HISTORIES OF GUIDELINE DEVELOPMENT FOR THE FOURTH EDITION

12. Chemical fact sheets

12.1 Chemical contaminants in drinking-water

1,2-Dichloroethane

History of guideline development

The 1958, 1963 and 1971 WHO International Standards for Drinking-water did not refer to 1,2-dichloroethane. In the first edition of the Guidelines for Drinking-water Quality, published in 1984, a health-based guideline value of 0.01 mg/l was recommended for 1,2-dichloroethane, while noting that the mathematical model appropriate to chemical carcinogens that was used in its derivation involved considerable uncertainty. The 1993 Guidelines calculated a guideline value of 0.03 mg/l for 1,2-dichloroethane on the basis of haemangiosarcomas observed in male rats, corresponding to an upper-bound excess lifetime cancer risk of 10⁻⁵. This guideline value was brought forward to the third edition of the Guidelines, published in 2004, and the fourth edition of the Guidelines, published in 2011.