the editorial base alike. It is therefore important that the reviews that are eventually published provide the most informative answers to the most relevant questions to guide decision-making. Asking vague questions leads to vague answers and is a waste of time, money and resources.

Methods Any question arising from practice that has to do with choosing a suitable intervention for a particular health issue can be formulated to contain the elements p=Participants, I=Intervention(s), C=Control and O=Outcome(s). Similarly, a research study evaluating the effectiveness of a particular intervention and a systematic review aiming to make a summary of all sufficiently similar studies ought to use this recipe. This talk will explore how each of these elements influence the whole review process from searching studies to making a synthesis of their findings and reporting results.

Result We will compare a convenience sample of five recent Cochrane Work reviews with another five recent non-Cochrane reviews for their use of PICO and how it is implemented throughout the review.

Discussion PICO is a simple tool that will ensure that research will answer the question of interest that has arisen from practice. Ignoring PICO almost certainly leads to a biassed review process and consequently biassed review results. PICO is the most important ingredient in enabling evidence-based medicine.

1710b GRADE APPLIED IN A RECENT UPDATED COCHRANE

¹HF van der Molen, ²P Basnet, ²JH Verbeek. ¹Academic Medical Centre, University of Amsterdam, Department: Coronel Institute of Occupational Health, Amsterdam Public Health research institute, Amsterdam, The Netherlands; ²Cochrane Work Review Group, Finnish Institute of Occupational Health, Kuopio, Finland

10.1136/oemed-2018-ICOHabstracts.360

Evaluation of interventions to reduce occupational injuries in the construction industry are relatively scarce. Various interventions to prevent occupational injuries have been proposed and studied. In a Cochrane review we systematically summarise the most current scientific evidence on the effectiveness of interventions to prevent injuries associated with construction work. Most of these studies are analysed with an interrupted time series design, which are characterised by a higher risk of bias.

We use the GRADE (Grades of Recommendations, Assessment, Development and Evaluation) approach that systematically represents the factors important in interpretating evidence and results in a current update of our review. While the evidence can be different for each outcome, GRADE considers the evidence for each outcome and takes into account the magnitude of effect and ensures the process is systematic and transparent.

Rating of the evidence was done as follows: with RCTs we started at high quality and with observational studies we started at low quality. Then we downgraded if one of the following criteria were met: study limitations, inconsistency, indirectness, imprecision and publication bias. We upgraded observational studies if there have been dose-response, large effect size or an opposite effect of confounding. We constructed tables for every comparison for our interventions and

our two primary outcomes fatal and non-fatal injuries because these were our inclusion criteria for the studies.

Applying GRADE and the difference with strength of association will be discussed based on the above mentioned update of our review. Also the differences in clarity of the conclusions with and without GRADE will be discussed.

1710c

UNEXPECTED INVITATION TO BECOME A CO-AUTHOR OR: HOW I LEARNED TO STOP WORRYING AND LOVE SYSTEMATIC REVIEWS

TC Morata. National Institute for Occupational Safety and Health, Cincinnati, USA

10.1136/oemed-2018-ICOHabstracts.361

All of us are recipients of health care, and most of the ICOH Congress participants also provide health services. As patients and providers we expect that the service being rendered stands on a solid scientific base. Nowadays, with the expansion of publications and communication channels, we hear a lot about evidence-based practice (EBP) and systematic reviews. Systematic reviews, are the most important type of scientific review because they are central to evidence-based practice, but they can be misunderstood or even intimidating to some. Examination of the contributions of systematic reviews to occupational health and the processes to get familiarised, became a user and participate in the implementation of evidence-based practices to prevent work-related disorders. Locating pertinent Cochrane resources and reviews, and defining what are answerable questions and eligible sources of evidence for a Cochrane Review. Examples will focus on a Cochrane review that examined the effectiveness of enforcement tools for preventing occupational diseases and injuries and a second one that examined interventions to promote the use of hearing protections and other efforts to control noise and promote hearing loss prevention. To be able to offer evidence-based practices, occupational health professional need to recognise the need and approaches that will allow him/her to be a lifelong learner, by keeping current with evidence-based professional practice, and engage in continuing competence and professional development activities.

Disclaimer The findings and conclusions in this abstract have not been formally disseminated by the National Institute for Occupational Safety and Health and should not be construed to represent any agency determination or policy.

1710d

SYSTEMATIC REVIEWS AND EVIDENCE-BASED GUIDELINES, TWO OF A DIFFERENT KIND?

Carel T Hulshof. Netherlands Society of Occupational Medicine (NVAB), Centre of Excellence, Utrecht, the Netherlands; Academic Medical Centre, dept. Coronel Institute of Occupational Health, Amsterdam, the Netherlands

10.1136/oemed-2018-ICOHabstracts.362

In improving the quality and professional independence of Occupational Safety and Health (OSH) professionals, the development of an evidence-based practice plays a pivotal role. OSH professionals should strive to use scientific evidence as much as possible to support their decisions in daily practice and policy. However, in many situations, still a gap between evidence from research and decision-making in daily practice