Notes from WASH FIT 2026 Meet-Up Series – Session 1

Topic: Water quality in health care facilities
Date: 19 February 2026

1. Meeting overview

The first session of the 2026 WASH FIT Meet-Up Series focused on the role of safe water in health care facilities as a foundational element for infection prevention and control (IPC), quality of care, and resilience in both routine and emergency contexts. Participants included WHO technical staff, national partners, implementers, regional CDC representatives, and research institutions.

The session programme included:

- **Opening and welcome:** Valentina Grossi, WHO
- **Overview of WASH FIT Meet-Ups:** Arabella Hayter, WHO
- **Introduction to water safety in health care facilities:** Rory Moses McKeown, WHO
- **Water safety planning in WASH FIT:** Alla Yushchuk, WHO Ukraine
- **Water quality test programme, Bangladesh:** Dr Zahid Hayat Mahmud, iccdr,b
- **Moderated Q&A**
- **Closing words:** Valentina Grossi, WHO

2. Resources

Slides are available at:
https://www.washinhcf.org/resource/wash-fit-meet-up-no-1-water-quality-management-in-health-care-facilities/
Recording available at: https://www.youtube.com/watch?v=9ETTqJEY43U&t=3s

2. Key technical messages

Safe water as a clinical risk control measure

Presentations emphasized that safe water in health care facilities:

- protects vulnerable patients
- prevents microbial and chemical harm from drinking-water
- reduces risks associated with pathogens such as *Legionella* in water systems
- enables effective environmental cleaning and IPC practices
- facilitates disinfection and medical equipment reprocessing
- supports high-risk clinical services (e.g. dialysis)

Ensuring these outcomes requires water that is:

- available on site from an improved source
- accessible at all points of care
- safely treated and reliable
- available in sufficient quantity (minimum two days' supply)

Risk-based water safety management

Presenters highlighted the importance of adopting a **risk-based approach** to water safety, particularly in emergency and fragile contexts where infrastructure, monitoring capacity, and technical expertise may be limited. Risk-based approaches supported through WASH FIT can:

- enhance patient safety and IPC
- improve understanding of facility water systems
- enable more efficient use of limited resources
- support faster detection and response
- allow steady, progressive improvement aligned with national and global standards.

Routine sanitary inspection and operational monitoring were identified as practical tools to support this approach where laboratory testing capacity is unavailable.

3. Country Experience

Ukraine

WASH FIT implementation in Ukraine since 2022 includes:

- application across more than 200 HCFs in frontline areas
- adaptation of WASH FIT indicators to national legislation
- integration with the Infection Prevention and Control Assessment Framework (IPCAF)
- extension of indicators within HeRAMS self-reporting systems
- translation of WASH FIT guidance into Ukrainian

As of December 2025:

- 92.8% (9,956) of reporting facilities had water available
- however, 744 facilities reported no or partial service, primarily in primary health care settings

Operational challenges identified included:

- limited knowledge of water needs estimation
- inadequate maintenance of storage systems
- insufficient point-of-use water quality testing
- lack of distribution systems for technical water
- absence of internal SOPs or water safety policies

Priority actions discussed included:

- engagement of regional CDCs for methodological support
- implementation of the Quick Guide for managing water supply systems in HCFs
- strengthening national regulations on storage maintenance and water needs estimation

Bangladesh

Preliminary findings from a comprehensive national-level hospital water quality assessment (181 facilities) highlighted contamination risks within facility distribution systems:

- ESBL[1]-producing *E. coli* detected in 113 hospitals
- KPC[2]-producing *E. coli* detected in 38 hospitals
- microbial contamination associated with tap outlets in high-risk clinical areas

These findings underscore the role of internal plumbing systems and fixtures (e.g. taps) as potential reservoirs of antimicrobial-resistant organisms and the need for facility-level hazard control within water safety planning.

4. Highlights of Q&A and discussion

[1] Extended-spectrum beta-lactamase

[2] Klebsiella pneumoniae carbapenemase

- **Rapid monitoring in emergency settings:**
  Participants noted that in crisis contexts (e.g. Ukraine), rapid field-deployable tools can support water safety monitoring, including portable molecular tests for specific pathogens, rapid *E. coli* test kits, and proxy operational parameters (pH, turbidity, free chlorine residual).
- **Point-of-use (POU) treatment:**
  POU treatment was highlighted as an important control measure where source water quality is unknown or potentially compromised. Chlorination was identified as a low-cost intervention, with pre-filtration advisable where turbidity or organic load is high.
- **Monitoring without laboratory testing:**
  Operational monitoring can include inspection of storage tank integrity, protection of boreholes or wells, and assessment of hygiene conditions of taps and storage containers in clinical areas. Sanitary inspection packages can be adapted for health care facility contexts.
- **Understanding baseline water quality:**
  Facilities were advised to request routine monitoring data from suppliers or regulators, conduct sanitary inspections, and map water sources, storage arrangements, and distribution systems.
- **Role of regional CDCs:**
  Regional CDCs can provide methodological support and technical guidance on operational monitoring, support implementation of facility-level water safety tools, and assist with internal SOP development and estimation of facility water needs.
- **Practical tools for chlorine dosing:**
  WHO water safety planning training materials include foundational guidance and example SOPs for chlorination that may be adapted for health care facility use. Participants were also directed to operational resources (e.g. CAWST) supporting chlorine dosage calculations and field implementation.
- **Management of AMR risks in taps and system "hot spots":**
  Evidence from Bangladesh highlighted taps and internal plumbing as potential reservoirs of antimicrobial-resistant organisms, reinforcing the need for facility-level hazard mapping and routine sanitary inspection.
- **Integration of water quality testing kits into health supply chains:**
  Participants raised the possibility of supplying onsite testing kits through existing drug distribution systems (e.g. biannual provision).
- **Application of WASH FIT in rural HCFs managing suspected infectious disease cases (e.g. Mpox):**
  Onsite water quality testing kits and point-of-use treatment technologies may serve as interim control measures where water quality is unknown or at risk of contamination.