

More information

Our drinking water is already excellent and getting better. The Government's independent watchdog, the Drinking Water Inspectorate, has confirmed that in the North West, over 99.9% of all individual quality measurements meet the standards. In order to meet ever higher standards for drinking water quality, we are investing in new treatment works and improving the many thousands of kilometres of water mains.

For more details or for information about water quality in your area, please phone **0845 746 2200** or Minicom textphone 0808 143 0295.

Alternatively, you can visit our website at:

www.unitedutilities.com/waterquality

Or write to:

**United Utilities
Customer Services
Lingley Green Avenue
PO Box 453
Great Sankey
Warrington
WA55 1SE**

Opening hours:

9am – 5pm for 'walk in visits' to the site,
or for telephone enquiries
8am – 8pm Monday to Friday;
8am – 6pm Saturday;
8am – 12noon Sunday.

Business customers

We offer a dedicated Water Quality Information Service for our business customers.

If you wish to register for this service, please phone **0845 746 2200** or Minicom textphone 0808 143 0295.

For more information, ask for a copy of our Water Quality Information Service factsheet.

Key facts on water quality

Iron and manganese

Naturally occurring iron and manganese from upland reservoirs can be a problem in some places. Some iron also comes from the poor condition of older mains. Very high concentrations of iron and manganese can cause discolouration of washing. The presence of iron and manganese has no health significance.

Fluoride

Fluoride exists naturally in different amounts in drinking water, or can be added in the treatment process. We have long standing obligations to two health authorities in the North West to add fluoride to drinking water. These are in West Cumbria and Crewe. There are no plans to extend fluoridation to other areas.

Hardness

Water hardness depends on the amount of calcium and magnesium in the water. Underground waters are usually harder than river or lake sources. Hard water makes it more difficult to get a lather when using soap and it can cause deposits in kettles. These deposits are not harmful to health. Most of our supplies are 'soft'.

This factsheet describes and explains the information that is available to domestic and business customers on the quality of drinking water provided by United Utilities.

Drinking water quality

In surveys, 99% of you, our customers, say that providing safe drinking water is essential or very important. As a key business objective, we protect and enhance public health by providing safe drinking water.

The quality of drinking water in the North West region is better than it has ever been. Improvements in quality have been achieved through our programme of investment in treatment works, treatment processes and the enormous network of mains which deliver water to your tap.

Quality standards

There are strict regulations to make sure that drinking water meets the standards of quality required by the European Union legislation and the UK Government.

Our investment programme is directed to meeting ever higher standards for drinking water quality. 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.

We have a Drinking Water Register giving full details of the quality of all our water supplies. You can view the Register at our Lingley Mere site in Warrington, on our website at www.unitedutilities.com/waterquality or we can send you a copy of the information by post, free of charge.

Testing water quality

The drinking water we supply to our customers must meet legal quality standards. These 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 our customers.

The North West region is divided into 261 water supply zones. The water supplied to a zone is 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. All the test results are recorded on the Drinking Water Register.

What the test results mean

For customers who have already asked for or received a report from the Drinking Water Register, the next section explains the technical words used.

Key facts on water quality

Here are some key facts on substances many customers are particularly concerned about.

Lead

There is virtually no lead in water as it leaves treatment works. Lead in drinking water originates from lead service pipes and plumbing, mainly found in older houses. Occasionally a problem occurs due to the inappropriate use of lead based solders on modern fittings.

The extent of lead pick-up depends on the nature and extent of plumbing materials and the water. Where we have identified a risk, the water has been treated as far as is practical to minimise any pick-up of lead in water. However, the best way of reducing lead in water is to replace lead pipes.

If you are worried about lead in your water at home we can give you advice on replacing your pipes. Please call **0845 746 2200** or Minicom textphone 0808 143 0295.

The Register summary

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

PCV or indicator standard

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%).

Percentage failed

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

In most cases you will see a value of 0.00% which shows that the water has met the standard every time. We investigate all failures thoroughly and take action to sort out any problems.

Taste and odours in drinking water

Some people find the taste of tap water can be unpleasant at times. The most common reason why your tap water may sometimes taste or smell unusual is chlorine.

