
Semi-Plenary Session 25

Abstract citation ID: kqae023.0036

SPL25

RESEARCH AND OCCUPATIONAL HEALTH ACTIVITIES WITHIN THE PEROSH NETWORK

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Most European countries carry out significant occupational health and safety research. Much of this is being conducted within the PEROSH network comprising 14 institutes. The 2023 PEROSH research conference, with its 80 presentations, together with an analysis of a number of other ongoing projects in Europe, provides a good overview of current issues.

“Traditional” risks are still relevant.

- Some have long been known, such as those linked to asbestos, crystalline silica, carcinogenic substances or biological agents. The main aim of research is to gain a better understanding of workers' exposure to these hazards sometimes taking into account multiple factors. Some research on protective equipment, sometimes using innovative methods is also ongoing.
- In the field of chemical risk, a key development is the development of new approaches to analyze the hazards associated with chemical substances such as new *in vitro* tests metabolomics, or QSAR models, heralding a radical change in the way we work.
- Other topics are more novel, from emerging pollutants, such as nanoplastics, to the impact of new technologies such as connected glasses, exoskeletons, cobotics and 3D printers. The evolution of these risks associated to green transition and climate change is still not widely covered, but it is likely that this subject will become increasingly important in the future.

A significant amount of work focuses on the impact of the upheavals that the world of work has undergone in recent years, in particular with the rise of information technologies, the profound changes in work organizations, one of which is the widespread use of teleworking since the pandemic, changes in demography and in the aspirations of society.

- As far as organizations are concerned, mainly psychosocial risks are addressed from the point of view of analyzing their effect, means of prevention and health effects. Musculoskeletal disorders are also covered. Among the topics investigated is the effects of telework, which is still a live issue, whether we are talking about the pandemic period or the current situation.

A related topic is workplace organization, particularly the type of office. Another subject is the impact of algorithmic management, both in the case of working via a digital platform or of internal organization within the company. In addition, there is a wide diversity of more or less emerging organizations that can have an impact on employee health, and also modify the way in which preventive measures are implemented.

- Information technology also featured prominently, with presentations on artificial intelligence, a potential source of risk posing specific problems, but also a tool for research and prevention. Another phenomenon is the emergence of numerous miniature, low-cost sensors. Several presentations were devoted to the use of sensor networks designed to provide a better view of the risks to which workers are exposed, whether through multiple individual sensors or by mapping a hazard in the workplace.

Finally, it's worth mentioning one last research topic of interest. A reflection on how to deploy prevention actions and on their impact.
