Introduction Work-related disease is a global health and safety challenge that is thought to cause over 2 million deaths worldwide annually. In addition to this, around 160 million people worldwide are estimated to become sick every year from a range of occupational exposures. This does not only affect adults, because 168 million of the world's children are child labourers, half of whom work in hazardous conditions. Dedication to the prevention of occupational disease motivated the creation of the non-profit organisation Workplace Health Without Borders (WHWB). The UK Branch of WHWB was formed in 2016.

Methods WHWB members volunteer their time to offer training, mentoring and technical assistance to develop capacity for preventing occupational disease around the world. Examples include: training, mentoring, projects to prevent exposure to silica dust in agate workers and stone-crushers in India, and in brick plant workers in Nepal, Pakistan and Tanzania. In agate silica exposure reduction, low cost engineering controls using locally available materials are being considered.

Result Practical approaches for the reduction of exposures are necessary; examples will be demonstrated where simple extraction systems and other hygiene measures have been introduced in very challenging workplace exposures. One example of this is the use of locally purchased and built extraction fans for the reduction of agate silica dust exposures in India which have resulted in a 40%–50% reduction in silica dust levels in some cases.

Discussion It is hoped that through education, training, mentoring and raising public awareness that improvements can be made in hazardous workplace exposures across the world. Much can be achieved remotely through online training but more effort and support is required. WHWB-UK is in the early stages of helping with this but with additional funds and support much more can be achieved.

1646d WHOCC AND ICOH: LEVERAGING COLLABORATIONS

¹L Nickels, ²CMCA Nogueira, ³DM Zalk, ⁴I Ivanov*. ¹National Institute for Occupational Safety and Health (NIOSH), Washington DC, USA; ²University of Pretoria, Faculty of Health Sciences, Pretoria, South Africa; ³Lawrence Livermore National Laboratory (LLNL), Livermore, California, USA; ⁴World Health Organisation (WHO), Geneva, CH

10.1136/oemed-2018-ICOHabstracts.670

Introduction Global network members of WHO Collaborating Centres for Occupational Health (CCs) assist WHO in implementing the World Health Assembly Resolution 60.26: the Global Plan of Action on Workers' Health, (GPA) 2008–2017. Current activities align with workplan objectives for 2012–2017. Risk assessment, management, control and prevention of noncommunicable diseases (NCDs) are one of seven priority objectives. CCs include 50 centres of excellence in occupational health and three international partners including ICOH. Development and delivery of training and intervention strategies for identification, prevention, and management of occupational risk factors are the best path forward to achieving sustainability and improving conditions within informal and high risk sectors.

Methods WHOCCs conducted a review of CC contributions toward WHO Secretariat in implementing the GPA under the 2006–2012 workplan. Quantitative self-administered questionnaires collected information on outputs from projects

conducted by CCs. Qualitative surveys asked semi-structured questions about views, opinions and ideas regarding CCs.

Result Project leaders from 46 CCs in 28 countries (including ICOH) responded to the quantitative survey. Of 202 responses, 78.7% produced a product and 70.5% indicated another CC/NGO had product participation. Primary product audiences were health professionals, academic researchers, and employers. Products available by weblink or in pdf format will be made accessible through the GeoLibrary. CCs also conducted 143 training courses and materials were available for over 75% of trainings; 25 CCs responded to the qualitative survey. Key themes emerging from data analysis highlighted CCs' strengths, advantages to other networks, external constraints, areas for improvement, new ways of working, utilisation of CC contributions, collaboration among the CCs, and their WHO affiliation.

Discussion WHO and ICOH are major organisations whose work contributes to protecting workers globally. By leveraging collaboration, each brings important perspective and expertise with shared commitments to healthy and safe workplaces. The 2006–2012 review reflected the contributions and reach of these partnerships.

1646e QUALITATIVE STRATEGIES TO SIMPLIFY WORK-RELATED RISK REDUCTION

DM Zalk. Lawrence Livermore National Laboratory (LLNL), Livermore, California, USA

10.1136/oemed-2018-ICOHabstracts.671

Introduction Clear and consistent communication of risk within the Occupational Safety, Health, and Hygiene (OSHH) professions is essential for achieving prevention of work-related diseases. This risk communication must be simplified. It must speak to workers directly, assisting them in identifying work-related hazards and implementing solutions. Controls that assist in preventing the most common work-related diseases are well known to OSHH professionals, yet they remain unknown to 2.5 billion workers. This results in an annual estimate of 2 million deaths from and 160 million incidences of work-related noncommunicable diseases within the global workforce, primarily in Economically Developing Countries (EDCs).

Methods Utilising fundamental Occupational Hygiene principles and Control Banding's qualitative strategy for assessing occupational risks and the selection of solutions, a Risk Level Based Management System (RLBMS) was developed. RLBMS is designed to deliver the most elusive element necessary for success; risk communication within and between OSHH professions. This qualitative occupational risk assessment and risk management strategy has been trialled across chemical, physical, and biological agents in a high regulatory enforcement environment.

Result Initial qualitative risk assessment not only standardises controls, it also prioritises where and when quantitative monitoring needs to be performed. In addition, de-confliction of multidisciplinary controls for an individual task is presented to the workers for simple, clear, and concise guidance on how to reduce risk and achieve exposure prevention on a daily basis. This simple and consistent risk communication was successful for worker understanding and implementation of controls. Further simplifying communications to colours and symbols renders it applicable in EDCs globally.