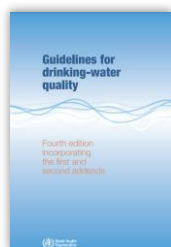


Water safety planning

A roadmap to supporting resources

A water safety plan (WSP) is a proactive and ongoing risk assessment and risk management approach that includes all steps in the water supply chain – from catchment to consumer. WSPs are recommended by the World Health Organization (WHO) as the most effective means to consistently ensure the safety of drinking-water. The following publications by WHO and partners provide guidance on various aspects of water safety planning, including WSP development, implementation, training, advocacy and auditing. Several resources are available in multiple languages.

POLICY GUIDANCE



Guidelines for drinking-water quality

Fourth edition incorporating the first and second addenda

WHO (2022)

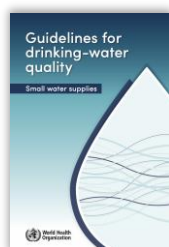
<https://www.who.int/publications/i/item/9789240045064>

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 WSP principles and key elements for policy-makers.

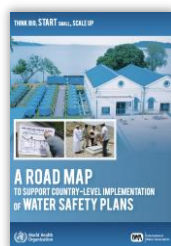
Guidelines for drinking-water quality *Small water supplies*

WHO (2024)

<https://www.who.int/publications/i/item/9789240088740>



Provides clear guidance for decision-makers on the progressive improvement of small water supplies, including through policies and regulations on water safety planning and sanitary inspections to proactively manage risks.



Think big start small scale up

A road map to support country-level implementation of water safety plans

WHO & IWA (2010)

<https://www.who.int/publications/m/item/think-big-start-small-scale-up>

Provides guidance to government entities on introducing and scaling up WSPs nationally, with a focus on building an enabling environment to support and sustain WSPs.

Taking policy action to improve small-scale water supply and sanitation systems

Tools and good practices from the pan-European region

WHO (2016)

<https://www.who.int/europe/publications/i/item/9789289051606>



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

GUIDANCE AND TOOLS FOR WSP DEVELOPMENT AND IMPLEMENTATION



Water safety plan manual *Step-by-step risk management for drinking-water suppliers (second edition)*

WHO (2023)

<https://www.who.int/publications/i/item/9789240067691>

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

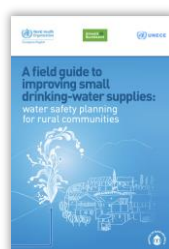
Water safety planning for small community water supplies *Step-by-step risk management guidance for drinking-water supplies in small communities*

WHO (2012)

<https://www.who.int/publications/i/item/9789241548427>



Sets out the principles and steps to develop a simplified WSP for small water supplies that are managed by communities, targeting those who support these water suppliers.



A field guide to improving small drinking-water supplies *Water safety planning for rural communities (second edition)*

WHO (2022)

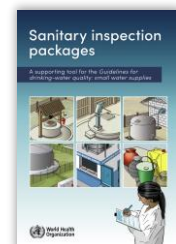
<https://www.who.int/europe/publications/i/item/9789289058414>

A complement to *Water safety planning for small community water supplies*, this field guide provides templates and tools to assist the practical development of WSPs by local institutions supporting water supply service delivery in small communities.

Sanitary inspection packages *A supporting tool for the Guidelines for drinking-water quality: small water supplies*

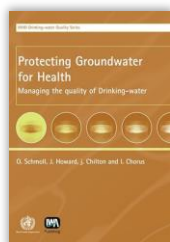
WHO (2024)

<https://www.who.int/publications/i/item/9789240089006>



Supports proactive risk management and drinking-water quality surveillance across a range of water delivery scenarios, and aids the practical implementation of related recommendations in the *Guidelines for drinking-water quality: small water supplies*.

GUIDANCE ON RISK MANAGEMENT AT SPECIFIC POINTS IN THE WATER SUPPLY



Protecting groundwater for health *Managing the quality of drinking-water sources*

WHO (2006)

<https://www.who.int/publications/i/item/9241546689>

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

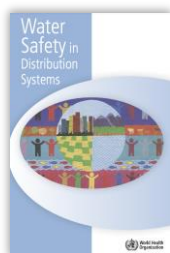
Protecting surface water for health *Identifying, assessing and managing drinking-water quality risks in surface-water catchments*

WHO (2016)

<https://www.who.int/publications/i/item/9789241510554>



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



Water safety in distribution systems

WHO (2014)

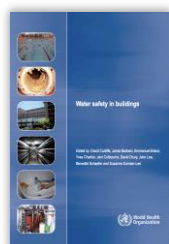
<https://www.who.int/publications/i/item/9789241548892>

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

Water safety in buildings

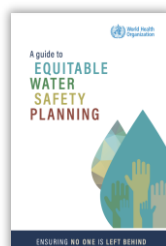
WHO (2011)

<https://www.who.int/publications/i/item/9789241548106>



Provides guidance for those responsible for managing water supplies in buildings on applying the WSP approach to understand and address priority risks to ensure water safety is maintained within the building (e.g. hospitals, schools, child- and aged-care facilities, hotels and apartment blocks).

GUIDANCE ON ADDRESSING EQUITY AND CLIMATE RESILIENCE



A guide to equitable water safety planning *Ensuring no one is left behind*

WHO (2019)

<https://www.who.int/publications/i/item/9789241515313>

Provides guidance for WSP teams and WSP coordinators to improve equity outcomes through the explicit and systematic inclusion of equity considerations through the WSP process.

