

Osh research needs

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working environment challenges for
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1. A changing context
 1. Some figures
 2. Social and technological changes
2. Five research priorities
 1. Psycho-social Risks (PSRs)
 2. Musculoskeletal disorders (MSDs)
 3. Chemical risks (CMR)
 4. Biological risks
 5. Methodological issues

1.1 Occupational accidents and diseases

- Frequency of occurrence of occupational accidents : 45 ‰ to 38 ‰ from 1998 to 2008
 - Falls from heights, slips and trips, still the main causes of accidents
- Occupational diseases are constantly increasing
 - MSDs represent 70% of occupational diseases
 - Cancer : Fraction attributable to professional exposure 4% to 8% ;
 - Development of Psycho-social risks (PSRs), with high social cost ;
- A situation very heterogeneous amongst sectors, category of employees

1.2 Technological and Societal Changes

1. Demographic changes: more elderly workers, migrants;
2. Shift in the productive system
 1. Organisational change, outsourcing, service economy;
 2. Quest for productivity (intensification);
 3. Shift towards a service economy;
 4. New form of contracts, etc.
3. Climate change and environmental issues
4. A more demanding society;
5. The aftermath of the economic and financial crisis;

2. Five research priorities

1. PSRs
2. MSDs
3. Chemical risks (Notably CMR)
4. Biological risks
5. Methodological issues

2.1 Priority 1 : PSRs

- There is a growing demand on this issue in France
- Some studies show that some work organisation can generate harmful effects on mental health
- The research should focus on 3 issues :
 1. Relation between work condition (and shift in work condition) and emerging PSRs
 2. Understanding the phenomena relative to well-being or to degradation health
 3. The effect on physical and mental health

2.2 Priority 2 : MSDs and low back pain

- One of the most important and increasing category of occupational diseases numerically speaking
- The main improvements in knowledge are needed in
 1. Understanding the mechanisms of MSDs (inflammation, biomechanics, etc.);
 2. Interactions between the emergence of MSDs and PSRs. The respective role of Biomechanical issues and PSRs ones;
 3. Estimation of the consequences of MSDs on life and career path (in liaison with ageing);

2.3 Priority 3 : Chemical Risks (excluding nano-technology)

We still need to develop:

1. Knowledge on CMR effects;
2. Alternative method for testing toxicology;
3. Biometrology for occupational exposure;
4. Collecting field data on exposure;
5. Techniques to take risks into account at the design stage of equipment;
6. Knowledge of the effects of co-exposure; (including chemical and physical interactions).

2.4 Priority 4 : Biological risks

- The study of biological risks is insufficiently developed.
- There is a lack of knowledge, in particular on immuno-allergic and toxin risks at work.
- There is also a need for metrology, epidemiology, and assessment and prevention of biological risks.
- Some sectors as the waste sector require particular monitoring.
- The biotechnology sector is also an emerging sector that has not yet received much attention.

2.5 Priority 5 : Methodological issues

- Reinforcing simulation and modelling
 - To predict accidents (Usual accidents are still a matter of concerns)
 - To avoid human experiments;
 - Develop (and assess) virtual reality to help the design of equipment, enrich risk prevention.
- Developing assessment of effects of risk prevention action
 - General statistics and surveys;
 - Culture of assessment of action.

1. Priorities: any French specificities?
2. The French administration is now preparing a occupational health road map for 2010-2015
 - The priorities will be discussed this autumn;
 - 3 working groups with the following objective
 - To improve knowledge in osh domain
 - To Pursue a policy of active prevention of occupational hazards
 - To encourage prevention measures in enterprises (notably in SMEs)
3. A role for Perosh to follow up the discussion on emerging topics in osh
 1. To feed into the various national strategies
 2. As well as into a European strategy?

To know more

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