

RECOMMENDATIONS ON PROBLEMS REQUIRING EPIDEMIOLOGICAL STUDY

1. *That the relationship of fibre type to the risk of developing asbestosis, carcinoma of the lung, and mesothelial and other tumours be investigated.*

International and intranational comparative studies of mining and other populations exposed to only one type of fibre are recommended.

Studies of the effect of exposure to different types of asbestos fibre within a country are likely to be of special value, but studies of groups exposed to apparently similar fibres in different parts of the same country are also likely to be informative.

2. *That the relationship of dust dosage (including concentration and duration of exposure), and the composition and physical state of the dust to the incidence of asbestosis, carcinoma of the lung, mesotheliomas, and other cancers be studied.*

Comparative studies in factory populations in the asbestos textile and other manufacturing processes using asbestos are likely to be useful, especially when there are records of past dust measurements. In any prospective studies of new entrants, the measurement of dust by a standardized method should be regarded as an essential part of the investigation.

3. *That the effects of removal from further exposure to asbestos dust be investigated.*

It is important to establish the subsequent morbidity and mortality from asbestosis, and the mortality from cancers associated with exposure to asbestos in population groups no longer exposed to the dust.

4. *That further investigations be made of past and all future cases of diffuse mesothelial tumours of the pleura and peritoneum to establish any association with asbestos and other factors.*

These tumours should be diagnosed on the criteria suggested by the Panel on Pathology (see below) and the diagnoses should be reviewed by a panel of pathologists with experience of these rare tumours. The tumour and lungs should be investigated for the presence of asbestos by physical and chemical methods (see below).

5. *That studies of morbidity and mortality be extended to asbestos-exposed populations that have not so far been widely investigated.*

(a) It is recommended that special attention be directed to surveys in the insulating, asbestos cement and asbestos products industries and other plants in which asbestos is regularly used.

(b) It is also recommended that, since incidental exposure to asbestos dust may occur in certain trades and occupations, attention be directed to the handling and transporting of asbestos, pipe fitting, and the building and ship-building industries.

(c) It is recommended that surveys be made to study environmental and community exposures, including populations near mines and factories and elsewhere.

(d) It is recommended that general population surveys be made nationally and internationally to establish by standardized methods, in areas of presumed high and low exposure to asbestos dust, the prevalence of asbestos bodies and fibres.

(e) It is recommended that surveys of asbestosis in domestic and wild animals be extended to areas of high and low exposure.

6. Epidemiological Methods

(a) General

In addition to the usual information about the individual collected in such surveys, special attention should be directed to a detailed, social (including smoking habits), occupational, environmental, and medical history from early childhood to elucidate any possible exposure to or association with any type of asbestos or other dusts. A study of the family unit or household may be of interest in view of the occasional reports of significant neighbourhood and household exposures.

In view of the association between exposure to asbestos dust and pulmonary fibrosis and its complications, it is important to obtain as much information as possible about morbidity and mortality from all causes, with particular attention to: asbestosis, chronic bronchitis and emphysema, bronchiectasis, diffuse interstitial fibrosis, pneumonia, tuberculosis, cor pulmonale, carcinoma of the lung, diffuse mesothelial tumours of the pleura and peritoneum, gastrointestinal tumours, and ovarian tumours.

(b) Clinical Criteria

Symptoms

It was agreed that in all surveys the presence or absence of cough, sputum, dyspnea, and chest pain should be recorded as a minimum. This should be recorded using a standardized questionnaire.

Signs

It was agreed that when physical examination was possible the minimal observations should include the presence or absence of clubbing of fingers, cyanosis, and basal rales in the chest.

It was agreed that the measurement of sputum volume (first hour on rising) and degree of purulence recorded in a standard way¹ was useful in association with the questionnaires for assessing