

EU-OSHA activities on work-related diseases and their link to emerging risks at work



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Prevention and Research Unit
European Agency for Safety and Health at Work

- A body of the EU
- Established in 1996 in Bilbao, Spain
- To promote a culture of risk prevention to improve working conditions in Europe, by providing technical, scientific and economic information to serve the needs of those involved in safety and health at work.
- Tripartite Board bringing together:
 - governments, employers' and workers' organisations
 - the European Commission



What we do

■ Research

- We identify and assess new and emerging risks at work
 - e.g. foresight, ESENER (EU survey of enterprises on new and emerging risks)
- We mainstream OSH into other policy areas: public health, research, environmental protection, transport, education, ...

■ Prevention

- We collect good practice examples
- We develop hands-on instruments for micro, small and medium-sized enterprises to help them assess their workplace risks, share knowledge and good practices on OSH
 - OiRA (Online interactive risk assessment)

■ Partnership

- We work and network with governments, employers' and workers' organisations, EU bodies and private companies
 - e.g. our EU network of national Focal Points

■ Campaigning

- We organise major bi-annual EU “Healthy Workplace Campaigns”:
 - 2012-2013: Working together for risk prevention
 - 2014-2015: Healthy workplaces manage stress

- **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.
- **One of the major challenges: to improve the prevention of work-related diseases.**

EU-OSHA strategic approach

EU-Strategy

Multi-annual strategic programme

- Identified priorities

Annual Management Plan

- Specific projects

EU-OSHA Strategic objectives 2014-2020

- **Providing credible, good quality data on new and emerging risks**
- **Providing an accurate and comprehensive current picture of the “state of OSH”**
- **Making accessible tools for micro and small enterprises**
- **Raising awareness about hazards, risks, and solutions**
- **Mobilising the OSH community to develop and disseminate knowledge**
- **Networking to engage with partners and support information dissemination**

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;
- 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.

- **As early as 2002 (OSH monitoring Workshop 2002 – Forum 11), EU-OSHA was asked to contribute to the policy discussion on work-related diseases**
- **EU-OSHA set up a web feature on monitoring systems in the Member states**
- **Published reports:**
 - Policy and practice - skin diseases
 - Chapters in “emerging chemical risk” and “emerging biological risks” reports
 - OSH in figures MSDs
 - OSH in figures Noise and hearing loss
- **Integration into work on groups, sectors, risk factors**
- **2002-2014 Participation in Eurostat working groups**
- **2011 Participation in workshop on occupational diseases (EC report) and 2013 conference on occupational diseases**

A new look at old diseases
Contributing to evidence base for action

- **Cover diseases/health problems that are not so well covered**
 - 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**

An "**emerging OSH risk**" is understood to be any risk that is both

- 1) **new** - the risk was previously non-existent and is caused by new processes, new technologies, new types of workplace, or social or organisational change; or a long-standing issue is now considered to be a risk due to new scientific knowledge or a change in public perception, and
- 2) **increasing** - the number of hazards contributing to the risk and the likelihood of exposure to the hazards are rising, and the effects of the hazards on workers' health are getting worse.

Facts and figures – EU-OSHA risk observatory studies addressing the main diseases and health problems



Globally, 2.3 Million Deaths caused by Work

192,200 Work-related Deaths

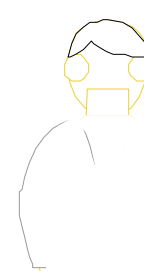


EU28

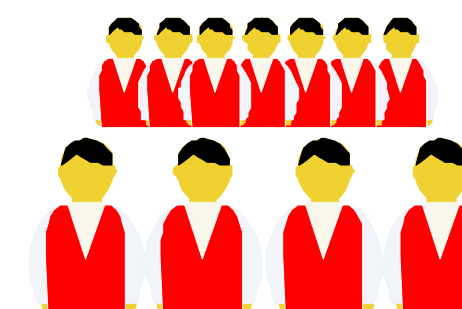
There were 192,200 work-related deaths in the EU28, from years 2010 and 2011.

