

Water Quality Testing and Safety

Standard operating procedure (SOP) | WAT-SOP-001

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Title	Water Quality Testing and Safety
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Prepared by	{{roles.quality_lead.name}}, Quality lead
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Replaces	None (new document)
Standards and criteria supported	Standard 2B, criterion 2B.3 (non-negotiable)
Evidence basis	E-009
Status of this document	Recommended best-practice model. A hospital may adopt, adapt or replace it with an equivalent that meets the same criteria.

At a glance: what to do

1. Test the water on the schedule the committee sets, at the points listed in the schedule.
2. Record every result on WAT-FRM-001 with the date and who tested.
3. If a result is outside the limit, act at once: isolate the outlet, inform the infection prevention lead, and retest.
4. Keep records for the last 3 months available for audit.

Stop and get help straight away if: a result is outside the limit for a clinical outlet, or the supply is interrupted for patient care areas.

1. Purpose

To make sure water used for drinking, washing, dialysis, sterilisation and clinical care is safe, tested on a schedule, and that interruptions are managed [EC].

2. Scope

Applies to	Facilities, infection prevention, laboratory and clinical staff who use water
Locations	All water outlets and storage tanks at {{facility.legal_name}}
When	On the test schedule, after any repair or interruption, and after any abnormal result
Does not apply to	Dialysis water, which has its own standard (SOP-105 and the dialysis service)

3. Definitions and abbreviations

Term	Meaning in this SOP
Outlet	Any tap, shower or dispensing point
Water test	A test for microbiological and chemical quality as the schedule sets
Limit	The value set by the national standard or the committee (EC) above which action is needed

4. Background and rationale

Municipal supply is not automatically safe inside a building. Pipes, tanks and stagnant outlets can introduce contamination, including Legionella and other organisms. Criterion 2B.3 requires testing on a schedule and a plan for interruption.

5. Responsibilities

Role	Duties in this SOP	Competence needed
Facilities manager	Owns the schedule; arranges sampling and repairs; keeps the plan	Facilities and water systems competence
Infection prevention lead	Advises on results; decides on outlet isolation with the facilities manager	Infection prevention competence
Laboratory (or accredited external lab)	Tests samples and reports results within the agreed time	Accredited testing

6. Equipment, materials and resources

Item	Specification or standard	Check before use
Sampling kit	Sterile bottles and labels, supplied by the testing lab	In date
Water test schedule (WAT-PLN-001)	Current	Available to facilities
Water test record (WAT-FRM-001)	Current	Used for each result

7. Safety and infection prevention

- Wear gloves when sampling. Wash hands before and after.
- Do not use a tap that is isolated or flagged as unsafe.
- Keep disinfectant and cleaning products away from sampling points.

8. Before you start

- Check the schedule for the day.
- Check the sample bottles are sterile and labelled.

9. Procedure

Follow the steps in order. Where a step says "If", take the action for the case that applies. Do not skip a step. If a step cannot be done, use section 11 and section 12.

Step	Action	How to do it	Key point
1	Take the sample on schedule.	• Sample from the points on the schedule, using the sampling method of the lab. • Label with date, time, point and sampler. • Send to the lab within the time the lab requires.	A sample from the wrong point or after flushing the tap gives a false result.
2	Record the result.	• Enter each result on WAT-FRM-001 when received, with the limit and the status (within limit or not). • File the lab report.	The record must match the lab report.
3	If a result is outside the limit.	• Inform the infection prevention lead and the facilities manager the same day. • Isolate the outlet and label it "do not use for drinking or clinical use". • Flush and disinfect the outlet as the plan says, then retest. • Record each step and the time.	An isolated outlet is safer than a suspicious one still in use.
4	Respond to interruptions.	• Follow the contingency plan (WAT-PLN-001): tell the	The plan is what

Step	Action	How to do it	Key point
		clinical teams, use the stored water supply, and restrict use to essential purposes. • Record the start and end of the interruption and the actions.	keeps patients safe while the supply is off.
5	Review the results.	• Review all results each quarter with the infection prevention lead. • Look for trends and repeated failures at the same point.	A repeated failure at one point means the pipework or the outlet needs fixing, not just retesting.

Decision points

- If a result is outside the limit for a patient care outlet, the outlet is out of use until retested within limit.

10. Special situations

Situation	What to do
After any repair or new plumbing	Test before use, using the post-repair test (EC).

11. Problems and escalation

- Out-of-limit results and interruptions go to the infection prevention lead and the chief executive the same day.

12. Monitoring and compliance

What is checked	Target	How often	Who	If the target is missed
Tests done on schedule	100%	Monthly	Facilities manager	Escalate to chief executive
Out-of-limit results acted on the same day	100%	Each result	Infection prevention lead	Review with chief executive
Interruptions with plan followed and recorded	100%	Each event	Facilities manager	Review of plan

13. Records

Record	Where it is kept	Kept for
WAT-FRM-001 Water Test Record	Facilities file	At least 3 months on site, then archived for {{facility.records_retention_years}} years
Lab reports	Facilities file	{{facility.records_retention_years}} years

14. Training and competence

- Facilities staff are trained in sampling and in responding to results (EC).
- Clinical staff are briefed on the interruption plan.

15. Related documents

ID	Title	Relationship
WAT-PLN-001	Water Interruption Contingency Plan	Used in step 4
WAT-FRM-001	Water Test Record	Used in step 2
SOP-037	Infection Prevention and Control Procedure (generic)	Hand washing with safe water

ID	Title	Relationship
SOP-105	Dialysis Water Testing Standard (generic)	Separate standard for dialysis

16. Evidence

ID	Source and status
E-009	ASF Expert Committee consensus. Test parameters, frequency and limits must be set against national drinking water and healthcare water standards before approval.

EC = ASF Expert Committee consensus. Items marked EC are reviewed by the Committee each year.

17. Change history

Version	Date	What changed	Approver and signature
1.0	{{document.effective_date}}	First version	Approved by the ASF Expert Committee
1.1	{{document.effective_date}}	Internal quality review: corrected cross-references, status wording and document control	Approved by the ASF Expert Committee