

Chapter

1. Asbestos Exposure Assessment, Risk Identification, and Substitutes

Section

C. Epidemiology of ARDs

No./Title

4. The expected burden of mesothelioma mortality in Great Britain from 2002 to 2050

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Introduction

Asian context

Since the study for Great Britain published in 1995, malignant mesothelioma deaths continue to increase and is predicted to increase further up to 2011-2015.

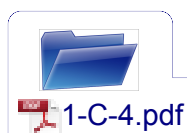
Critical appraisal

Authored by Hodgson JT et al of UK (Peto J is last author).An update of the landmark study by Peto J in 1995.

Unique keywords

Prediction, mesothelioma

Abstract



The British mesothelioma register contains all deaths from 1968 to 2001 where mesothelioma was mentioned on the death certificate. These data were used to predict the future burden of mesothelioma mortality in Great Britain Poisson regression analysis was used to model male mesothelioma deaths from 1968 to 2001 as a function of the rise and fall of asbestos exposure during the 20th century, and hence to predict numbers of male deaths in the years 2002-2050. The annual number of mesothelioma deaths in Great Britain has risen increasing rapidly from 153 deaths in 1968 to 1,848 in 2001 and, using our preferred model, is predicted to peak at around 1,950 to 2,450 deaths per year between 2011 and 2015. Following this peak, the number of deaths is expected to decline rapidly. The eventual death rate will depend on the background level and any residual asbestos exposure. Between 1968 and 2050, there will have been approximately 90,000 deaths from mesothelioma in Great Britain, 65,000 of which will occur after 2001.

Annotation

Fact 1

- Malignant mesothelioma mortality in Great Britain is predicted to peak at around 1,950-2,450 deaths per year some time between 2011 and 2015.

Fact 2

- Around 90,000 deaths due to mesothelioma are predicted to occur until 2050, with 65,000 of these occurring from 2002 onwards in Great Britain.

Fact 3

- The annual number of mesothelioma deaths in Great Britain has risen increasingly rapidly by about 12-fold from 1968 (153 deaths) to 2001 (1,848 deaths).

Fact 4

- The mesothelioma death rate in males has continued to increase in older age groups, but has decreased among younger men in recent years in Great Britain.

Fact 5

- Men born around 1940 have suffered higher death rates than any previous or subsequent birth cohort.

References