Abstracts

attempt to sort out what currently is known and not about hazards of ENMs.

Methods The scientific literature from 2000–2017 was assessed using keywords and environmental scanning techniques to capture information about the health effects of ENMs. The focus will be on high volume ENM.

Result The extent of research health effects that have been identified for various high volume ENMs will be described. While many nanomaterials have been developed there are a limited number that are widely used in commerce. Common determinants of toxicity will be identified.

Discussion Assessing the hazard potential of ENM is a complex task since there are so many combinations of physiochemical parameters that may lead to ENMs having differential toxicity. The implications of this will be discussed as well the research needed to address the hazard potential of engineered of nanomaterials that are or could be in commerce.

1745 AIR PNEUMO: AN ACADEMIA-BASED QUALITY ASSURANCE OF PHYSICIANS’ PROFICIENCY IN READING CHEST RADIOGRAPHS OF PNEUMOCONIOSIS

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Introduction Early detection of the disease, by routine standard chest X-ray, is one of the essential measures for secondary prevention. ILO has provided the guideline for radiographs reading for pneumoconioses according to the ILO classification to support the medical screening test and clinical purposes. The aim of this article is to describe the history and concept of the AIR Pneumo.

Methods Asian Intensive Reader of Pneumoconioses (AIR Pneumo) is a quality assurance program to train and certify physicians who works for prevention of pneumoconioses, which is one of the major occupational health problems worldwide. The system is useful for epidemiological research, screening and surveillance of high-risk workers, diagnosis and compensation. Because of variability of reading by physicians, some organisation, e.g., US NIOSH, has developed the certification testing, called B-reader.

Result Since its first Bangkok workshop in 2006, AIR Pneumo has conducted 17 workshops 6 times in Thailand, 4 times in Brazil, twice in Japan, and once in each in Philippines and India. As Bangkok workshops invited international participants, most of physicians from ASEAN countries and D.R. Congo has attended the workshops.

Discussion The classification system holds its uniqueness in possessing standard radiographs that show profusion 0 to 3 for each types of small opacities, large opacities and pleural abnormalities. By using standard radiograph side-by-side to the subject radiographs that physicians are reading and classifying, higher inter reader agreement can be achieved. Understanding and using the classification properly demands certain amount of training. In accordance with WHO/ILO Global Programme for Elimination of Silicosis, ILO has been encouraging GPEs participating nations to educate physicians to increase proficiency of reading radiographs of pneumoconioises. The AIR Pneumo, an academia based quality assurance of physicians proficiency in reading pneumoconiosis radiographs is sustainable approach with active involvement of local experts in GPEs participant nations.