Your drinking water quality

United Utilities
Water for the North West

This factsheet explains the information that is available on the quality of drinking water provided by United Utilities in your area.

Every day United Utilities collects, treats, and supplies water to some seven million people across the north west of England. Ensuring the quality of drinking water is fundamental to the service we provide to you, our customers.

At every stage in the journey from its source to your home we sample, analyse, and continually monitor the effectiveness of water treatment in order to provide you with high quality drinking water. In England and Wales, the Drinking Water Inspectorate (DWI) provides independent scrutiny of drinking water quality checking that it meets the standards laid down in law.

Quality standards

There are a number of regulatory standards for drinking water quality defined within UK legislation with which all water companies must comply.

We carry out frequent tests on the quality of the drinking water we supply and the results of these tests are available to the public.

You can find out more about the quality of drinking water in your area by visiting: **unitedutilities.com/waterquality** and entering your postcode.

Testing water quality

The drinking water quality standards are known as Prescribed Concentrations or Values (PCVs for short) and indicator standards (or specifications).

PCVs relate to water quality parameters of importance to human health and the aesthetic quality of drinking water. Indicator standards relate to water quality parameters which reflect the control of water treatment and distribution of drinking water.

We monitor the quality of water as it leaves our water treatment works and service reservoirs to make sure that standards are being met.

A service reservoir is a structure in which treated water is stored to meet a variable demand for the supply of water.

We also measure the quality of drinking water as it reaches you at your tap.

Our supply region is divided up into water supply zones. The water supplied to a zone is typically from a single source ie: one particular water treatment works or service reservoir or sources of similar water quality.

Water samples are taken at addresses selected at random from customers' taps to monitor water quality in the zone.

The samples are tested at our laboratory and the results compared to the required quality standards (which are shown inside this factsheet). All the test results are recorded on the Drinking Water Register.

The Drinking Water Register

The next sections explain the information contained within the drinking water register.

Heading

The heading shows the number and name of your zone and the period covered by the report. This will normally be the previous 12 months.

Parameter

A parameter is a substance or physical property that can be measured in water. In most cases, each parameter has a quality standard which must be met. Examples of parameters are taste, odour, lead, pesticides, aluminium, iron and manganese.

Minimum, average and maximum

The next three columns show a summary of the results from the tests over the time period. The lowest, average and highest concentrations or values recorded are shown. A '<' symbol shows that the value recorded was below measurable limits. The average is calculated by adding up all the results and dividing by the total number of tests for that parameter.

Units

The concentration or values are expressed in different units. Mostly they are milligrams per litre (mg/l) or micrograms per litre (µg/l) These are very small amounts. One mg/l is one part in 1,000,000 parts of water (or 0.0001%). One µg/l is one part in 1,000,000,000 parts of water (or 0.0000001%).

Regulatory

The maximum concentration or value permissible in a water supply (legal water quality standard).

Samples

The number of samples taken for regulatory purposes in the previous 12 months.

Percentage failed

This column shows the percentage of samples which failed the standard for each parameter during the previous 12 months. This is shown as a percentage of the total number of samples for that parameter. For example, 2% shows that one sample in 50 failed.

In most cases you will see a value of 0 which shows that the water has met the standard every time. We investigate all failures thoroughly and take action to sort out any problems.

For further information



unitedutilities.com/waterquality



0345 672 3723
8am - 8pm Mon to Fri
8am - 6pm Sat
8am - 12 noon Sun

The Drinking Water Inspectorate is responsible for regulating the quality of public water supplies.

