Introduction

Asian context

National mesothelioma surveillance program provides a valuable information source to improve knowledge of this neoplasm and for better management of patients.

Critical appraisal

A detailed analysis of data of NMSP (French National Mesothelioma Surveillance Program) records on incident pleural tumors in 21 French districts that cover a population of approximately 16 million people. The attributable risk fraction for occupational asbestos exposure in men was 83.2% (76.8% to 89.6%).

Unique keywords

France, surveillance program, mesothelioma

Abstract

Objectives: The French National Mesothelioma Surveillance Program (NMSP) was established in 1998 by the National Institute for Health Surveillance (InVS). Its objectives are to estimate the trends in mesothelioma incidence and the proportion attributable to occupational asbestos exposure, to help improve its pathology diagnosis, to assess its compensation as an occupational disease, and to contribute to research.

Methods: The NMSP records incident pleural tumors in 21 French districts that cover a population of approximately 16 million people (a quarter of the French population). A standardized procedure of pathological and clinical diagnosis ascertainment is used. Lifetime exposure to asbestos and to other factors (man made mineral fibers, ionizing radiation, SV40 virus) is reconstructed, and a case-control study was also conducted. The proportion of mesothelioma compensated as an occupational disease was assessed.

Results: Depending on the hypothesis, the estimated number of incident cases in 1998 ranged from 660 to 761 (women: 127 to 146; men 533 to 615). Among men, the industries with the highest risks of mesothelioma are construction and ship repair, asbestos industry, and manufacture of metal construction materials; the occupations at highest risk are plumbers, pipe-fitters, and sheet-metal workers. The attributable risk fraction for occupational asbestos exposure in men was 83.2% (95% CI 76.8 to 89.6%). The initial pathologist’s diagnosis was confirmed in 67% of cases, ruled out in 13%, and left uncertain in the others; for half of the latter, the clinical findings supported a mesothelioma diagnosis. In all, 62% applied for designation of an occupational disease, and 91% of these were receiving workers’ compensation.

Conclusions: The NMSP is a large scale epidemiological surveillance system with several original aspects, providing important information to improve the knowledge of malignant pleural mesothelioma, such as monitoring the evolution of its incidence, of high risk occupations and economic sectors, and improving pathology techniques.
Based on a detailed analysis of data of NMSP (French National Mesothelioma Surveillance Program) records on incident pleural tumors in 21 French districts (population covers approximately 16 million people), the estimated number of incidence mesothelioma cases in France in 1998 ranged from 660 to 761 (women: 127-146; men: 533-615).

The industries where the risks of mesothelioma were highest were construction and ship repair, transformation and manufacture of asbestos products, and the manufacture of metal construction materials (bridges, tanks, pipes, scaffolding, and staircases).

The occupations most at risk were plumbers and pipe-fitters, sheet metal workers and boilermakers, and welders and flame-cutters.

The risk fraction attributable to occupational asbestos exposure was 83.2% (76.8-89.6) in men, and 38.4% (26.8-50.0) in women.