

Lead in drinking water

This pack provides information and answers some frequently asked questions about lead in drinking water. It also gives information on our lead pipe replacement scheme.



Lead in our environment

Lead used to be common in the environment due to its historic use in petrol, paint and water pipes, as well as its natural occurrence in soils as a consequence of local geological conditions. From the 1970s onwards these uses of lead have been prohibited across Europe. Exposure to significant quantities of lead can be harmful to health especially for unborn babies and young children. Worldwide it is recommended that human exposure to lead is kept to a minimum and lead is therefore controlled in air, soil, food and water.

Lead in our region

The water from our treatment works, supplied through our mains to the boundary of your property, contains virtually no lead. Water supplies in our region are hard which are high in dissolved minerals, specifically calcium and magnesium. As a result limescale normally builds up on the inside of pipes, reducing the likelihood of lead dissolving into the water. The levels of lead are therefore low and it is rare for concentrations to be elevated. We also add a small amount of phosphate to most of our supplies, which acts like limescale, to further minimise the levels of lead in our tap water. Phosphate at such levels is not harmful, they are about 500 times lower than the phosphate levels in milk.

How does lead get into drinking water?

Before 1970, many smaller water pipes were made from lead. Although lead pipes have not been permitted for this purpose for four decades, in older properties it remains possible that part, or all, of the underground service pipe connecting the water main in the street to your kitchen tap may be made from lead. It is also possible that some original lead plumbing remains within older properties especially if the kitchen has not been modernised.

In hard water areas such as the Thames Water region the scale that forms on the inside of pipes prevents the lead from dissolving into the water. None the less in some cases lead may still dissolve into water.

A less common cause of lead in drinking water is the illegal use of lead based solder to join together sections of copper pipe. Lead solder is still sold for use on closed central heating systems and mistakes occasionally happen whereby unqualified plumbers or householders use lead solder on drinking water pipes contrary to the law. For all these reasons, the amount of lead in drinking water at a particular property may sometimes be above the health based standard.

Regulatory limits for lead

The current UK standard for the concentration of lead in drinking water is a maximum of 10 micrograms per litre (ug/l) or parts per billion (ppb). This standard applies to cold water drawn from the tap used for normal drinking water purposes. Although these levels are safe the Department of Health recommends you should try to reduce lead levels even further, particularly if you are pregnant or have young children. We carry out regular monitoring for lead by taking samples from randomly selected customers' properties. We can give you a report of the water tested in your local area (water supply zone) free on request or you can access it on our website (Help and advice - Water Quality - Check the water quality in my area). Thames Water will inform our customers, and the Environmental Health Department of the local council, if we find in excess of the standard in the drinking water at any houses during the course of our water quality sampling programme. In addition, under our Lead Pipe Replacement Scheme we will investigate, and if lead pipe is present, will replace our part of the underground service pipe connecting the water main in the street to your kitchen tap. See diagram on next page.

Who is responsible for the pipework which supplies my water?

The water pipe, which joins our water main to your property, is called the 'service pipe' and is divided into two parts.

The part of the service pipe that links the water main in the street to the outside stop valve/property boundary is known as the communications pipe and is our responsibility.

The part of the service pipe that links from the outside stop valve/property boundary to your inside stop valve is known as the supply pipe and is the responsibility of the property owner.

All plumbing inside your home to the kitchen tap is the responsibility of the property owner.

Supply pipes can be either separate (one pipe per property), or shared (two or more properties fed by a single supply pipe). Many older properties are served by a shared supply pipe, particularly terraced houses. Supply pipes (either separate or shared) may be lead, dependant upon the age of your property.

The two diagrams above show the typical layout of a single and shared supply pipe.

If you are on a single supply pipe, you are responsible for the maintenance of this pipe. If you are on a shared supply pipe, you are jointly responsible, along with your neighbours, for the maintenance of the shared part of the pipe. You will, however, be individually responsible for any branch of pipe which solely feeds your property.