 = 100 workers

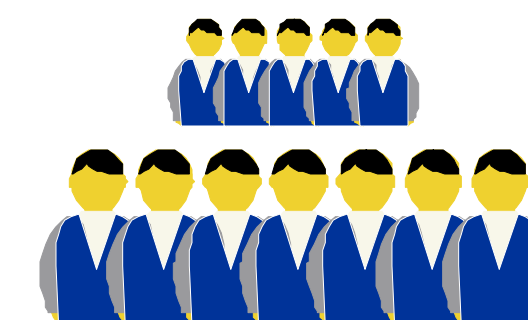
 = 1,000 workers

 = 10,000 workers

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



4,700 Fatal Accidents



187,500 Fatal Work-related Illnesses

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

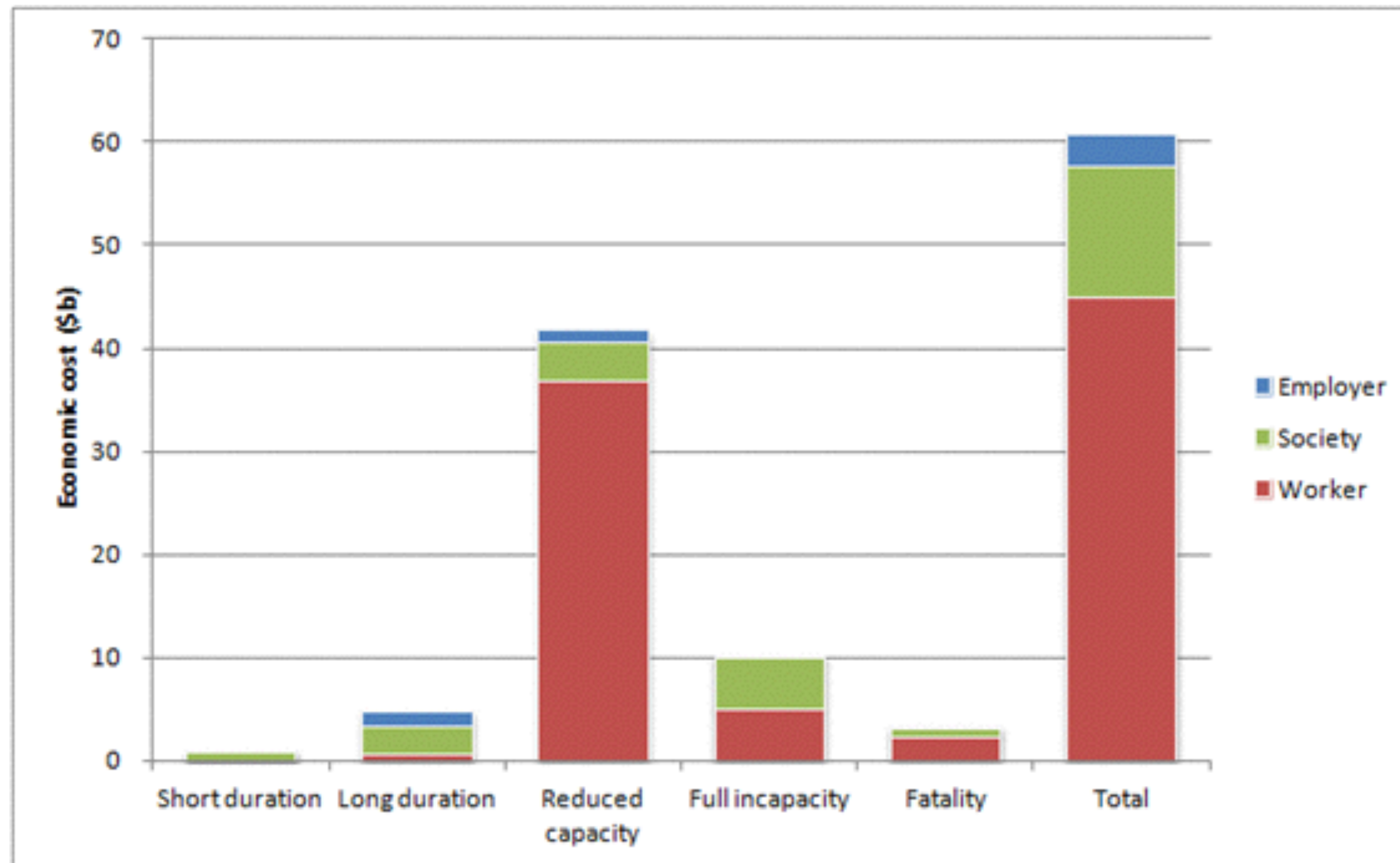
Costs - diversity of estimates

- **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.**

Country	Estimate % share GDP	Year
Netherlands	3.0	2004
Finland	2.0	2000
Spain	1.7	2004
United Kingdom	1.0	2010
Slovenia	3.5	2000
Australia	4.8	2009
New Zealand	3.4	2006
Germany	3.1	2011
Austria	2.7	2008

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)



The aim is to:

- **continue activities on work-related diseases** and address those currently not or insufficiently covered by the recognition / compensation / prevention systems
- provide policy makers, actors in work-related diseases recognition / compensation / prevention and the workplace level with **a better picture of work-related ill-health and the burden of work-related diseases**
- support better tailoring of prevention, setting of research priorities, development of monitoring methods and awareness-raising

Expert forecast

Main emerging chemical risks

- **Nanomaterials & ultrafine particles**
- **Man-made Mineral Fibres**
- **Carcinogens, mutagens and reprotoxic substances**