Chlorine is added to water to kill harmful bacteria and viruses. From time to time you may notice the taste or smell of this chlorine in your tap water, particularly if you have a sensitive palate, or live very near where water is treated.

Sometimes chlorine reacts with materials used for tap washers, anti-splash devices and seals in kettles causing an unpleasant 'chemical' taste.

We recognise that some customers are not satisfied with the taste of chlorine in their drinking water. However, the use of chlorine as a disinfectant is essential to prevent waterborne illness and safeguard public health.

What can I do about the taste of chlorine?

- Cooling your drinking water will usually improve its taste - try storing some water in a closed glass container in the fridge.
- If this does not work try boiling the water for about five minutes. This will generally remove much of the chlorine and improve its taste. After the water cools, store it in a closed container in the fridge and use it as quickly as possible.
- You could also think about using a home treatment device (see below for more information).

Should I use a 'water filter'?

Generally these are not necessary, but in some circumstances they may improve the taste of water. There are several types of water filter on the market varying in cost from a few pounds to several hundreds of pounds. They can be free-standing or permanently fitted. You will need a filter containing activated carbon which absorbs chlorine and other substances which cause taste.

Any device which is 'plumbed-in' must comply with the Water Supply (Water Fittings) Regulations 1999. If not properly maintained, such devices may cause problems with water quality.

Key facts on water quality

Trihalomethanes (THMs)

These are substances which can be formed as by-products during the disinfection of water containing naturally occurring organic material. Treatment is required to remove organic material to prevent them forming.

Aluminium

Aluminium is present widely in the environment and exists naturally in lakes, rivers and reservoirs. It is also used at some water treatment works to remove impurities and harmful microorganisms.

Any aluminium is removed at a later stage of the treatment process. The 200 µg/l standard for aluminium is not a health standard, but is based on concentrations which affect the water's appearance.

Drinking water contains less than 5% of the daily dietary intake of aluminium. For example, a cup of tea may contain 20 to 200 times more aluminium than the water it was made from.

Nitrate

Nitrate exists naturally in soil and can be found in water because of the run-off into rivers and the seepage into underground water sources. This happens more often where nitrate fertilisers are used. Most of the supplies in our region come from areas with little nitrate run-off. Medical advice is that nitrate levels up to twice the standard are harmless for short periods of time.

Some examples of drinking water standards

Prescribed concentrations or values

Parameter	Unit	Maximum value
Colour	Hazen	20
Nitrate	mg NO ₃ /l	50
Aluminium	µg/l	200
Iron	µg/l	200
Manganese	µg/l	50
Lead	µg/l	25*
Total pesticides	µg/l	0.5
Coliform bacteria	number/100ml	0
<i>E.coli</i>	number/100ml	0
Fluoride	µg/l	1500
Trihalomethanes (THMs)	µg/l	100

*10 µg/l from 25 December 2013

Key facts on water quality

Pesticides

There are many different pesticides available today, so we have surveyed which pesticides are used in the region and test for those likely to reach water supplies. Generally pesticides are not a problem because most of our supplies are drawn from areas with low usage of pesticides. The standard is not linked to health.

Chlorine and disinfection

Our top priority is the protection of public health and disinfection is most important. We disinfect all the water we supply. This is usually done by chlorination. A small amount of chlorine stays in the water as it passes to your tap. The level used is harmless, although some customers may occasionally notice a 'bleach-like' taste or smell.

Coliform bacteria and *E.coli*

These bacteria are usually harmless in themselves, but if present show that there is a possibility of contamination of drinking water, or disinfection is not working properly. Some of the bacteria we find are from dirty taps in houses, but in all cases where we find bacteria we act promptly to make sure the water is safe.

Cryptosporidium

Cryptosporidium is a microscopic organism which has been recognised to cause water-borne illness in humans. *Cryptosporidium* can survive normal disinfection used in water treatment. The best way to remove this micro-organism from water is by filtration through sand or membranes. Much of our investment in drinking water quality improvement is to either increase the thoroughness with which existing filtration processes act as a final barrier to *Cryptosporidium* or else to install a filtration barrier for the first time.