costs
- Difficulties in assessing at mobile workplaces
- Increase in static postures
- Prolonged standing and sitting, especially in service professions
- Address organisational as well as physical conditions – French concept of „pénibilité au travail“

A new look at old diseases

- **Building on Agency’s work**
  - MSDs, skin diseases, stress-related disorders

- **Risks to reproductive health**
  - Workshop and publication of a report
  - Lack of testing routines, monitoring and epidemiologic studies on some reprotoxic effects (male reprotoxicity; on the offspring e.g. propensity to allergies, hormonal and developmental changes), caused by chemicals, physical and organisational factors
    - prolonged sitting, lack of access to rest and toilet facilities
    - Only few countries have strategies beyond the protection of pregnant workers
    - Support workplace management and awareness-raising
  - Publication of workshop summary

- **Workshop to scope future work on burden of WRD**

- **Carcinogens and work-related cancer**
  - Report + summary to follow-up on 2012 seminar—monitoring methods,
EU-OSHA advice on how to address diversity at work

Workforce diversity and risk assessment: ensuring everyone is covered
Summary of an Agency report

Introduction
Workers are not all exposed to the same risks and some specific groups of workers are exposed to increased risks (or are subject to particular requirements). When we speak about workers exposed to particular or increased risks, we refer to workers subject to specific risks due to age, gender, physical condition or status in the enterprise. Such people may be more vulnerable to certain risks and have specific requirements at work.

Health and safety legislation requires employers to carry out risk assessments and emphasizes the need to adapt the work to the individual, in the obligation to the employer to be in possession of a record of assessment of the risks to safety and health at work, including those facing groups of workers exposed to particular risks and that sensitive groups must be protected against the dangers which specifically affect them.

Diversity and diversity management in the workplace are important issues in occupational safety and health. Indeed, however, diversity has seldom been studied from the perspective of risk assessment. Practical risk assessment tools that take into account the specific risks faced by individuals or people with disabilities, migrant workers, older workers, women, and temporary workers are still rare. It is hoped that further research and development will lead to additional guidance materials in the future.

Aim of the report
The report produced by the Agency highlights the need to carry out diversity risk assessment, to take into account the diversity of the workforce when assessing and managing risks. The main aim of this report is to describe how diversity risk assessment can and should cover the whole workforce and to increase awareness among those responsible for and affected by health and safety at work – employers, employees, safety representatives and occupational safety and health practitioners – about the importance of assessing the risks for all workers.

The first part of the report presents the main issues regarding the occupational safety and health of six categories of workers considered at increased risk: migrant workers, disabled workers, young and older workers, women (gender issues) and temporary workers. At the end of each subsection, links are provided to further information and practical guidance on risk assessment tools.
Work-related cancer – Seminar September 2012

**Monitoring:**
- Take different approach (occupation → disease rather than agent → disease)
- Use job-exposure matrices
- Use cancer registers and other sources of data

**Rethink concept of vulnerable workers:**
- Young workers (e.g. in maintenance)
- Migrant workers in low-skilled manual jobs – lack of training and access to preventive services
- Women in service professions
- Older workers

**Rethink major causes and how to assess the burden of disease:**
- NOCCA study looked at socio-economic determinants and occupations via cancer incidence
- Examples: cancer of the digestive system linked to static work, “cultural norms of the occupation” and access to healthy food
- Combined exposures to several factors
- Shift work and cancer

2015 outlook on EU-OSHA work - Current discussion

- **Awareness-raising reproductive risks**
  in the Member states

- **Dissemination of carcinogens and cancer report**

- **Methodologies**
  - burden of disease assessment - estimates
  - review on alert and sentinel systems to identify emerging work-related diseases
  - exposure assessment - carcinogens

- **Overview reports - facts and figures**
  Review on certain work-related diseases

- **Good practice & guidance**

- **Back to work**
  Review on rehabilitation and back-to-work measures for workers affected by cancer
A new look at old diseases
Evidence base for action

- Cover vulnerable workers, groups/occupations particularly at risk, and/or with little support/protection/awareness
- Cover service sectors
- Raise awareness of emerging issues, e.g. increasingly static work may lead to digestive cancers, MSDs, reproductive disorders, etc…
- Cover diseases/health problems that are not so well covered

- Consider combined exposures/wider context of work
  - Work organisational factors (e.g. static work and cancer or CVD, cancer and shift work)
  - Life-style factors linked to how work is organised (non-standard working times, static work, lack of access to healthy food, norms/culture of the sector, etc. ) – link to health promotion

- Areas where back to work strategies are needed (e.g. cancer, lower-limb disorders)

- Input into
  - work on instruments and tools
  - discussions on monitoring
  - link to health promotion
  - work on sectors, groups, research priorities, foresight
  - our campaigns

- Refocusing perspective to cover service sectors, women, young people, different age groups, diversity issues, workers on temporary jobs, outsourced work, multiple jobs/workplaces, working at clients premises and at mobile sites
Evidence-based prevention is doable – an example

Germany – BG for hairdressers and other services

- Almost 90% reduction in rehabilitation cost through prevention programme combining training, awareness-raising, technical and organisational measures and skin protection programmes

Source: Brandenburg and Schröder, presentation at the XX World Congress on OSH, Frankfurt

Source: Brandenburg and Schröder, presentation at the XX World Congress on OSH, Frankfurt
What is needed

- Better awareness
- Empowerment of workers
- Improving statistical data collection to have better evidence and developing monitoring tools – data on recognised diseases also needed
- Information on the benefits of OSH action – long-term evaluation of actions
- Targeted prevention supported by:
  - Systems to identify case studies of health problems and target prevention
  - Evaluation of prevention schemes and campaigns
  - Long-term evaluation of policies, e.g. noise reduction
  - Specific actions for the reduction of health problems, e.g. voice disorders
  - Early assessment of health problems linked to new types of jobs (e.g. green jobs, call centres, home care, etc.)
  - Better use of existing tools: Job-exposure matrices and analysis of disease /death registers
  - Linking occupations to specific health problems and identify causes
Thank you for your attention

schneider@osha.europa.eu
http://osha.europa.eu/
What would be your priorities, based on national activities, policy actions, or other activities? Please explain the reasons.

- Work-related cancers, reproductive disorders
- Cardiovascular diseases (incl. static work, noise, incl. low-level, stress, etc.)
- Neurological diseases, incl. chemicals-related (memory loss, depression, neuropathies, cognitive loss, affectation of the balance, etc...), Parkinson (link to pesticides and other) and other (physical risks such as vibration)
- Immunological diseases
- Diseases caused by biological agents, incl. allergic reactions and infectious diseases
- Sensory disorders, such as sight problems, tinnitus, etc.
- Voice disorders, as identified in the “Noise in figures” report.
- Lower limb disorders
- Mental health disorders (currently in focus of DG EMPL)
- Respiratory diseases

Which actions/areas would you find particularly important regarding each of these priority topics? (e.g. good practice, awareness raising, back-to-work, statistics, health promotion, sectors, groups)