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Risk Assessment of Cryptosporidium in Drinking Water



**Public Health and Environment
Water, Sanitation, Hygiene & Health**



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ACKNOWLEDGEMENTS

The authors thank Tatsuro Endo, Steven Schaub, Stig Regli, Jeff Swartout and Mike Messner for their helpful comments on the draft of this document.

PREFACE

Background

In the process of revision of the WHO Guidelines for Drinking Water Quality, the need for a fundamental change in the guidelines for microbial safety has been identified. The former Guidelines were focussed on end-product monitoring for *E. coli*. This system is reactive; the warning signal is received at the time that the consumer's health is already at risk. Outbreaks of disease through drinking water that meets this Guideline have been reported. This also indicates that meeting the Guideline is not always a safeguard against transmission of illness through that same drinking water. Developments in microbial risk assessment and in a risk management framework in the food industry have indicated that a preventive, risk based approach can provide the necessary expansion of the current approach to protect the consumer against health effects from drinking water.

In subsequent meetings in Medmenham (1994), Stockholm (1999), Berlin (2000) and Adelaide (2001), the microbiology working group of the revision of the WHO guidelines has been progressing towards the complementation of the current microbiological guidelines with the requirement for a Water Safety Plan. Such a plan is a systematic inventory of the hazards, an evaluation of the significance of these hazards and of the efficacy of control measures taken. This changes the focus of attention to verification that the safeguards in the water supply chain (catchment and source protection, treatment processes, distribution system integrity) are in place and effective.

In this new approach to the new Guidelines, the need for background documents that illustrate the approach and discuss the available scientific information was identified. This document on *Cryptosporidium* is the first in a series of microbiological Environmental Health Criteria (EHC) that will serve as background documents.

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