1.2. Outdoors at several sites

Table V-3. Average chrysotile asbestos concentrations at several sites in 10^{-9} g/m^3

Location	U.K. Rickards (1971, 1973)	Netherlands I.G. TNO (1976)	U.S.A. Nickelson (1970) Munchio (1973)	CSSR Simecek (1971)	France Bignon et al (1975)	Germany*** Roböck (1973)
At the site of an asbestos processing industry, down wind	1	100*	u	1000**	u	u
Town center	0.1	< 0.1	25 - 60	u	0.2-1.5	<0.1
Industrial area	0.1	u	45 - 100	u	u	u
Rural area	0.1-1	u	20	u	u	u

u = unknown

* Down wind, at a height of 1.5 m, 150 m from an asbestos processing industry

** Down wind, at a height of 2 m, 300 m from an asbestos processing industry

*** Personal communication: measurements have been carried out by CERCHAR-France in Essen. Fibres were found but no asbestos. Batelle (Frankfurt) found fibres in Frankfurt with optical microscopy; a fraction of these fibres had properties resembling those of asbestos. This would result in a concentration of approximately 100 x 10^{-9} g/m^3.

Apart from what has been pointed out in the beginning of this chapter on the comparison of the results of different investigators, it should also be kept in mind that the practical detection limit of asbestos in air, using electron microscopy as an analytical tool lies between 10^{-7} and 10^{-10} g/m^3.

It should be noted that the majority of fibres detected in the preliminary Dutch investigations, see Table 3, had a diameter of approximately 0.02 µm and a length of approximately 0.5 µm, which means that they could only be detected with the aid of an electron microscope. These results are -

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