- **Dermal exposures**
- **Exposures in waste management**
- **Combined exposures**
- **Poor risk management in micro- & SMEs, and sub-contracted work** (maintenance, cleaning, etc.)



Expert forecast

Main emerging biological risks

- **Global epidemics** (avian flu, HIV, etc.)
- **Drug-resistant microorganisms** (MRSA, tuberculosis, etc.)
- **Indoor moulds**
- **Poor maintenance of HVAC systems** (Legionella, Aspergillosis, etc.)
- **Waste management**
- **Endotoxins**
- **Poor risk assessment**
- **Combined exposure to biological and chemicals agents**



Coverage of work-related diseases in burden of disease studies

- Mostly **dealing with high prevalence diseases**, such as cancers and pulmonary diseases (asthma and COPD).
- Other diseases like **cardiovascular diseases and MSDs not adequately estimated**.
- **Noise-induced hearing loss**, although the fourth most common occupational disease (Eurostat, 2004) **and skin diseases** only estimated in a small number of studies.
- **Disorders involving the immune mechanism**, attributable to occupation should be seen as challenges for future research (Tuchsen et al., 2004).
- Concern should be given to the burden of **reproductive disorders**
- **Mental health** an issue: suicide and stroke recognised as occ. accidents in some MS
- **Hardly any data by gender and age**

