

Chapter

Section

No./Title

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Bibliographic ID

1. Asbestos Exposure Assessment, Risk Identification, and Substitutes

C. Epidemiology of ARDs

2. The global burden of diseases due to occupational carcinogens

Driscoll T, Nelson DI, Steenland K

Am J Ind Med 2005 Dec;48(6):419-31

Introduction

Asian context

Mortality and morbidity from malignant mesothelioma is not well characterized in Asian countries despite the recent massive increase in asbestos use in Asian countries.

Critical appraisal

Authored by an international group of known researchers in the field. The estimated annual mesothelioma deaths reported in this paper is endorsed by the WHO. Often cited as a global reference.

Unique keywords

Disability-adjusted life year, mesothelioma

Abstract

Background: The worldwide mortality and morbidity from lung cancer, leukemia, and malignant mesothelioma arising from occupational exposure to carcinogens are described. Cases reported in the year 2000 that resulted from relevant past and current exposures are assessed.

Methods: The proportions of workers exposed to the carcinogens of interest, and their levels of exposure, were estimated using workforce data and the CAREX (CARcinogen EXposure) database. These were combined with relative risk measures (for lung cancer and leukemia) or absolute risk measures (for malignant mesothelioma) to develop estimates of deaths, disability-adjusted life years (DALYs) and attributable fraction (for lung cancer and leukemia).

Results: There were an estimated 152,000 deaths (lung cancer: 102,000; leukemia: 7,000; and malignant mesothelioma: 43,000) and nearly 1.6 million DALYS (lung cancer: 969,000; leukemia: 101,000; and malignant mesothelioma: 564,000) due to exposure to occupational carcinogens.

Conclusions: Occupational carcinogens are an important cause of death and disability worldwide.



Annotation

Fact 1

- The annual deaths of malignant mesothelioma in the world is estimated at 43,000.

Fact 2

- Deaths due to malignant mesothelioma occur predominately among older persons up to 79 years.

Fact 3

- The disability-adjusted life years (DALYs) due to malignant mesothelioma in the world was estimated to be 564,000 DALY.

Fact 4



Fact 5



References