Integrating water quality testing into household surveys

WHO/UNICEF JOINT MONITORING PROGRAMME
FOR WATER SUPPLY, SANITATION AND HYGIENE

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Integrating water quality testing into household surveys
Thematic report on drinking water

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Introduction

Access to safe drinking water is a basic human right and an essential foundation of public health. Obtaining reliable information on the safety of drinking water supplies has historically been a major challenge for national and global monitoring. Since 2017, the World Health Organization (WHO) and United Nations Children's Fund (UNICEF) Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) reports on progress towards Sustainable Development Goal (SDG) target 6.1 have included estimates on the quality of drinking water supplies[1]. This represents a significant advance in global monitoring of drinking water services.

In many low- and middle-income countries, existing water quality data from regulatory authorities is limited, especially for rural areas and populations using non-piped supplies. To complement the regulator data, an increasing number of low- and middle-income countries are collecting nationally or sub-nationally representative data on drinking water quality through multi-topic household surveys.

Beginning in 2012, a water quality module was developed and standardized by the WHO/UNICEF JMP in collaboration with UNICEF's Multiple Indicator Cluster Survey (MICS) programme. Integration of water quality testing has become a feasible option due to the increased availability of affordable and accurate testing procedures and their adaptation for use by household survey experts. The growing interest in ensuring the implementation of water quality testing in these surveys can, to a large extent, be attributed to the incorporation of drinking water quality in the SDG global indicator for 'safely managed drinking water services'.

This thematic report presents the experience of using the water quality module in representative household surveys.

[1] World Health Organization and the United Nations Children's Fund, *Progress on Drinking Water, Sanitation and Hygiene: 2017 update and SDG baselines*, WHO and UNICEF, Geneva, 2017. <https://washdata.org/report/jmp-2017-report-final>.

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Summary of findings

The integration of water quality testing into national household surveys has enabled the collection of data on the presence of *Escherichia coli* (*E. coli*), an indicator of faecal contamination. Some surveys tested for additional

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