

Every workplace deserves a good indoor environment

Problems with the quality of the indoor environment have become a new and demanding challenge to occupational health and safety. Modern workplaces resembling office environments that do not have any hazardous exposures originating from work processes can face other problems related to the indoor environment, for example, problems related to substances that are a part of building materials and occur in ventilation.

People in Western societies spend more than 90% of their time indoors. Therefore, the quality of indoor environments plays a significant role in their life. Bad indoor air and environments are able to cause work-related symptoms and diseases, while high quality supports well-being and productivity.

A good indoor environment not only consists of clean air (including proper humidity, air velocity, and temperature), but also of good acoustics, good lighting, and a good psychosocial environment in the workplace.

In Finland, with over 5.5 million inhabitants and 2.5 million employees, the cost of poor indoor environments to society is nearly EUR 1.5 billion a year, mainly as a result of the cost of medical examinations and care, sickness absences, lower efficiency at work, allergies, hospital infections, and cancer. Good indoor environments also seem to affect our creativity, memory, and mood.

According to a recent survey of office environments, one out of every three workers complains about constant indoor-air problems, and one out of every five complains about weekly occurring symptoms caused by poor indoor air. The top 10 indoor-air problems are related to heating, ventilation, and air-conditioning (HVAC) systems, such as dry and stuffy air or draft, unpleasant odors, moisture and molds, dust and dirt, tobacco smoke, ozone, radon, asbestos, and mineral fibers.

WorkAir2007

In order to promote the issues concerned with the quality of indoor environments, the Finnish Institute of Occupational Health and the Ministry of Social Affairs and Health, in collaboration with the Finnish Society of Indoor Air Quality and Climate, organized the International Conference on Healthy Air—Better Work 2007 (WorkAir 2007). The conference was arranged on 29–31 May 2007 in Helsinki, Finland, and it gathered 136 participants, mostly professionals experienced with problems related to indoor environments, from 26 countries.

WorkAir 2007 was the first international conference focusing on the quality of indoor environments in occupational settings. Particularly the focus was on nonindustrial workplaces such as offices, schools, day care centers and hospitals, where many people—both adults and children—are exposed to poor indoor air every day.

The idea was to bring together a multiprofessional combination of experts: occupational health and safety experts and researchers, decision makers and legislators, managers, builders, architects, and engineers. The questions concerned identifying and managing problems in indoor environments, designing a good indoor environment, and creating and disseminating good practices regarding the quality of indoor environments. The impact of indoor environments on work performance, productivity, and well-being at work was also discussed. The aim was to provide the participants with practical knowledge and tools regarding the quality of indoor environments.

Conclusions drawn and future needs

The quality of indoor environments is a complex and multifaceted issue. It includes technological, physical, chemical, biological, medical, and psychosocial aspects, along with questions regarding the design, construction, and management of buildings, not to mention legal and insurance-related considerations. Therefore, good practices and validated methods, professional expertise, and networking between experts in all these branches are needed.

In recent years, research has significantly increased our knowledge concerning the quality of indoor environments. We now know more about the causes of indoor-air problems and outcomes after exposure to different hazardous substances in indoor environments. Therefore, it is now important to disseminate the new knowledge and put it into practice at workplaces. For this step, good practices and effective strategies are needed for the dissemination of information to the most important target groups.

In order to achieve the best quality for indoor environments, a comprehensive preventive grasp of the matter is needed. "Prevention is better than cure" and "from diagnosis to prevention" are becoming slogans, since ex-ante actions are essential if sustainable solutions are to be found for planning, (re)construction, surveillance, and design.

If problems with the quality of indoor environments have already emerged, we need to take charge of them. At workplaces, it seems that multiprofessional teamwork is the most efficient way to manage such problems. In addition, it is essential to involve the entire work community in resolving problems and controlling risks—both real and perceived.

During the discussions at the WorkAir2007 conference, it became evident that healthy and clean air really is a key to better performance. A good indoor environment has positive effects on well-being, sickness absences, work performance, and productivity.

The organizers of the WorkAir 2007 conference have proposed that a topic focusing on work-related indoor environments should be taken as a special theme in international conferences on indoor air and environments, such as in conferences on indoor air and healthy buildings. We trust that this will occur in the near future.

We would like to extend our warmest thanks to all the participants and sponsors for their valuable contributions.

Investment in healthy indoor environments pays back!

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