Climate resilient water safety plans *Managing risks associated with climate variability and change*

WHO (2017)

<https://www.who.int/publications/i/item/9789241512794>



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

AUDIT GUIDANCE



A practical guide to auditing water safety plans

WHO (2016)

<https://www.who.int/publications/i/item/9789241509527>

Provides practical guidance and tools for water suppliers and surveillance authorities on planning for, carrying out and following up on WSP audits to support the continuous improvement and sustainability of WSPs.

TRAINING COURSES, VIDEOS AND WORKSHOP MATERIALS



Water safety planning for urban water supply systems *An introduction*

WHO (2023)

<https://openwho.org/courses/water-safety-planning>

A self-paced course for governments, water suppliers and supporting partners, outlining the principles and steps of the WSP approach and presenting success factors that underpin effective and sustainable WSP implementation.

Water safety plans *Training package*

WHO & IWA (2012)*

<https://www.who.int/publications/m/item/water-safety-plans-training-package>

* Updated training package under development

A training package designed to support delivery of a 5-day WSP training event, aligned with the *Water safety plan manual* and comprising a facilitator's guide, participant workbook and slides.



WSP training video *An introduction to WSP principles and steps*

WHO (2020)

<https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health/water-safety-and-quality/water-safety-planning/water-safety-planning-training-videos>

A virtual training session recording offering a 2-hour overview of WSP principles and steps.

Equitable water safety planning *PowerPoint slides*

WHO (2019)

<https://www.who.int/publications/i/item/9789241515313>

PowerPoint slides aligned with *A guide to equitable water safety planning*, detailing how and where to integrate equity messaging into WSP training events.



Establishing a WSP regulatory audit scheme *Guidance package*

WHO (2022)

<https://wsportal.org/resources/auditing-verification>

Material to support a 3-day workshop on key factors that underpin the development of a national regulatory WSP auditing programme, including narrated slides, facilitator's notes, country examples and participatory worksheets.



Water safety plan auditing *Training package*

WHO (2019)

<https://www.who.int/publications/i/item/9789241509527>

A training package on how to prepare for, carry out and follow up on a WSP audit, aligned with *A guide to auditing water safety plans* and providing everything a trainer needs to lead classroom lessons and field activities.

WSP audit training video *How to carry out a WSP audit*

WHO (2020)



<https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health/water-safety-and-quality/water-safety-planning/water-safety-planning-training-videos>

A virtual training session recording drawing on the material in *Water safety plan auditing: training package*, presented in five segments of one hour or less.



Operational monitoring plan development *A guide to strengthening operational monitoring practices in small to medium-sized water supplies*

WHO (2017)

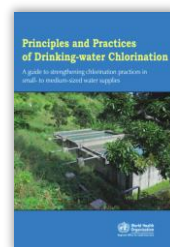
<https://www.who.int/publications/i/item/9789290225379>

Practical guidance and training materials for small- and medium-sized water suppliers and supporting partners, focusing on strengthening operational monitoring practices - a core element of water safety planning.

Principles and practices of drinking-water chlorination *A guide to strengthening chlorination practices in small- to medium-sized water supplies*

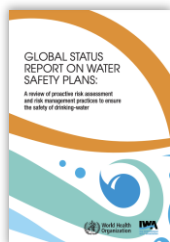
WHO (2017)

<https://www.who.int/publications/i/item/9789290225362>



Practical guidance and training materials for small- and medium-sized water suppliers and supporting partners, focusing on strengthening chlorination practices - a common improvement need identified through a WSP.

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)

<https://www.who.int/publications/i/item/WHO-FWC-WSH-17.03>

Presents information on the status of WSP implementation and the integration of WSPs into the policy environment, as well as WSP benefits, challenges and future priorities.

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

WHO & IWA (2018)

<https://www.who.int/publications/i/item/WHO-CED-PHE-WSH-18.69>



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



Water safety plans
Managing drinking-water quality for public health

WHO (2010)

<https://www.who.int/publications/m/item/water-safety-plans>

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.

WSP NETWORK

Water Safety Portal

WHO & IWA (website)

<https://www.wspportal.org>



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

WSP LINKAGES TO OTHER INITIATIVES



WASH FIT
A practical guide for improving quality of care through water, sanitation and hygiene in health care facilities (second edition)

WHO (2022)

<https://www.who.int/publications/i/item/9789240043237>

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 in health care facilities.

Sanitation safety planning
Manual for step-by-step management for safely managed sanitation systems (second edition)

WHO (2022)

<https://www.who.int/publications/i/item/9789240062887>

Based on WSP principles, this manual provides guidance on the assessment and management of risks to ensure the safe use and disposal of human waste. SSPs can support WSPs by managing sanitation-related risks to drinking-water supplies.



Potable reuse
Guidance for producing safe drinking-water

WHO (2017)

<https://www.who.int/publications/i/item/9789241512770>

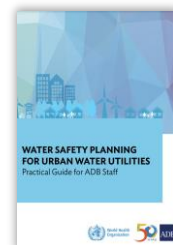
With linkages to *Sanitation safety planning*, this document provides guidance on applying the WSP approach for potable reuse, considering wastewater as the source of drinking-water with impacts on treatment, distribution and supply to consumers.

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

ADB & WHO (2017)

<https://www.adb.org/documents/urban-water-safety-planning-guide>

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



For more information on WSPs, email or visit:

Email: gdwg@who.int

Portal: <https://www.wspportal.org>

Website: <https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health>