# Water safety planning



## A roadmap to supporting resources

The following publications by the World Health Organization (WHO) and partners provide guidance on various aspects of water safety planning, such as water safety plan (WSP) development, implementation, training, advocacy and auditing. Many of these resources are available in multiple languages — see the links provided. These, and other WSP materials, can be found on the WHO's Water, Sanitation and Hygiene website (http://www.who.int/water\_sanitation\_health/en/) and on the global WSP online forum, Water Safety Portal (www. wsportal.org).

# GUIDANCE ON WSP DEVELOPMENT AND IMPLEMENTATION



Guidelines for drinking-water quality (fourth edition incorporating the first addendum)

WHO (2017)

http://www.who.int/water\_sanitation\_health/publications/drinking-water-quality-guidelines-4-including-1st-addendum/en/

The global reference on drinking-water safety and good practice, the guidelines position WSPs as a core element of WHO's framework for safe drinking-water and outline the principles and key elements of a WSP for policy-makers.

#### Water safety plan manual: Stepby-step risk management for drinking-water suppliers

WHO & IWA (2009)

http://www.who.int/water\_ sanitation\_health/publications/ publication 9789241562638/en/



Provides detailed guidance for practitioners on developing and implementing a WSP, particularly for organized drinking-water supplies managed by a water utility or similar entity.



Water safety planning for small community water supplies: Stepby-step risk management guidance for drinking-water supplies in small communities

WHO (2012)

http://www.who.int/water\_sanitation\_health/publications/small-comm-water\_supplies/en/

Provides detailed guidance on developing and implementing a simplified WSP for a small community water supply; primarily directed at government officials or NGOs supporting drinking-water activities.

# Water safety plan: A field guide to improving drinking-water safety in small communities

WHO (2014)

http://www.euro.who.int/en/publications/ abstracts/water-safety-plan-a-field-guideto-improving-drinking-water-safety-in-smallcommunities



A complement to the guidance document *Water safety planning* for small community water supplies, this field guide provides templates and tools to assist in the practical development of WSPs by local institutions working directly in drinking-water supply in small communities.

# GUIDANCE ON RISK MANAGEMENT AT SPECIFIC POINTS IN THE WATER SUPPLY SYSTEM



Protecting groundwater for health: Managing the quality of drinking-water

WHO (2006)

http://www.who.int/water\_sanitation\_health/publications/protecting\_groundwater/en/

Provides guidance for health, environment and water sector professionals on the application of risk management approaches to protect groundwater sources of drinking-water, presenting a structured approach to analysing hazards to groundwater quality, assessing and prioritizing the risks they pose, and developing management strategies for their control.

#### Protecting surface water for health: Identifying, assessing and managing drinking-water quality risks in surfacewater catchments

WHO (2016)

http://www.who.int/water\_sanitation\_health/publications/pswh/en/



The partner publication to *Protecting groundwater for health*, this document provides practical guidance for health, environment and water sector professionals on the application of water safety planning to protect surface water sources of drinking-water.



#### Water safety in distribution systems

WHO (2014)

http://www.who.int/water\_sanitation\_health/publications/water-safety-in-distribution-system/en/

Provides guidance for water suppliers and regulators on applying the WSP approach to enhance risk management and investment planning in distribution systems.

#### Water safety in buildings

WHO (2011)

http://www.who.int/water\_sanitation\_health/publications/2011/9789241548106/en/

Provides guidance for those responsible for managing water supply systems in buildings on applying the WSP approach to improve risk management and ensure water safety is

maintained within the building (e.g. hospitals, schools, child- and aged-care facilities, hotels, apartment blocks).





#### **POLICY GUIDANCE**



Think big start small scale up: A road map to support country-level implementation of water safety plans WHO & IWA (2010)

http://www.who.int/water\_sanitation\_health/publications/thinkbig-startsmall/en/

Provides guidance on introducing and scaling up WSPs nationally, outlining steps to building an enabling environment to support and sustain WSPs; primarily directed at government entities tasked with developing or revising drinking-water quality policies, programmes and regulations.

#### Taking policy action to improve smallscale water supply and sanitation systems: Tools and good practices from the pan-European region

WHO (2016)

http://www.euro.who.int/en/publications/abstracts/taking-policy-action-to-improve-small-scale-water-supply-and-sanitation-systems.-tools-and-good-practices-from-the-pan-european-region-2016



Presents policy-makers with a range of regulatory, planning, financial and educational instruments to support effective policy and promote good practice (including water safety planning) to improve small-scale water supply and sanitation systems.

#### AUDIT/ASSESSMENT GUIDANCE AND TOOLS



## A practical guide to auditing water safety plans

WHO & IWA (2016)

http://www.who.int/water\_sanitation\_health/publications/auditing-water-safety-plans/en/

Provides practical guidance and tools for water suppliers and surveillance authorities on the development and implementation of WSP auditing schemes to support the continuous improvement and sustainability of WSPs.

### Water safety plan quality assurance tool

WHO & IWA (2013)

http://www.who.int/water\_sanitation\_ health/publications/water-safetyquality-assurance/en/



A tool designed to guide organized drinking-water supplies through a WSP self-assessment to determine the WSP's completeness and the effectiveness of its implementation.