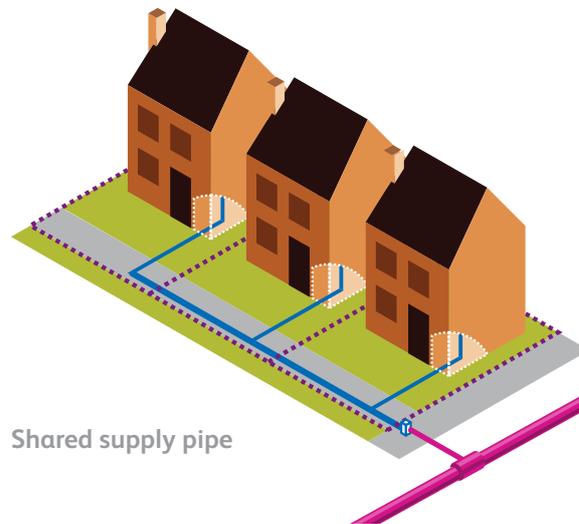
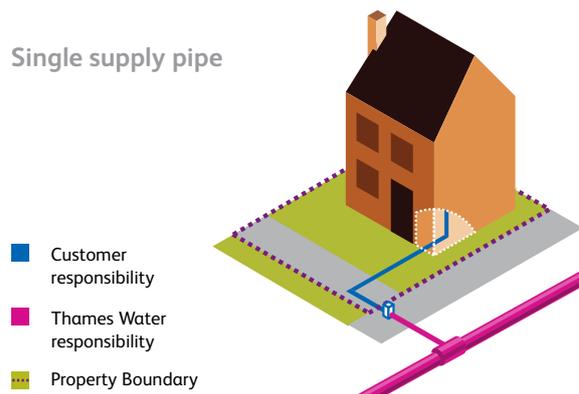
How do you know if you have lead pipes?

If your home was built before 1970, it may have lead pipes. If it was built after 1970, it is unlikely to have lead pipes.

If your home has been modernised since 1970 and all of its pipework replaced from the water company's stop valve outside your home to the kitchen tap, there should be no lead pipes on your property.

If you are unsure, below is a simple guide to checking.

Single supply pipe



Shared supply pipe



Inside your home

Find the pipe leading to the kitchen tap. Look in or behind the cupboards in your kitchen. You may also need to look in other places such as the cupboard under the stairs. Check if the pipe is lead along as much of its length as possible. Unpainted lead pipes appear dull grey and generally have rounded swollen joints where they join other pipes. They are also soft and if they are gently scraped you will see the shiny, silver-coloured metal underneath. Tapping the pipe with a metal object will produce a 'dull' sound if it is lead rather than a clearer ringing sound produced by copper or iron pipes. You can ask a plumber to carry out this check for you.

Outside your home

Open the flap of the stop valve outside your property. Examine the pipe leading from the stop valve to the property. You can ask a plumber to carry out this check for you as in some cases access may be difficult.

Other pipe materials which may have been used are:

- Copper – hard and can be bright or dull brown in colour.
- Iron – dark coloured, very hard and may be rusty.
- Plastic – may be grey, black or blue in colour.

This is only a guide and not conclusive.



Even where lead pipe is present the levels of lead in drinking water are normally very low. If you do have concerns you can ask us to test your water. As the majority of lead pipe is the responsibility of the householder, however we do ask that you commit to replacing this pipe should elevated levels of lead be identified.

Lead Pipe Replacement Scheme

The level of lead detected in the sample taken from your home will determine whether you are eligible for the free replacement of our lead communication pipe through our Lead Pipe Replacement Scheme. If the lead level detected is greater than the 10 ug/l lead standard we shall replace the communications pipe (our responsibility) to your property.