Visit their website at:
dwi.defra.gov.uk

Parameter	Description	Standard
1,2-dichloroethane	1, 2-dichloroethane is found in industrial solvents and can be detected occasionally in trace amounts in water sources. Where necessary, solvents are removed using specialist water treatment.	3 µg/l
Aluminium	Aluminium occurs naturally in most water sources and is removed effectively during treatment. Aluminium compounds are used in water treatment to help remove impurities from the source water and are removed during the treatment process.	200 µg/l
Ammonium	Ammonium ions are present naturally in most water sources and are usually broken down during disinfection.	0.5 mg/l
Antimony	Antimony is not found naturally in water sources. Any traces found in water supplies are likely to be due to contact with brass fittings or solders used in domestic plumbing systems.	5 µg/l
Arsenic	Very low concentrations of arsenic can occur naturally in some groundwater sources. Where present, arsenic is removed using specialist treatment.	10 µg/l
Benzene	Benzene is used in industry for making plastics, rubber, resins and synthetic fabrics like nylon and polyester. Benzene can occasionally be detected at trace concentrations in water sources. Where present, benzene is removed in water treatment.	1 µg/l
Benzo(a)pyrene	Benzo(a)pyrene may be found in bitumen linings which were used in the past to protect water mains from corrosion. Traces may occasionally be found in water supplies where bitumen linings are still present.	0.01 µg/l
Boron	Boron can be found occasionally at trace concentrations in some water sources. Boron is found in detergents and can enter water sources which receive treated wastewater. In the North West very few water sources receive treated wastewater.	1 mg/l
Bromate	Bromate can occasionally be detected in water supplies at very low concentrations. It can be caused by the presence of bromide in compounds used during the disinfection of water supplies.	10 µg/l
Cadmium	Very low levels of cadmium can occur naturally in some groundwater sources. Where present, cadmium is removed using specialist treatment.	5 µg/l
Chloride	Chloride occurs naturally in all water sources and is not removed during treatment. The concentrations present in water do not present any risk to health.	250 mg/l
Chromium	Chromium is rarely found in water sources but may be present at low concentrations if the water has passed through rocks containing naturally occurring chromium.	50 µg/l
Coliform bacteria	Coliform bacteria are found widely in the environment and are normally removed during water treatment. They are not necessarily harmful. Their presence in treated water may indicate a possible source of contamination. This can be from the tap. United Utilities always carries out prompt investigations following any detection of coliforms in treated water supplies.	0 per 100 ml
Colony counts after 3 days	This is a measure of the naturally occurring harmless bacteria found in water.	No abnormal change
Colour	Water occasionally has a slight tinge which may be caused by naturally occurring substances.	20 mg/l Pt/Co scale
Conductivity	Conductivity is a measure of the amount of naturally occurring dissolved inorganic substances in water.	2500 µS/cm at 20°C
Copper	The presence of copper in water supplies is usually due to contact with domestic plumbing.	2 mg/l
Cyanide	Cyanide is rarely found in water sources, but may be present at low concentrations if the water source has passed through rocks containing naturally occurring cyanide compounds.	50 µg/l
E.coli/Enterococci/ Clostridium perfringens (including spores)	These organisms are present in the gut of warm-blooded animals. On rare occasions, low numbers of these organisms are detected in treated water. Their presence in treated water indicates possible faecal contamination. Detection of these organisms does not indicate an immediate risk to health. United Utilities always carries out prompt investigations following any detection in treated water supplies.	0 per 100 ml

