within the general population with a higher frequency than in workers population, subjects with an increased susceptibility may occur. However, this hypothesis can neither be confirmed, nor rejected; no specific study has been undertaken on this topic. This demands an extra safety factor. On the other hand, taking into account the long latency period of asbestos related cancers, one should realise that 20 to 40 years ago many workers entered employment without any medical selection procedure.

Nevertheless, if one wants to evaluate the public health risk, one has to base oneself on the available data of dose-response relationship, however insufficient they may be, and one has to extrapolate from occupational health to public health.

There apparently exist qualitative dose-response relationships: concentration in air and/or duration of exposure determine the relative number of subjects affected and also the diagnosis. However, very few quantitative data exist. Sturm (1975) quotes Bohlig in stating that necessary previous intensity of asbestos exposure is decreasing in the following order: asbestosis → bronchial carcinoma, pleurahyalinosis → mesothelioma; the duration of development of disease (exposure + latency) decreases as follows: mesothelioma → bronchial carcinoma → pleurahyalinosis → asbestosis. In heavy mixed asbestos exposure there does seem to be some inverse relationship between asbestosis and mesothelioma. Very heavy exposures perhaps kill by asbestosis and/or bronchial cancers before mesotheliomas arise, or in some way may modify the ability of fibres to reach the periphery of the lung. It may also be that those who develop asbestosis, bronchial cancers or mesothelioma have something in common, and which one develops depends on the dose; this might fit as the dose-response relationship is less clear for the mesotheliomas.

In a cohort study in a U.K. factory with mixed exposure there was a mesothelioma incidence rate per 100,000 subject years ranging from 6 (10-15 year exposure) to 218 (30+ year), and from 31 (<2 year exposure slight to moderate) to 195 (>2 year, severe exposure) in males (Newhouse et al 1975), i.e. a clear dependance on duration and severity of exposure.

Enterline et al (1972) calculated the cumulative dust exposure in mmpcf*

* - mmpcf = million particles per cubic foot.

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