

Chapter 8

Future research

164. Uncertainty surrounds the application of appropriate safety factors to data on halogens and hydrogen halides, especially for potentially susceptible groups such as the young, especially the very young, and the old. Further data are required in this area.
165. Currently no human chamber experiments have been reported with hydrogen bromide or hydrogen iodide: this is another area for which further appropriate research is recommended.
166. EPAQS has noted the complete absence of any short-term measurements of the halogens and hydrogen halides dealt with in this report, in UK urban areas. It recommends that a monitoring programme be established in urban areas, preferably in the vicinity of the large industrial plants that synthesize and utilize these compounds and downwind of large coal-fired power plants that emit them directly. This monitoring should usefully focus on short-term averaging periods (hourly periods) and should cover those compounds with large national emissions, such as hydrogen chloride, and with high toxicity, for example, chlorine. In view of the large tonnages of chlorine that are handled by industry and its apparent toxicity, continuous monitoring of short-term concentrations is recommended in the immediate vicinity of chlorine production and utilization plants.