Lead Sample Results	Outcome
<10ug/l Less than the lead standard	You will not qualify for the free replacement of our lead communication pipe. You may still ask us to replace our lead communication pipe but the property owner will be required to pay for this. You can also replace your lead supply pipe if you wish.
>10ug/l Greater than the lead standard	You will qualify for the free replacement of our lead communication. We recommend that you replace your lead pipework to ensure all lead is removed from the water supply.

Shared Supply Pipes

If you qualify under our lead pipe replacement scheme and you are on a shared supply pipe, you have two options:

1. Arrange with your neighbours to jointly replace the whole length of lead shared supply pipe. We will then replace the lead communication pipe.
2. If your neighbours do not want to contribute towards the replacement of the shared supply pipe, you can lay a new single supply pipe from your property to the point where the old lead supply pipe joins our communication

pipe. This may involve crossing your neighbour's property, and if so, you will need to obtain their agreement first. We will then replace the lead communication pipe and join to your new pipe.

Summary

1. Check to see if you have a lead water supply pipe.
2. Check to see if you are on a separate or common supply pipe.
3. Obtain the necessary quotes for any plumbing work which you may need to do.
4. Complete and post back the enclosed Replacing lead supply pipe application form.
5. Once we have received the application, we will contact you to arrange to come to your property to take a water sample. We will then advise you whether or not you have qualified for the scheme. If you qualify for the scheme we will be replacing the communications pipe which is our responsibility and would strongly advise that you replace your supply pipe (within the boundary of your property) to ensure all lead is removed. If necessary, we will also advise you where you should lay your new pipe.
6. If you need to arrange for your plumbing work to be done, you should contact us when the work is finished in order that we can carry out the necessary inspection, unless you use an approved contractor. However it is important that you contact us before the supply pipe has been buried.
7. After we have 'passed' your work, we will arrange to lay our length of pipe, connect the new pipe to the water main and disconnect your old supply pipe. In most cases, our Representative will arrange an appointment with you for this work.
8. Shared supply pipes only: Arrange with your plumber to disconnect your old branch pipe. Contact us to arrange an inspection of this work. One of our Representatives will return to check the disconnection and make sure it meets the Water Supply (Water Fittings) Regulations.

What happens next?

1. If you are concerned about the level of lead in your water supply and wish to be considered for our lead communication pipe replacement scheme, please complete the enclosed application form and return to the address below. Please be aware that should you qualify for the replacement of our lead communication pipe, we would strongly advise that you replace all of your lead pipes before we proceed with the works.

Thames Water Utilities Ltd
Lead Policy Co-ordinator
Lead Replacement Scheme Applications
Thames Water
PO Box 286
Swindon
SN38 2RA

If you need any help on filling in the form or have any other questions, please call us on 0800 316 9800 or minicom 0800 316 9898.

2. Within 10 working days of receiving your application form we will aim to contact you to advise you of the date and time we will be coming to take a sample of water from your cold kitchen tap. If building works have taken place at your property, 6 weeks must be allowed following completion of the works as this will allow for any pipework which may have been disturbed to settle down, which may affect the lead results.
3. Thames Water will analyse the drinking water sample to determine the concentration of lead in your water supply. We will write to you to inform you of the results and the next steps.



Getting in touch

You can contact Thames Water 24 hours a day, 365 days a year. We record all our calls to ensure that we always give you a quality service.

0800 316 9800

- For emergencies
- Other non-billing enquiries
- Literature

Minicom service if you are deaf or hard of hearing
0800 316 9898

If you prefer you can write to us at:
Thames Water PO Box 286 Swindon SN38 2RA

0800 980 8800

- Queries relating to your bill
- Change of address
- Meter readings

Minicom service if you are deaf or hard of hearing
0800 316 6899

To contact us from abroad:
+44 1793 366011

Visit the Thames Water website on
thameswater.co.uk

Have you any comments about this leaflet?
We will be happy to hear from you regarding this or any other matter where our service to you could be improved.

This leaflet can be supplied in large print, braille or audio-tape upon request.