the airways. Low humidity favours transmission and survival of influenza virus and is associated with an increase of infections in institutions. Slightly elevated humidity appears also to improve sleep quality, while low humidity may impact the vocal cord negatively.

Discussion Reporting of 'dry air' or 'dryness' or dry eyes and airways continues to be a major complaint in office environments, despite the continued efforts to develop low emitting building materials and better ventilation strategies. Some researchers continue to argue that the complaints of 'dry air' (semantically misleading, since we do not have an organ sensing humidity) are associated with indoor pollutants. However, measured concentrations of common VOCs, in general, are orders of magnitude below thresholds for sensory irritation effects, perhaps with the exception of formaldehyde and acrolein. The perception 'dry air' appears to be composed of different perceptions and associated causes.

Epidemiologic studies and intervention studies have shown associations between low RH and complaint rates; furthermore, aggravation of the eye tear film stability by low RH may result in desiccation, hyperosmolarity and inflammatory reactions. Thus, the merged information about the impacts of VOCs and particles indoors versus low RH favours the latter as an important risk factor to consider for assessment of eye and airway complaints, sleep quality, and vira transmission and survival. The impact of low RH on voice reduction is less clear. 'Dry air' should be replaced with a meaningful indoor air quality descriptor.

1687c INDOOR AIR RELATED ENVIRONMENTAL INTOLERANCE

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Intolerance may develop to various everyday environmental exposures at levels that are well below those known to cause adverse health effects. Reactions initiate typically from odorous substances. Reactions range from unpleasant sensations and annoyance to multi-organ symptoms, severe disability, and major restrictions in daily life and work. Symptoms often lead to exposure assessments at work and may result in excessive actions to eliminate minor exposures. In environmental intolerance, occupational health care is the front line actor in primary and secondary prevention, and support of recovery.

Human reactions to indoor air can be explained by building-related, psychosocial and individual factors. The non-specific symptoms without a clear cause have also been called the sick building syndrome. In Finland, the prevalence of building-related intolerance is common and higher than elsewhere in Europe. Also, the 37% of working population perceives indoor air harmful to their health. Indoor air problems, especially moisture-damage and moulds are considered a major health risk in Finland.

The mechanisms of environmental intolerance have become more clear. The recognition of functional symptoms and environmental intolerance from indoor pollutant-related symptoms is not easy, but it is possible. The differential diagnosis of symptoms is necessary, because intervention may be the opposite considering e.g. avoidance.

The development, sustenance and perpetuation of environmental intolerance should be prevented. In less severe cases, psychoeducation at occupational services may be sufficient. In cases with severe indoor air -related idiopathic environmental intolerance, so far, results show resistance to other than avoidance and means reasoned by the toxic-hypotheses. However, the recognition of environmental intolerance as one among other functional disorders will open new promising intervention avenues. Studies on new therapeutic means are under investigation.

1687d ROLE OF OCCUPATIONAL HEALTH SERVICES IN THE ASSESSMENT AND MANAGEMENT OF INDOOR AIR QUALITY PROBLEMS

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The indoor air quality (IAQ) and its impact on health comfort, and work-performance is an issue of increasing concern in office workers. The role of the occupational health services in the assessment and management of IAQ problems has been discussed by experts of the Scientific Committee on Indoor Air Quality and Health of the ICOH and the following has been proposed.

- Collaboration in risk assessment – risk management. Information meeting and Inspection by walk–through of the workplaces. Questionnaire survey (see below) and assessment thereof. Collaboration at the technical building assessment, definition of the IAQ measurement protocol if required, and evaluation of the results. Evaluation of the combined results and definition of the risk management activities.
- Questionnaire survey. The questionnaire should cover questions about the indoor climate, symptoms and psychosocial working aspects. The results can be used for mapping the perceived IAQ and to prioritise the order in which the problems should be tackled.
- Health surveillance. Individual health surveillance in relation to IAQ is proposed only when periodical health surveillance is already performed for other risks or when specific clinical examination of workers is required due to the occurrence of diseases that may be linked to IAQ (e.g. Legionnaire's disease), recurrent inflammation, infections of eyes, respiratory airways effects, and sensorial disturbances.
- Health promotion. Workplace health promotion programs should include smoking cessation and stress management; programmes for a better IAQ management may also be considered.

A team approach with cooperation between medical and technical experts is recommended in the assessment and management of IAQ problems. Further, synergies with other risk factors, e.g. psychosocial stress may potentially also be important and need to be evaluated.