



Standard drinking water test

Water can dissolve many minerals or chemicals and transport microbiological contaminants. The purpose of this fact sheet is to provide you with information about how you can test your water to prove that it is safe to drink. The Standard Drinking Water Test (SDWT) outlined in this fact sheet has been created to detect chemical and microbiological contaminants that are most commonly found in Western Australia waters.

The Department of Health and participating chemical and microbiological laboratories have endorsed the chemical and microbiological tests contained in the SDWT.

The Standard Drinking Water Test will tell you:

- how safe your water is for drinking purposes
- the levels of contamination in your drinking water
- the aesthetic quality of your drinking water.

Standard Drinking Water Test tests conducted by participating laboratories comply with National Association of Testing Authorities (NATA) requirements. Results provided by these laboratories are accepted by the Department of Health.

What will be tested?

The SDWT has two components: Microbiological test and chemical quality test.

Microbiological tests

The microbiological test will identify total coliforms (a type of bacteria) and faecal coliforms in drinking water. The total coliform test will show the total bacterial loading found in the water sample. The faecal coliform test will indicate the level of faecal contamination in the water and how safe the water is to drink.

Chemical quality tests

The chemical quality test is made up of a range of chemical elements and compounds.

Some of the elements are heavy metals that may pose a risk to your health while others may only affect the taste, odour and appearance of the water (These are called 'aesthetic' characteristics).

The list of Chemical quality tests can be found in Appendix 1.

Further chemical testing may be required:

- when a more comprehensive assessment of water quality is needed
or
- where specific hazards occur in the catchment area (see below).



How much will the test cost?

The cost varies between different laboratories and prices may increase over time.

Please contact the laboratories listed in Appendix 2 to obtain a quote.

What should I do before I take a water sample?

Before you take a sample, call the laboratories listed in Appendix 2 to obtain sampling bottles and information on the correct sampling procedure. Please note that your sample will not provide you with accurate information unless the:

- correct sample bottles are used
- correct volume is taken
- sample is stored at the required temperature
- sample is transported to and arrives at the laboratory in the correct time
- correct procedure is used to take the sample.

What do the results mean?

The Department of Health is able to interpret laboratory results and provide you with advice on how to make your water safe to drink. Microbiological and chemical laboratories may also be able to assist you with additional technical advice. However, they are not in a position to provide you with health related advice.

Will the standard drinking water test, test for all contaminants?

No. The catchment or source of your drinking water can affect the water quality in many ways. Water can dissolve chemicals

and transport microbiological contaminants while it travels through or across the catchment area. It is important that you identify the hazards that occur in or on the catchment area before you test the water.

What are some hazards in my catchment area?

For rainwater collected off roofs look for:

- intensive agriculture, industry or mining
- a chimney from a wood burner
- discharge pipes from roof mounted appliances such as evaporative air-conditioners or hot water systems.

For bore/dam water look for:

- excessive or inappropriate use of fertilisers, animal manures, pesticides, herbicides and insecticides
- poorly maintained septic tanks and other liquid waste disposal systems
- fuel and chemical storage areas
- intensive agriculture, industry or mining
- accidental spills of chemicals.

If you find any of these activities or items in or on the catchment area you may need to ask for additional tests to be completed by the chemical laboratory.

It may also be possible to gain more information about your catchment area by contacting your neighbours, the local government environmental health officer or the Department of Water.



More information:

Additional Information may be obtained by contacting your Local Government Environmental Health Officer

or

Water Unit

Environmental Health Directorate
Department of Health
PO Box 8172
PERTH BUSINESS CENTRE WA 6849

Telephone: 08 9388 4999

Facsimile: 08 9388 4910

This document is available in alternative formats on request for a person with a disability.



Appendix 1

Standard Drinking Water Assay (SDWA)	
Microbiological Tests	
Total coliforms Thermotolerant coliforms or <i>E.coli</i>	
Chemical Quality Test	
Rainwater (Roof Collection)	Other Sources (e.g. Bore / Dam water)
Aluminium Cadmium Chloride Copper Total Iron Lead Nickel Nitrate Nitrite Sodium Sulfate Zinc Alkalinity Calcium Conductivity Colour Hardness Magnesium pH Potassium Total Dissolved Solids Total Suspended Solids Turbidity	Aluminium Cadmium Chloride Copper Total Iron Lead Nickel Nitrate Nitrite Sodium Sulfate Zinc Alkalinity Calcium Conductivity Colour Hardness Magnesium pH Potassium Total Dissolved Solids Total Suspended Solids Turbidity
Further Chemical Testing	
Antimony Arsenic Barium Chromium Manganese Molybdenum Selenium Silver Tin	Ammonia Antimony Arsenic Barium Boron Chromium Total Cyanide Fluoride Hydrogen Sulfide Manganese Molybdenum Selenium Silver Tin Uranium



Appendix 2

	Laboratory	Contact Details
Microbiological and Chemical	ALS Laboratory Group	10 Hod Way MALAGA WA 6090 Telephone: (08) 9209 7655
	MPL Laboratories	16-18 Hayden Court MYAREE WA 6154 Telephone: (08) 9317 2505
	SGS Environmental Services	10 Reid Road Perth International Airport NEWBURN WA 6105 Telephone: (08) 9373 3614
Microbiological ONLY	PathWest (conditionally available for public testing)	J Block, Hospital Avenue QEII Medical Centre Nedlands, WA, 6009 Telephone: (08) 9346 3000
	ProMicro Pty Ltd	31 Green Road HILLARYS WA 6025 Telephone: (08) 9401 5699
	Silliker Microtech Pty Ltd	181 Claisebrook Road PERTH WA 6000 Telephone: (08) 9227 6499
Chemical ONLY	Analytical Reference Laboratory	46-48 Banksia Road WELSHPOOL WA 6106 Telephone: (08) 6263 4444
	ChemCentre	Resources and Chemistry Precinct South Wing, Building 500 South Entrance Drive Curtin University BENTLEY WA 6102 Telephone: (08) 9422 9800
	Genalysis - Intertek	15 Davison Street MADDINGTON WA 6109 Telephone: (08) 9251 8100
	National Measurement Institute	ARRC Building 26 Dick Perry Avenue KENSINGTON WA 6151 Telephone: (08) 9368 8400

