

HISTORIES OF GUIDELINE DEVELOPMENT FOR THE FOURTH EDITION

12. Chemical fact sheets

12.1 Chemical contaminants in drinking-water

Arsenic

History of guideline development

The 1958 WHO *International Standards for Drinking-water* recommended a maximum allowable concentration of 0.2 mg/l for arsenic, based on health concerns. In the 1963 *International Standards*, this value was lowered to 0.05 mg/l, which was retained as a tentative upper concentration limit in the 1971 *International Standards*. The guideline value of 0.05 mg/l was also retained in the first edition of the *Guidelines for Drinking-water Quality*, published in 1984. A provisional guideline value for arsenic was set at the practical quantification limit of 0.01 mg/l in the 1993 *Guidelines*, based on concern regarding its carcinogenicity in humans. In the second addendum to the third edition, published in 2008, the guideline value of 0.01 mg/l was designated as provisional on the basis of scientific uncertainties and supported by a JECFA PTWI, and an expanded summary statement for arsenic was published. The fourth edition of the *Guidelines*, published in 2011, noted that the JECFA PTWI had been withdrawn, and the guideline value of 0.01 mg/l was designated as provisional on the basis of both treatment performance and analytical achievability, with the proviso that every effort should be made to keep concentrations as low as reasonably possible.