

How to take water samples



Following these sampling guidelines will help ensure your water samples remain stable and give you the most accurate results.

Before starting, get advice on sample bottle type and size, sampling procedures and how to transport samples to the accredited laboratory you use to analyse the samples.

Collect water samples using a sterile container from the source, where the water is stored and at the end of a drinker line.

Do

- Use a clean, sterile bottle.
- Collect samples in an approved sampling bottle.
- Complete a requisition form.
- Label the bottle (not the lid) before sampling.
- Adequately flush the line before you begin.
- Disinfect the tap using an approved method.
- Take microbiological samples first.

Do not

- Touch the inside of the bottle or allow contact between the bottle and the tap.
- Rinse the bottle.
- Put caps on the ground while sampling.
- Transport drinking water samples with other types of water samples, e.g. wastewater.

Sampling points

Each farm may require samples from multiple sampling points. Label each sample with the farm name, sampling position and date.

This fact sheet was developed as part of the *Training and extension for the Australian chicken meat industry* project (PRJ-011920). This project supports the adoption of innovation and research and development outcomes for the Australian chicken meat industry.

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Raw source water is the point at which the water comes onto the farm, e.g. mains, river, dam, bore.

Sampling after water treatment, pre-treatment and sanitisation indicates the effectiveness of treatments and disinfection.

The far end of the water line is the furthest point of the furthest spur from where the water enters the farm, and indicates the quality of water after it has passed through the maximum length of farm plumbing.

General sampling procedure

1. Clearly label the sample bottle.
2. Turn the tap/drinker fully on and allow the water to run for at least 30 seconds. This flushes the interior of the nozzle and discharges any stagnant water.
3. Open the bottle—keep the cap but don't touch inside it. Do not empty any preservative from the bottle!
4. Hold the bottle near the base of the tap to get the sample.
5. Put the cap on the bottle immediately. Make sure the cap is secure, but not over-tight.
6. Fill out the requisition form.
7. Put the sample in a cooler filled with ice packs.
8. Reassemble water line and drinker components, and check water delivery at drinkers.
9. Arrange for samples to be transported to the laboratory.

Water samples must be kept within a specific temperature range during transport to keep the sample in the best condition possible and ensure the test results are accurate. Different types of samples have different requirements, and these are summarised in the following table.



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| Sample type | Requirements |
|---|--|
| All microbiological samples | Delivered within six hours of sampling or up to 24 hours if kept below 6 °C (not frozen) |
| Chemistry for standard chemical analysis | Delivered below 10 °C (not frozen) |
| Environmental water or sewage for chemical and microbiological analysis | Delivered within six hours of sampling or up to 24 hours if kept below 6 °C (not frozen) |

Note: for all other chemistry on drinking water, please contact the laboratory for advice.

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These temperature control requirements for water samples are based on the requirements of the following organisations and guidelines:

- [ISO 17025:2017—General requirements for the competence of testing and calibration laboratories.](#)
- [Australian drinking water guidelines](#) produced by the National Health and Medical Research Council and the Natural Resource Management Ministerial Council.
- [Monitoring and sampling manual](#) produced by the Department of Environment and Science, Queensland.



More information

- Download the [Industry best practice manual for water quality management and sterilisation on farm \(PDF, 2.6MB\)](#) or view the [online version](#).

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