

Collecting a drinking water sample for microbiological analysis

NSW Health Drinking Water Monitoring Program

Sample Container

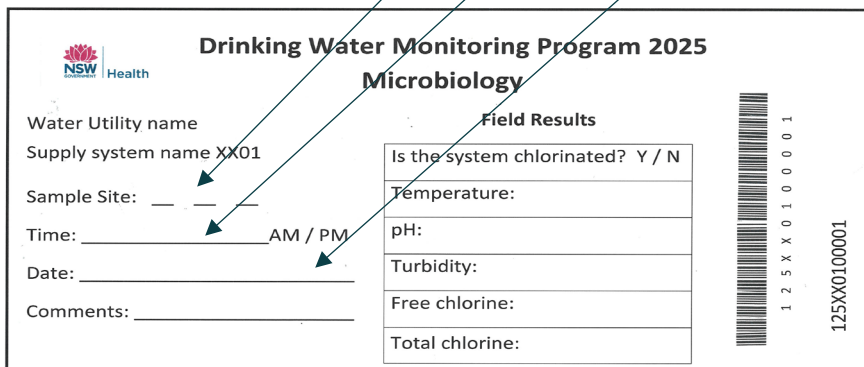
- Use a sterile leak-proof 250mL PET container with sufficient sodium thiosulphate to neutralise residual chlorine in the water sample.

Label

- Use a NSW Health barcoded label for the correct supply system, current year and sample type.

Sample Type	Label Colour	Barcode Starts With
Allocated Microbiology	White	1
Repeat	Pink	6
Additional	Blue	8

- Use a waterproof pen to record the site code, time and date of collection.



The image shows a sample of the 'Drinking Water Monitoring Program 2025 Microbiology' label. The label is divided into several sections:

- Header:** NSW Health logo, 'Drinking Water Monitoring Program 2025', and 'Microbiology'.
- Text Fields:** 'Water Utility name', 'Supply system name XX01', 'Sample Site: ___ ___', 'Time: ___:___ AM / PM', 'Date: _____', and 'Comments: _____'.
- Field Results Table:**

Is the system chlorinated? Y / N
Temperature:
pH:
Turbidity:
Free chlorine:
Total chlorine:
- Barcode:** A vertical barcode on the right side with the number '125XX0100001' printed vertically next to it.

 Arrows from the text above point to the 'Sample Site', 'Time', and 'Date' fields on the label.

- Ensuring that the outside surface of the container is dry, place the label evenly around the sample bottle (not on the lid) so that the entire barcode can be scanned at the laboratory.

Preparing the Tap

- Ensure the tap is clean, free of attachments and is in good working order.
- Flush the water for 2 to 3 minutes.
- Disinfect the tap prior to taking the sample, using one of the following methods:
 - Disinfection by flaming:* For metal taps without plastic fittings or other heat-sensitive components, flame the tap, starting at the nozzle and working back to the body of the tap until the water in the nozzle boils. After flaming, run the water to waste until cool before taking the sample.
 - Disinfection where flaming is not appropriate:* Dip the mouth of the tap for 2 to 3 minutes in a beaker containing sodium hypochlorite solution (approximately 1g/L available chlorine),

ethanol (70%) or isopropanol (70%). Alternatively, a swab or wash bottle or similar may be used to disinfect the tap on the outside and as much of the inside as possible. Subsequently, run the water just long enough to ensure that the sample has no residual disinfectant effect.

Precautions When Taking the Sample

- Take care not to contaminate the sample during collection.
- Do not rinse the container before taking the sample.
- Do not carry out field tests from this bottle.
- If taking both a microbiology and chemistry sample, take the microbiology sample first.

Collecting the Sample

- Reduce the water flow to prevent splashing but keep the tap running.
- Remove the screw cap and hold it without touching the inside of the cap while taking the sample.
- Fill the bottle only to just above the shoulder. Do not fill all the way to the top or let the bottle overflow. A minimum volume of 200 mL is required.
- Carefully replace the cap.

Field results

- Take a second sample at the same time as the Microbiology sample is collected to carry out field tests (temperature, pH, turbidity, free chlorine and total chlorine).
- Record the results on the Microbiology label.

Drinking Water Monitoring Program 2025	
Microbiology	
Water Utility name	Field Results
Supply system name XX01	Is the system chlorinated? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Sample Site: <u>Q Q L</u>	Temperature: <u>23.6°C</u>
Time: <u>11:15</u> (AM) PM	pH: <u>7.8</u>
Date: <u>3/1/2025</u>	Turbidity: <u>2.3 NTU</u>
Comments:	Free chlorine: <u>0.41 mg/L</u>
	Total chlorine: <u>0.55 mg/L</u>

Transporting Samples to the Laboratory

- Pack the sample into an insulated container with sufficient freezer bricks to keep the sample cool ($5\pm 3^{\circ}\text{C}$) during transportation. Do not freeze the sample.
- Attach a copy of the NSW Health Pathology - Westmead address label to the insulated container.
- Send/deliver the samples to the laboratory so that testing may begin within 24 hours of collection.

URGENT WATER MICROBIOLOGY SAMPLES
Delivery Address NSW Health Pathology Westmead – Microbiology Central Specimen Reception (CSR) Level 2, Block I, Institute Road WESTMEAD NSW 2145
After hours number: 0419 215 490
FRAGILE