Parameter	Description	Standard
Fluoride	Fluoride can occur naturally in water sources and can be added to water supplies in some areas as a protection against tooth decay.	1.5 mg/l
Hydrogen ion (pH)	pH measurement gives an indication of the acidity of the water. pH 7 is neutral. pH values below 7 indicate acidic characteristics and pH above 7 indicates alkaline characteristics.	6.5 – 9.5 Indicator specification at customers' taps
Iron	Iron is found naturally in most water sources and is removed effectively during treatment. Iron in water supplies can also occur due to corrosion of iron pipes. The concentrations present in water are not harmful to health. Iron compounds are also used in water treatment to help remove impurities from the source water and are removed during the treatment process.	200 µg/l
Lead	Lead is not normally found in water sources. Any lead found in drinking water is usually due to contact with lead pipes that may be in some customers' properties. United Utilities treats water supplies in order to minimise pick-up of lead from lead pipes.	10 µg/l
Manganese	Manganese occurs naturally in most water supplies and is removed during treatment.	50 µg/l
Mercury	Mercury is rarely found in water sources but may be present at extremely low concentrations if the water has passed through rocks containing naturally occurring mercury.	1 µg/l
Nickel	Nickel is not found naturally in water sources. Any traces of nickel found in water supplies are likely to be due to contact with protective coatings on taps and fittings within some customers' properties.	20 µg/l
Nitrate	Nitrate occurs naturally in water. Increased concentrations in water sources can occur as a result of fertiliser use. Nitrate concentrations are reduced during water treatment.	50 mg/l
[Nitrate]/50 plus [Nitrite]/3	This is a measure of the ratio of the concentrations of nitrate and nitrite in water supplies.	≤ 1
Pesticides - total	This is the sum of the concentrations of the individual pesticides detected.	0.5 µg/l
Polycyclic aromatic hydrocarbons (sum of 4 PAHs)	These compounds are present in bitumen linings which were used in the past to protect water mains from corrosion. Traces may occasionally be found in water supplies where bitumen linings are still present.	0.1 µg/l
Quantitative taste and odour	Odour and taste occur naturally. A formal method is undertaken in the laboratory to assess the taste and odour of water.	Acceptable to customer and no abnormal change
Radioactivity - gross alpha	Radiation exposure through water is typically very small. Where present, it is due to naturally occurring radioactive species, at levels that are not harmful. Gross alpha activity is monitored for the calculation of Total Indicative Dose.	0.1 Bq/l (screening value)
Radioactivity - gross beta	Radiation exposure through water is typically very small. Where present, it is due to naturally occurring radioactive species, at levels that are not harmful. Gross beta activity is monitored for the calculation of Total Indicative Dose.	1 Bq/l (screening value)
Residual chlorine - free / Residual chlorine - total	Small amounts of chlorine are added to water to kill any harmful bacteria.	No standard applies
Selenium	Selenium is rarely found in water sources but may be present at extremely low concentrations if the water has passed through rocks containing naturally occurring selenium.	10 µg/l
Sodium	Sodium occurs naturally in all water sources. The concentrations normally found in water do not present any risk to health.	200 mg/l
Sulphate	Sulphate occurs naturally in all water sources. The concentrations normally found in water do not present any risk to health.	250 mg/l
Tetrachloroethene and trichloroethene	This standard applies to the sum of the concentrations of tetrachloroethene and trichloroethene. These are solvents which can occasionally be detected at trace concentrations in water sources. Where necessary, solvents are removed using specialist water treatment.	10 µg/l
Tetrachloromethane	Tetrachloromethane is a solvent which can occasionally be detected at trace concentrations in water sources. Where necessary, solvents are removed using specialist water treatment.	3 µg/l

Parameter	Description	Standard
Total organic carbon	The total organic carbon content of water represents the amount of naturally occurring organic material present in the water.	No abnormal change
Total Indicative Dose (for radioactivity)	Total Indicative Dose is the effective dose of radiation exposure through water. It is required to be measured if the gross alpha or gross beta activities exceed the screening values.	0.10 mSv/year
Trihalomethanes - total	Trihalomethanes can be formed during disinfection of water supplies if chlorine reacts with naturally occurring organic substances. Water treatment is carefully controlled to minimise any formation of trihalomethanes.	100 µg/l
Tritium (for radioactivity)	Tritium is a radioactive isotope of the element hydrogen that occurs naturally in the environment in very low concentrations. It is not normally present in water sources. Tritium is produced in the upper atmosphere when cosmic rays strike air molecules or as a by-product in reactors producing electricity. The Environment Agency carries out regular monitoring for radioactivity in water sources used for the supply of drinking water.	100 Bq/l
Turbidity	This is a measure of the clarity of the water.	4 NTU at customers' taps 1 NTU at WTW
Vinyl chloride	Vinyl chloride does not occur naturally in water. It may be present in polyvinyl chloride (PVC) pipes in trace amounts, as a residual of the manufacturing process. Vinyl chloride is strictly controlled by product specification.	0.5 µg/l

Note
mg/l = milligrams per litre or one part in a million
µg/l = micrograms per litre or one part in a thousand million

Your water quality

If you're interested in finding out more about the quality of your drinking water, please visit **unitedutilities.com/waterquality** and enter your postcode. We'll tell you where your water comes from, together with other information such as its hardness.

United Utilities
Water for the North West

About us

United Utilities is the North West's water company. We keep the taps flowing and toilets flushing for seven million customers every day. From Crewe to Carlisle, we work hard behind the scenes to help your life flow smoothly.

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