impetus for the development of epidemiological research (the study of the distribution and causes of disease in human populations) into the adverse health effects of the workplace.

Methods There are numerous epidemiological studies of specific industries, occupations and workplace 'exposures', from chemical, physical and biological agents to ergonomic factors and psychosocial stressors. These are usually observational in design and 'classical' intervention studies are much rarer. Occupational epidemiology plays an important role in identifying and quantifying risks and understanding the aetiology of disease and makes important contributions towards

- i. risk and health impact assessment,
- ii. setting standards/limits in workplaces and the general environment
- iii. provision of evidence for compensation
- iv. estimation of the burden of occupational disease to society.

Results Epidemiological studies of current risks from past exposure have directly informed strategic workplace risk reduction programmes and campaigns and production of guidance and practical interventions for stakeholders. Together with mechanistic information they contribute to occupational exposure limit (OEL) setting. More recent studies illustrate prediction modelling of the impact of reduction of OELs and strategies such as improving compliance. Results from epidemiological studies are also incorporated into economic evaluations of risk options and this in turn has been important in decision making e.g. in the choice of EU OELs. International epidemiological studies can demonstrate important differences across nations in workplace exposures, resulting health consequences and use/lack of prevention measures.

Discussion Occupational epidemiology thus plays a vital role in increasing awareness of occupational disease and enumerating the impact of adverse working conditions and exposures. The occupational health community should continue to push for increased education on occupationally related ill-health, encourage routine collection of occupational data and, of course, persuade organisations to fund appropriate research.

1589 INFECTIONS IN THE WORKPLACE: IDENTIFYING PROBLEMS AND APPLYING RESEARCH TO PREVENTION

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Introduction Infections are the only occupational diseases that can be transmitted from one worker to another. Although workplace and community-acquired infections have a long history of affecting health and productivity, from miners' 'consumption' and seafarers' plague to influenza and Ebola, occupational infections have been under-recognised, under-reported and under-researched. In most workplace settings, infectious diseases have not received the same attention as physical, chemical and psychosocial challenges. Similarly, workplaces have generally been underutilised in the prevention and control of infections. However, epidemics in the 21st century have evoked attention not only from the occupational health fraternity, but also from employers, workers and the media seeking policies and procedures to prevent and manage infection in the workplace.

Methods Selected infections and their impact in various occupational settings are explored to illustrate the challenges of

their identification and management, as is the interface between public health and occupational health surveillance, research and interventions. The unique nature of infectious agents as an occupational hazard is considered, while longstanding and new public health research and strategies for prevention are evaluated in an occupational context.

Discussion A major challenge for research and prevention is measuring occurrence, morbidity or mortality from occupationally-acquired infections, especially when exposure in the workplace is not always recognised. Primary prevention interrupting the transmission cycle of micro-organisms comprises a variety of interventions that are implemented concurrently rather than in a hierarchy of control, while secondary prevention for affected individuals, becomes effective primary prevention for others. To date, even for health care workers, who dominate global research and interventions related to occupational infections, success has been somewhat limited to better resourced workplaces. It is vital for the focus to extend beyond the workplace in collaboration with public health care to promote research, recognition, prevention and management of infectious diseases for all workers.

1730 WORKING TOO MUCH, ANYWHERE AND AT ALL TIMES – WORKERS' HEALTH IN OUR CONTEMPORARY COMMUNICATION SOCIETY

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The advancement of information and communication technologies (ICT) has changed spatial and temporal dimensions of work. Currently, in several occupations, there is a blurring of the boundaries between professional and private life, thus providing access to workers at any time of the day or night. This presentation will deal with consequences of ICT to workers' health and well-being, including the supplemental work from home, intensification of work, and the intrusion of work into individuals' personal life, affecting work life balance. Besides, the presentation will focus the phenomenon of constant connexion and its relation to a general feeling of time scarcity, also with implications to well-being. The view of organisations that care about working conditions, such as the Eurofound and the International Labour Office, will also be addressed, as well as policies to protect workers, such as the so-called 'right to be disconnected' recently implemented in France.

1746 OVERVIEW OF THE CURRENT STATE OF KNOWLEDGE ABOUT THE HEALTH EFFECTS OF NANOMATERIALS

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Introduction It has been close to 20 years that engineered nanomaterials have entered commerce. There are tens of thousands of types of nanomaterials that have been produced and the hazard potential varies across them. Some may be hazardous and some not. The last decade of research has begun to identify important determinants of ENM toxicity but there is still much uncertainty about hazard potential. It is useful to