Burden of selected mental and neurological diseases

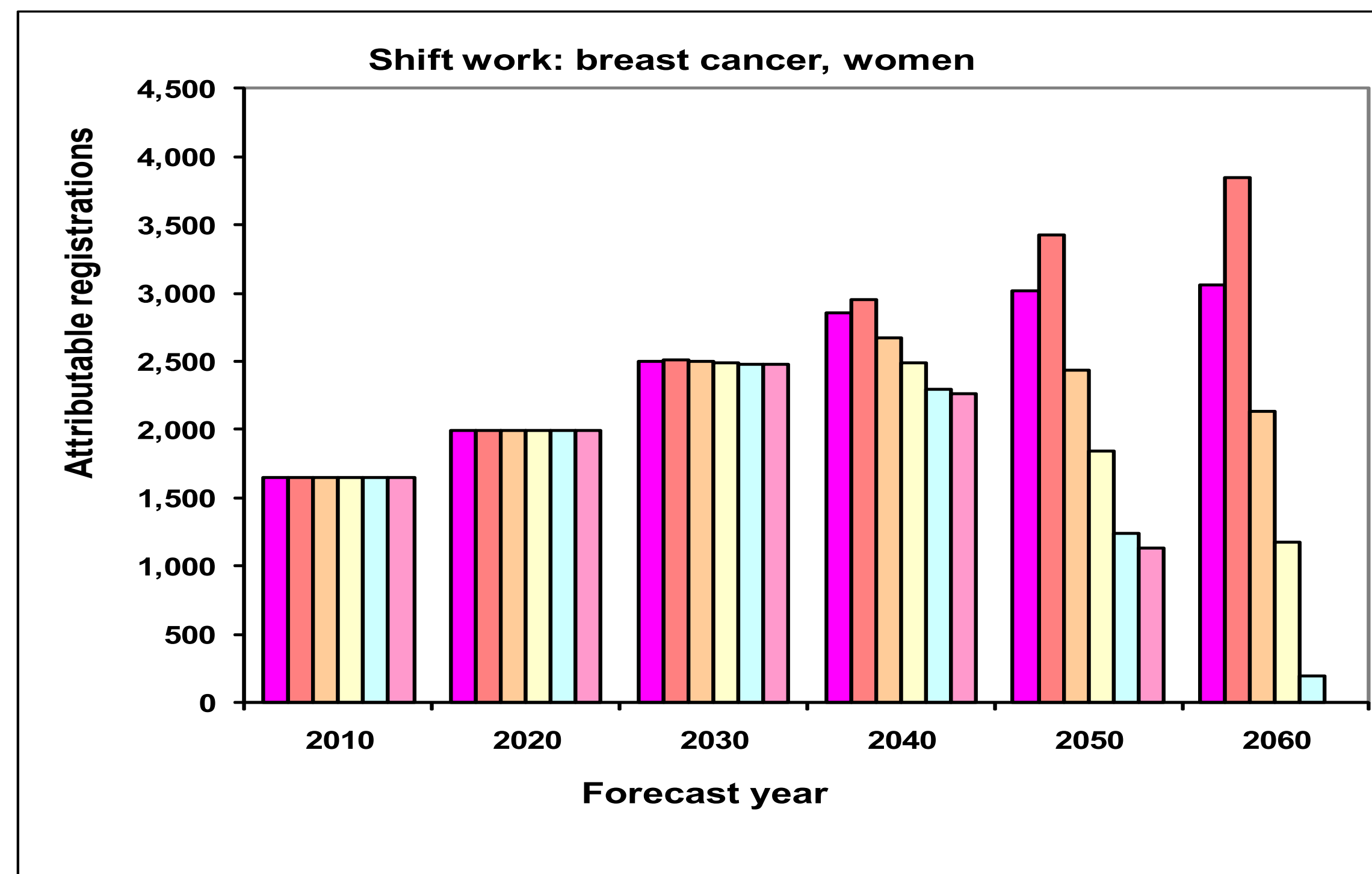
<i>Disease</i>	<i>Burden</i>	<i>Reference</i>
Mental disorders	Represent 4% of occupational mortality (Finland).	Nurminen & Karjalainen, 2001
	11.3% of depressive episodes are related to job strain (Finland).	Nurminen & Karjalainen, 2001
Neurological diseases	9.2 % of Parkinson's disease are attributed to occupation and in particular exposure to pesticides.	Nurminen & Karjalainen, 2001

- **Mostly studied: cancer and accidental injuries, caused mainly by mechanical factors and chemical exposures**
- **Factors under assessed:**
 - Work organisation: Repetitive work, lack of control, disruption, shift work, night work
 - Emerging ergonomic risk factors: Prolonged sitting and standing, static postures
 - Multiple exposures
- **Health problems:**
 - Lower-limb disorders
 - Neurologic disorders linked to chemicals exposure
 - Tinnitus, voice disorders
 - Reproductive disorders linked to work organisation or chemical exposures
 - Cardiotoxicity
 - Health problems linked to combined exposure

**Newer approaches:
estimation of future burden and forecasting scenarios linked to preventive action**

Shift (Night) Work: Forecasted Attributable Cancers

Source: EU-OSHA Cancer seminar Sep. 2012, UK burden of disease data (Rushton, L.)



