

The contribution of occupational risks to the global burden of disease: summary and next steps*

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KEY WORDS

Occupational risk; global burden of disease

SUMMARY

Background: *The Comparative Risk Assessment (CRA) project of the World Health Organization (WHO) assessed worldwide mortality and morbidity in the year 2000 resulting from exposures to selected occupational hazards. This article summarizes findings of the WHO CRA project, presents the estimates of the International Labor Organization (ILO) for total deaths due to workplace risks, and calls for action. Objectives: Global burden estimates and counts of deaths assist ministers and other decision and policy makers to make informed decisions and to take action regarding risk reduction. Methods: The WHO CRA methodology combined the proportions of the population exposed to five occupational hazards (excluding numerous risks due to inadequate global data) with relative risk measures to estimate attributable fractions of the selected health outcomes for both morbidity and mortality. ILO estimates of total numbers of global work-related injury deaths apply national fatality rates to employment data for the particular country; for disease deaths ILO uses an attributable risk approach. Results: In 2000, the selected occupational risk factors were responsible worldwide for 37% of back pain, 16% of hearing loss, 13% of chronic obstructive pulmonary disease (COPD), 11% of asthma, 8% of injuries, 9% of lung cancer and 2% of leukemia, and about 100% of pneumoconioses and mesothelioma. These selected risks at work resulted in the loss of about 24 million years of healthy life and caused 850,000 deaths worldwide, about 40% of the ILO estimate of 2.2 million total deaths. Conclusions: These global and regional analyses have identified areas where specific preventive actions are required.*