

## HISTORY OF GUIDELINE DEVELOPMENT

### Iodine

The 1958, 1963 and 1971 WHO *International Standards for Drinking-water* and the first edition of the *Guidelines for Drinking-water Quality*, published in 1984, did not refer to iodine. The 1993 Guidelines did not establish a guideline value for iodine because available data suggested that derivation of a guideline value for iodine on the basis of information on the effects of iodide was inappropriate and there were few relevant data on the effects of iodine; also, because iodine was not recommended for long-term disinfection, lifetime exposure to iodine concentrations such as might occur from water disinfection would be unlikely. This assessment was brought forward to the third edition of the Guidelines, published in 2004, and the fourth edition of the Guidelines, published in 2011. Both editions noted the need for guidance concerning the use of iodine as a disinfectant in emergency situations and for travellers. The fourth edition of the Guidelines incorporating the first and second addenda, published, in March 2022 (based on the 2020 assessment as a background document to the Guidelines), maintained that the derivation of a guideline value for iodine is inappropriate, citing limited exposure to iodine via drinking-water as well as inadequate data to establish a threshold between iodine intake and altered thyroid function in humans. It further recommends that iodine should not be used as a primary drinking-water disinfectant in water supplies, which would limit lifetime exposure, and summarizes considerations on the use of iodine in point-of-use applications.