



# Guidelines for drinking-water quality

SECOND EDITION

Addendum to Volume 2

**Health criteria and  
other supporting information**



World Health Organization  
Geneva

**Guidelines for  
drinking-water quality**

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Geneva  
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## Preface

Between 1993 and 1997, the World Health Organization (WHO) published the second edition of *Guidelines for drinking-water quality* in three volumes: Volume 1, *Recommendations*, in 1993, Volume 2, *Health criteria and other supporting information*, in 1996, and Volume 3, *Surveillance and control of community supplies*, in 1997. As with the first edition, the development of these guidelines was organized and carried out jointly by WHO headquarters and the WHO Regional Office for Europe.

At the Final Task Group Meeting (Geneva, Switzerland, 21–25 September 1992), when the second edition of the *Guidelines* was approved, it was agreed to establish a continuing process of updating of the guidelines, with a number of chemical substances and microbiological agents subject to periodic evaluation. Addenda containing these evaluations will be issued as necessary until the third edition of the *Guidelines* is published, approximately 10 years after the second edition.

In 1995, a Coordinating Committee for the Updating of WHO *Guidelines for drinking-water quality* agreed on the framework for the updating process and established three working groups to support the development of addenda and monographs on chemical aspects, microbiological aspects, and protection and control of water quality.

The Committee selected the chemical substances to be evaluated in the first addendum, designated coordinators for each major group of chemicals, and identified lead institutions for the preparation of health criteria documents evaluating the risks for human health from exposure to the particular chemicals in drinking-water. Institutions from Canada, Finland, France, Germany, the Netherlands, Sweden, the United Kingdom, and the USA, as well as the ILO/UNEP/WHO International Programme on Chemical Safety (IPCS), prepared the requested health criteria documents.

Under the responsibility of the designated coordinators for each chemical group, the draft health criteria documents were submitted to a number of scientific institutions and selected experts for peer review. Comments were taken into consideration by the coordinators and authors before the documents were submitted for final evaluation by the 1997 Working Group Meeting on Chemical Substances in Drinking-Water. The Working Group reviewed the health risk assessments and, where appropriate, decided upon guideline values.

During the preparation of draft health criteria documents and at the 1997 Working Group Meeting, careful consideration was always given to previous risk assessments carried out by IPCS in its Environmental Health Criteria monographs, the International Agency for Research on Cancer, the Joint FAO/WHO Meetings on Pesticide Residues, and the Joint FAO/WHO Expert Committee on Food Additives, which evaluates contaminants such as nitrate and nitrite in addition to food additives.

Evaluations of chemical substances given in this Addendum supersede evaluations previously published in Volume 1 and Volume 2 of the *Guidelines*.

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