

Lead Pipes

Information for Customers

Lead and drinking water

Lead is used for making batteries, roofing material and metal products such as pipes and solder (used for joining pipes). It was also used in petrol and paint. Much lead has been removed from our environment over the past 50 years or so. This has been achieved by removing lead from petrol and paint and replacing lead pipes and plumbing. The removal of lead from the environment over time means that Irish people, in general, are exposed to very little lead.

- **Irish Water's records currently show there are no lead water mains in Ireland.** There are still some lead pipes in the public network, but these are mostly in old shared connections or in the short pipes connecting the (public) water main to the (private) water supply pipes.
- **Lead pipes may have been used in water service connections and in inside plumbing in properties built up to and including the 1970s.**
- **Lead can dissolve into drinking water.** This happens when drinking water comes in to contact with lead pipes especially when it is left standing in a pipe for a period of time. Such lead pipes are found mostly in the internal plumbing of properties.
- **Lead in drinking water is recognised as a health concern.** The limit for lead in drinking water has been reducing over time and is now at a very low level (10ug/L or 10 microgrammes per litre).

How much lead is in drinking water?

If your property has lead plumbing, it is possible that there is lead in your drinking water.

The amount of lead which dissolves into drinking water can depend on:

- the length of lead pipework involved;
- how long the water is sitting in the pipe;
- the temperature of the water; and
- whether your water is hard or soft i.e. the water chemical characteristics.

Wherever lead piping is present in the supply pipe or internally in the property, there is a risk that lead may dissolve into the drinking water.

Who is responsible for the pipes?

- **Irish Water** is responsible for the pipes under the road or paths to the outer edge of the boundary of your property.
- **You** are responsible for the pipe from the outer edge of the property boundary to the building and all the inside plumbing.

There are other types of connections (e.g. where the connection is shared or comes through the back garden) but these are not common.

How do you know if you have lead pipes inside your property?

Look for the point where the water pipe enters the property and check as much of the pipe as possible.

Lead pipes are usually dark grey or black (unless painted) with a dull coating and the joints appear to be 'swollen'. A simple way of identifying lead is to scrape the pipe gently with a coin or a knife – if a shiny silver strip is revealed, then the pipe is lead.

If the plumbing has been upgraded or replaced in your property, you should still check the pipe running from the water main to your kitchen tap. Small amounts of lead piping may remain in the system.

As a guide, other pipe materials have the following appearances:

- Copper – bright or dull orange colour, and hard
- Iron – dark, very hard, and may be rusty
- Plastic – may be grey, black or blue

If you are in any doubt, you should employ a qualified plumber to check the type of pipework in your premises.

If you are not the owner of the property in which you live, please pass this information on to the property owner.

More information can also be found in the Environmental Protection Agency (EPA) and the Health Service Executive (HSE) “Drinking Water Consumer Advice Note No. 1 – Lead (Pb)” available at www.hse.ie/water

If you have lead pipes inside your house, the recommendation is to replace them

The World Health Organisation (WHO), the EPA and the HSE recommend total lead pipe replacement as the ultimate goal in reducing long-term exposure to lead. Research indicates that unless the public and private supply pipes are both replaced, lead levels in the water could still be higher than the legal limit. Replacing the public supply pipe or the private pipe on its own does not resolve the problem.

If a property owner replaces the lead pipework on their property, Irish Water will also replace the pipework between the water main and the property boundary.

What steps can you take before replacing your lead pipes?

If your water has not been tested, can you take precautions?

- Use only water from the cold water tap in the kitchen for drinking, cooking and making baby formula. This is called the 'rising main'. It comes straight into your house from the water mains. The water from this tap is usually moving and flowing and has not been stagnant (still or stationary). Water from other taps in your house may have been stagnant in tanks and pipes for longer periods of time and, therefore, more likely to have a higher level of lead.
- Flush the water before use. If the tap has not been used for many hours, running (flushing) the water before using it for drinking or cooking may lower the level of lead. However, the only way to know if you have lead in your drinking water, and if flushing lowers it, is by testing it before and after flushing.
- Alternatively, you could use bottled water.

If your water has been tested and is still above 10µg per litre (10 microgrammes per litre) after flushing what can you do?

- If after running (flushing) the water the level of lead stays above 10 µg per litre, you should use safe drinking water from some other source. This is especially important for pregnant women, bottle-fed infants and young children.
- Even if the level stays above 10µg per litre, you can use the water for toilet flushing, showering and bathing, laundry and dishwashing.
- Boiling water will not remove lead from the water.

How can you get your water tested for lead?

If you want to test your water for lead:

- You should use a laboratory with accreditation (approval) for testing for lead in drinking water. Using an accredited laboratory means you have independent assurance that the test is carried out properly.
- You should take a sample before and after water has been flushed through the pipe for 3 minutes.

It is important to understand that....

- A single test for lead in water may not provide a full picture of the lead levels in the drinking water at your property.
- This is because the amount of lead in water can be influenced by a number of factors, including the length of a pipe, the length of time water has been standing in a pipe, the temperature and the chemical nature of the water.
- This means that samples taken from the same tap at different times of the day or at different temperatures can give different results.

The Irish National Accreditation Board (INAB) assesses and certifies laboratories. It lists all accredited laboratories on its website and you can check with it for suitable laboratories in your area. It is a good idea to ring a few laboratories as prices can vary. The website address is: <http://www.inab.ie/Directory-of-Accredited-Bodies/Laboratory-Accreditation/Testing/>

Who is most affected by lead in drinking water?

- Regular intake of even low levels of lead can have small health effects for everyone.
- The greatest health risk is for babies in the womb, infants and young children.
- Bottle-fed infants are especially at risk because, for the first 4-6 months of life, all of their food comes from milk-formula which is made up with drinking water.

For further information on the health effects of lead and advice on lead in drinking water, see the HSE's 'Lead in Drinking Water – Frequently Asked Questions (FAQs), May 2015' at www.hse.ie/water.

What is Irish Water doing about lead?

The Government is developing a National Lead in Drinking Water Mitigation Strategy. As part of this strategy, Irish Water, as the national public water utility, is drafting the Irish Water Lead in Drinking Water Mitigation Plan, in collaboration with the EPA and the HSE. The options being considered under this Plan will be published for public consultation shortly and will be subject to regulatory approval. Some of the options under consideration are:

- A more extensive sampling programme to assess levels of lead and define priority areas for action.
- More detailed information for households.
- A programme of investment (subject to approvals and funding) for the replacement of the public connection pipes, and any other types of lead connections, under a long term planned programme.
- Optimisation of the quality of the treated water to reduce the level of lead in the drinking water in the distribution network (e.g. control of pH, use of corrosion inhibitors).
- Conduct research on various aspects of the lead pipe issue, including trials of chemical lining systems (Dundalk) and use of ortho-phosphate as corrosion treatment (Limerick).

If a property owner replaces the lead pipework on their property, Irish Water will also replace the pipework between the water main and the property boundary.

Need more information?

If you require further information:

- visit www.water.ie or
- phone Irish Water at LoCall **1890 278 278** or **+353 1 707 2828** (lines open 24/7)

More information on health issues can be found at www.hse.ie/water

CHECKLIST

- Check your plumbing for lead
- Read the HSE Lead in Drinking Water FAQs enclosed with this leaflet
- Organise a replacement of lead pipes within your property and Irish Water will replace the public connection if it is made of lead
- If you are renting, pass this information on to the property owner
- If you are the owner and are renting or selling this property, pass this information on to the new occupants
- If in doubt, contact Irish Water