cumulative dose is an adequate measure of exposure, the prevalence of crepitations which would occur in those employed for a lifetime under the present standard can be predicted only within wide limits. Crepitations are not specific to asbestos exposure nor would their presence be considered as significant disease, defined as disability or shortening of life. Possible asbestosis is a better indicator but may not be either specific or significant disease; however it correlates well with certification (Figure 2). In the group first employed after 1950 the average cumulative exposure was 84 f-yr/cm^3, the average follow-up since first exposure was 16 years, and the prevalence of possible asbestosis was 6·6%. In view of these findings there is no room for complacency about the 2f/cm^3 standard and efforts should be continued to reduce asbestos dust to as low a level as possible. At this stage it is impossible to state definitely that the standard is inadequate, because its introduction is so recent, and it is essential to follow up groups exposed to low levels in order to improve the data necessary for the formulation of better standards.

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Appendix

MEASURES OF EXPOSURE

In this appendix, certain forms of dose-response relationships are discussed. First, it is necessary to define the dose, that is, to derive a measure of exposure in the situation in which exposure takes place over a period of years with different concentrations.

The simplest and most commonly used measure of exposure is the cumulative dose, which gives equal weight to the concentrations of airborne dust experienced in each year of exposure. Thus, for example, suppose a man started work in the factory at time zero and was exposed to a concentration of c_1 up to time t_1; this was followed by concentration c_2 from time t_1 to t_2; c_3 from t_2 to t_3; and finally c_4 up to time t_4, the time the exposure is to be