#### TRAINING MATERIALS



#### Water safety plan training package

WHO & IWA (2012)

http://www.who.int/water\_sanitation\_health/publications/wsp\_training\_package/en/

A training package comprising a facilitator handbook, participant workbook and accompanying PowerPoint slides, aligned with the *Water safety plan manual* and designed to facilitate delivery of a five-day WSP training event.

# Capacity training on urban water safety planning – training modules

VHO (2016)

http://www.searo.who.int/entity/water\_sanitation/documents/WSP\_Training\_Modules/en/

A detailed training package to facilitate delivery of a three- or five-day WSP training

event, drawing on the *Water safety plan training package* and field experiences from numerous South-East Asian and Western Pacific countries. The package comprises a presenter's guide, participant handbook, PowerPoint slides with slide notes and various activities and worksheets for participants.



Operational monitoring plan development: A guide to strengthening operational monitoring practices in small- to medium-sized water supplies WHO (2017)

http://www.searo.who.int/entity/water\_sanitation/documents/guide\_watersupplies

Practical guidance and training materials for small- and mediumsized water suppliers, and for those providing training and support to these suppliers, on strengthening operational monitoring practices — a core element of water safety planning. Training materials include a facilitator's guide and PowerPoint slides.

#### Principles and practices of drinkingwater chlorination: A guide to strengthening chlorination practices in small- to medium-sized water supplies

WHO (2017)

http://www.searo.who.int/entity/water\_sanitation/documents/Drinking\_Water\_Chlorination/en/



Practical guidance and training materials for small- and medium-sized water supplies, and for those providing training and support to these suppliers, on strengthening chlorination practices — a common improvement need identified through the WSP process in the South-East Asia and Western Pacific regions. Training materials include a facilitator's guide and PowerPoint slides and are based on training programmes delivered in the regions.

# WSP IMPACT AND ADVOCACY DOCUMENTS



Global status report on water safety plans: A review of proactive risk assessment and risk management practices to ensure the safety of drinking-water

WHO & IWA (2017)

http://www.who.int/water\_sanitation\_health/publications/global-status-report-on-water-safety-plans/en/

Presents information on WSP implementation and the integration of WSPs into the policy environment. It also explores WSP benefits, challenges and future priorities.

#### Water safety plans: Managing drinkingwater quality for public health

WHO (2010)

http://www.who.int/water\_sanitation\_health/water-quality/safety-planning/WHS\_WWD2010\_advocacy\_2010\_2\_en.pdf?ua=1

A brief note on the rationale for the WSP approach, the potential benefits for various stakeholder groups, and the value of incorporating WSPs into policies and regulations.

#### COMING SOON



Strengthening operations and maintenance through water safety planning: A collection of case studies

WHO & IWA, under development http://www.who.int/water\_sanitation\_health/publications/en/

A collection of case studies from around the world demonstrating various operations and maintenance benefits realized through the implementation of WSPs.

## Water safety plan impact assessment guidance note

WHO, under development

A practical tool to facilitate the assessment of outcomes and impacts from WSP implementation, including an indicator framework and data collection forms for field workers.

#### IN PROGRESS



#### **WSP NETWORK**



Water Safety Portal WHO & IWA (website) http://www.wsportal.org/

An online global forum for all WSP stakeholders to find resources, share experiences and keep up-to-date on WSP news and events.

#### WSP LINKAGES TO OTHER INITIATIVES



Water and sanitation for health facility improvement tool (WASH FIT): A practical guide for improving quality of care through water, sanitation and hygiene in health-care facilities

WHO & UNICEF (2017)

http://www.who.int/water\_sanitation\_health/publications/water-and-sanitation-for-health-facility-improvement-tool/en/

Based on the WSP approach, WASH FIT provides practical guidance and tools for health sector professionals and supporting partners in low- and middle-income countries to help improve WASH services and related cleanliness and safety aspects in a health-care facility.

#### Climate-resilient water safety plans: Managing risks associated with climate variability and change

WHO (2017)

http://apps.who.int/iris/bitstream/10665/258722/1/9789241512794-eng.pdf

Provides guidance to WSP teams and other stakeholders on strengthening the climate resilience of water supply systems by applying the WSP approach to identify and manage risks that climate change poses to water quality and quantity.

#### IN PROGRESS



Equity in water safety planning: A guide to integrating equity considerations into the water safety plan process

WHO, under development

Provides guidance to support WSP teams and WSP coordinators in improving equity outcomes through the explicit and systematic inclusion of equity considerations through the WSP process.

# Water safety planning for urban water utilities: Practical guide for ADB staff

ADB & WHO (2017)

https://www.adb.org/documents/urban-watersafety-planning-guide

Practical guidance to ADB project officers on systematically integrating WSP development and implementation into the project cycle for projects that directly influence drinking-water safety.





Sanitation safety planning: Manual for safe use and disposal of wastewater, greywater and excreta WHO (2016)

http://www.who.int/water\_sanitation\_health/publications/ssp-manual/en/

Based on WSP principles, the manual provides step-by-step guidance for various stakeholder groups on effective risk management to ensure the safe use and disposal of human waste. Sanitation safety plans can support WSPs by managing sanitation-related risks impacting the drinking-water supply.

# Water safety planning A roadmap to supporting resources



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