- (1) Current employment levels maintained, 30% <5, 40% 5-14, 30% 15+ years night shift work
- (2) Linear employment trends to 2021-30
- (3) 50% <5, 30% 5-14, 20% 15+ years night shift work
- (4) 70% <5, 20% 5-14, 10% 15+
- (5) 90% <5, 10% 5-14, 0% 15+
- (6) 100% <5 years

Work-related diseases

A multi-annual global approach

For researchers, policy makers and workplace intermediaries:

- state of the art reviews to share/advance research/knowledge
- review strategies, policies and programmes, including campaigns
- support discussions on monitoring, recognition, methodologies to better assess the burden of work-related diseases, and rehabilitation strategies
- link with other policy areas, e.g. chemicals policy, public health
- work on instruments and tools for workplace management

Outputs

- **Reports**
- **Short summaries**
- **Articles on specific issues – OSH wiki?**
- **National workshops through portfolio approach**
- **EU seminars**
- **Good practice articles - efacts**

■ **Building on Agency's work**

- MSDs, skin diseases, stress-related disorders

■ **Risks to reproductive health**

- workshop and publication of a report
- publication of workshop summary <https://osha.europa.eu/en/seminars/workplace-risks-affecting-reproduction-from-knowledge-to-action>
- Workshop to scope future work on burden of work-related diseases: October 10th, 2014
- with experts, European Commission, WHO, ILO, SCOEL, employers' and workers' representatives

■ **Carcinogens and work-related cancer**

- report + summary to follow-up on 2012 seminar and address gaps identified
- <https://osha.europa.eu/en/seminars/workshop-on-carcinogens-and-work-related-cancer>

- **Member States survey and report on occupational exposure limits for CMRs** (published in 2009)
- **Seminar with European Commission, ECHA, Member State reps, advisory committee working party “Chemicals”, SLIC Chemex, SCOEL** (summary published in 2012)
- **Gaps identified in:**
 - research
 - monitoring
 - workplace solutions
 - policy level
- **2013-2014: report on exposures assessment methods**
- **2015: report on rehabilitation related to cancer**

■ **Methodologies:**

- Burden of disease assessment - estimates
- Work-related cancer and carcinogens - exposure assessment and identification of groups at risk
- Review on alert and sentinel systems to identify emerging work-related diseases

■ **Overview reports - facts and figures**

Review on group of work-related diseases

■ **Good practice & guidance**

- Back to work: Review on rehabilitation and back-to-work measures for workers affected by cancer

■ **Awareness-raising & dissemination**

- Reports on reproductive risks & cancer

Short translated summaries of the reports – portfolio approach

Focus groups, workshops, seminars in the Member states

The following disease groups could be targeted for the multi-annual project (over 3-4 years).

- Work-related cancers, reproductive disorders (covered 2012-14)
- 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)
- Diseases caused by biological agents, incl. allergic reactions and infectious diseases
- Lower limb disorders
- Cardiovascular diseases (incl. static work, noise, incl. low-level, stress, etc.)
- Immunological diseases
- Sensory disorders, such as sight problems, tinnitus, etc.
- Voice disorders, as identified in the “Noise in figures” report.
- Mental health disorders
- Respiratory diseases

What is needed

- **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
- **Better awareness**
- **Empowerment of workers**
- **Coverage by preventive services**

Changes in the world of work

Issues to be addressed

- **Part-time work and temporary work**
- **Trend to multiple jobs, how to assess exposures and protect workers**
- **Move from industry to services**
 - Statistics insufficient (e.g. restricted coverage of sectors and diseases)
- **Increasing number of female workers & insufficient knowledge**
- **Increasing number of migrant workers & insufficient knowledge**
- **Subcontracting**
- **Informal work. e.g. in home care, cleaning, agriculture**
- **Move away from the one worker/one workplace concept, how to work at client's premises**
- **Unsolved problems regarding combined exposures, including with physical risks, and dermal exposure**
- **Impact of new technologies – nano, green jobs, etc...**

Thank you for your attention

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