The value of OSH — estimating the costs of occupational injuries and diseases

EU-OSHA expert meeting, 10-11 October 2019
Dietmar Elsler, Prevention and Research Unit, EU-OSHA
Background of EU-OSHA activity on costs and benefits of OSH

- **Strategic background**
  - Europe 2020 Strategy: More and better jobs
  - European Commission Strategic Framework on Health and Safety at Work 2014-2020
  - EU-OSHA Multi Annual Strategic Programme 2014-2020

- **Objectives**
  - Provide policy makers with relevant information on the economic impact of poor or non-OSH at macro level.
  - Highlight contribution of OSH to improving productivity and competitiveness and thus increase the OSH motivation of enterprises
  - Raise awareness about the costs of non-OSH among policy makers outside the field of OSH.

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Specific objectives of the meeting

Day 1
- Presentation and discussion of new study „The value of occupational safety and health and the societal costs of work-related injuries and diseases”
- Presentation of national estimates of Austria and Finland
- Success factors and challenges of national estimates

Day 2
- WHO/ILO Joint Methodology for Estimating the Work-Related Burden of Disease and Injury
- Continuous improvement of work-related burden estimations
- Final discussions and conclusions
  - Added value of cost research
  - Future research needs
EU-OHSA projects on economic aspects of OSH

- **Business case on society level**
  - Overview of the availability and quality of national and international data sources that could be used to develop a European level cost calculation (2017)
  - Estimate of global and EU costs for Singapore World Congress (2017), Data-Visualisation
  - The value of occupational safety and health and the societal costs of work-related injuries and diseases (2019), estimate of costs of five countries based on national data sources

- **Business case on enterprise level**

- **Combining society and enterprises level through economic incentives**
  - How to create economic incentives in occupational safety and health: A practical guide (2011)
Global estimate 2017: global 3.9 % and EU28 3.3% of GDP

Global estimate

<table>
<thead>
<tr>
<th>Cost non-fatal cases</th>
<th>Cost fatal cases</th>
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<tbody>
<tr>
<td>1,207 Billion €</td>
<td>1,473 Billion €</td>
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EU28 estimate

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<tr>
<th>Cost non-fatal cases</th>
<th>Cost fatal cases</th>
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<tr>
<td>260 Billion €</td>
<td>216 Billion €</td>
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https://osha.europa.eu
Mortality: deaths resulting from work-related injury and illness (number of fatalities)

https://visualisation.osha.europa.eu/osh-costs#/

https://osha.europa.eu
EU estimates – Analysis by illnesses

Main work-related illnesses and DALY (Years of life lost and lived with disability) per 100,000 workers (EU28 + Iceland and Norway)
Business case at enterprise level

- **Return on prevention (ISSA, 2011)**
  - 2.2 EUR return for every Euro invested in OSH
- **BenOSH (2011):** cost-benefit ratio 1.36 – 2.70
Case studies in SMEs (EU-OSHA 2014)
Example: Backing healthy backs

Issue
- Fußboden Brandenburg is a parquet reclining company with six employees
- Laying carpet, laminate or flooring is heavy work
- Long sick leaves can threaten the existence of the business

Action
- Specialists of IKK Nordrhein developed a back pain prevention programme
- workers were trained in better manual handling of loads and in respecting their individual limits to avoid overstrain
- In addition, various lifting aids were purchased

Results
- Doing back exercises has become routine in the company.
- A before / after comparison in the guided intervention showed positive training results of all workers.
- Since five years, the workers have not missed a single day because of back ache or muscular complaints.
A cost-benefit analysis, calculated for four years at a discount rate of 4% gave the following results:

- Pay-back period (years) 2.16
- Return on investment 31%
- Net present value 6,864.50 EUR
- Benefit-cost ratio 1.80

- Pure consideration of health costs makes intervention already profitable
- Non-tangible costs, such as improved motivation and increased productivity have not been considered
Policy impact can already be seen at EU-level


European Economic and Social Committee

SOC/623
Investments in OSH: costs and benefits

OPINION

Section for Employment, Social Affairs and Citizenship

Summary of the costs and benefits of investments in occupational safety and health (OSH)
(Exploratory opinion requested by the Finnish Presidency)

Rapporteur: Adam ROGALEWSKI
Co-rapporteur: Ana BONTEA

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# Agenda of the meeting, Thursday 10 October

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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| 14.00-14.30 | Welcome and introduction  
William Cockburn, Head of the Prevention and Research Unit, EU-OSHA  
Dietmar Elsler, Prevention and Research Unit, EU-OSHA |
| 14.30-15.45 | The value of OSH: Estimating the societal costs of work-related injuries and diseases  
Martijn van Emmerik, Thijmen van Bree, TNO, The Netherlands |
| 15.45-16.00 | Coffee break |
| 16.00-16.45 | Austrian cost estimation project  
Thomas Leoni, Austrian Institute of Economic Research (WIFO), Austria |
| 16.45-17:30 | Finnish cost estimation approach - methodology and impact  
Päivi Hämäläinen, Wiking Husberg, Ministry of Social Affairs and Health, Finland |
| 17.30-18.00 | Discussions and conclusions |
| 20:30-22.30 | Dinner at Yandiola Restaurant at Azkuna Zentroa  
Plaza Arrikibar, 4, 48010 Bilbao  
Meeting point: Hotel Carlton reception at 20.00h |
Agenda of the meeting, Friday 11 October

09.30-10.15 WHO/ILO Joint Methodology for Estimating the Work-Related Burden of Disease and Injury
Frank Pega, WHO, Yuka Ujita, ILO

10.15-11.00 Continuous improvement of work-related burden estimations
Jukka Takala, ICOH President

11.00-11.15 Coffee break

11.15-13.00 Final discussions and conclusions
Promotion of the report
Future research needs

https://osha.europa.eu
Thank you

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