### WORLD HEALTH ORGANIZATION MONOGRAPH SERIES No. 63

SURVEILLANCE OF DRINKING-WATER QUALITY

# SURVEILLANCE OF DRINKING-WATER QUALITY

WORLD HEALTH ORGANIZATION GENEVA

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#### **PREFACE**

For some time the World Health Organization has been concerned about the lack of a single, comprehensive, but concise, source of practical information about, and guidelines for, public health surveillance of drinking-water quality in the developing countries. Surprisingly, few comprehensive studies of this subject have been undertaken, and there are few developing countries where formally organized, nationwide, fully adequate, and effective surveillance programmes have been implemented.

Major efforts have been made, and more are underway, to provide safe and convenient piped water supplies to many of the world's population. The benefits of safe and adequate drinking-water supplies are not automatically assured with the construction of waterworks and distribution systems. Indeed, experience has shown that without proper surveillance the water supply system itself may become an effective channel for spreading disease.

In this publication are assembled information and guidelines for planning, organizing, and operating programmes for surveillance of drinking-water quality at the national or regional level in the developing countries. The monograph is intended for use by officials with public health responsibilities and those responsible for the production and distribution of drinking-water, engineers and sanitarians engaged in public health or water supply activities, water treatment plant operators, and other persons who have a professional interest in water supply.

The guidelines presented here originated from a study of methods and procedures for the surveillance of drinking-water quality in developing countries initiated in 1968 under an arrangement between WHO and the University of North Carolina at Chapel Hill, USA, with Professor F. E. McJunkin as principal investigator. Information was obtained through on-site reviews of surveillance programmes in some eight countries; from correspondence and interviews with health and water supply officials and members of the WHO secretariat dealing with problems of environmental health; from comments and suggestions made by the panel of reviewers; by review of WHO publications and unpublished documents, especially country reports, questionnaires, and cholera team reports; and by review of the technical and scientific literature.

A draft of the guidelines prepared by Professor McJunkin was circulated to a number of reviewers and revised in the light of their comments and suggestions; a list of the reviewers is given in Annex 10. The revised draft was then discussed at a meeting of advisers convened in Geneva from 18 to 24 February 1975, when the

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