



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

Frequently Asked Questions- LEAD in drinking water

What is lead?

Lead is a naturally occurring bluish-grey metal found in the earth's crust (soil and rocks), air and water. It can be found in all parts of our environment. Much of it comes from human activities including burning fossil fuels, mining, and manufacturing.

What is lead used for?

Lead has many different uses. It is used in the production of batteries, ammunition, metal products (solder and pipes), and devices to shield X-rays. **The use of lead in petrol, paint and pipes has now been phased out.**

How might I be exposed to lead?

- Eating or drinking food or drink that contains lead. Water pipes in some older homes, particularly those built before 1970, and in service mains may contain lead.
- Spending time in older buildings where lead-based paints have been used and are deteriorating. Deteriorating lead paint can contribute to lead dust.
- In children, the ingestion of flaking paint, paint chips or soil is a major source of exposure.
- Working in a job where lead is used or engaging in certain hobbies in which lead is used, such as making stained glass.

How does lead get into drinking water?

Water does not contain lead when it leaves the treatment works. For a long time, generally up to 1970, lead was used for some water pipes. Part or all of the service pipe connecting the water main in the street to your kitchen tap may be made of lead. For this reason the amount of lead in drinking water can sometimes be above the standard. The likelihood of this happening can depend on the chemical make-up of the water. Some types of water, particularly soft water from upland areas, can pick up lead from pipes. Water is treated to reduce this where needed.

The drinking water standard has been set at a level which will protect infants who take all of their nutrition in liquid form usually from a single drinking water source. Therefore levels which exceed the standard often may not be of concern for short term use in the case of older children and adults who are not pregnant.

The presence of lead in the environment does not always result in exposure or health effects. You may be exposed to lead by eating food or drink or breathing in air contaminated with lead. Whether health effects result is influenced by the dose of lead taken in, the time period of exposure and whether or not the person is susceptible to health effects from lead. It is sensible to avoid excessive exposure to lead from any source.

Can lead affect health?

Lead can build up in the body and it can be harmful, especially to young children and pregnant women. Older children and adults are less susceptible to health effects as a result of lead exposure. Cases of acute toxicity from exposure to large amounts of lead over a short period are rare and unlikely to occur in Ireland.

Studies have shown that lead can have a small effect on the mental development of children. It may also be a factor in behavioural problems. It is best therefore to keep exposure to lead as low as possible.

Can lead cause cancer?

The International Agency for Research on Cancer has determined that lead and inorganic lead compounds are possible human carcinogens (evidence inadequate in humans, sufficient in animals).

Is there a medical test to determine whether I've been exposed to lead?

A blood test is available to measure the amount of lead in your blood. If you have concerns about your health, you should seek the advice of your general practitioner.

What can I do to reduce exposure to lead in my drinking water?

- Do not drink water that has been standing in the pipes for long periods, overnight or if no one has been in for more than six hours. In these circumstances, draw off a washing-up bowlful of water from the kitchen cold tap to clear the water which has been standing in the pipes. This need not be wasted but can be used in the garden or for something other than drinking or cooking. The water from the kitchen tap can then be used as usual.
- If you have any lead pipe work between the stop valve outside your home and your kitchen tap, **the best solution is to replace it** with plastic pipe work. Make

sure that removing lead water pipes does not reduce electrical safety by removing earthing.

Whether or not there is lead plumbing in your home:

- ***for drinking and cooking, always use the water from the cold water tap in the kitchen.***
- ***avoid drinking water from the hot tap or from the bathroom.***

If my water has high lead levels, is it safe to take a bath or shower?

Yes, bathing and showering is safe for you and your children, even if the water contains lead higher than regulation levels.

How do I know if there are lead pipes in my home?

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

If your home was built:

before 1970 it may have lead pipes

after 1970 it is unlikely to have lead pipes

If you are unsure, you can make a simple check:

Inside your home -

Look in or behind the cupboards in your kitchen. You may also need to look in other places, e.g. the cupboard under the stairs. Find the pipe leading to the kitchen tap. Check if it is lead along as much of its length as possible. Unpainted lead pipes are dull grey. They are also soft. If you scrape the surface gently with a knife, you will see the shiny, silver-coloured metal beneath.

Outside your home -

Open the flap of the stop valve outside your property. Examine the pipe leading from the stop valve to the property. If you can, scrape its surface gently with a knife. It may not be possible to do this in some cases as access may be difficult.

Other pipe materials in common use are:

copper - bright, hard and dull brown

iron - dark, very hard and may be rusty

plastic - may be grey, black or blue.

If unsure, home owners should have their property checked by a competent plumber.

The service pipe from the water main to the stop valve (belonging to the Water Services Authority/Local Authority) may still contain lead. If in doubt, ask your Water Services Authority (Local Authority) for advice.

Where can I access water quality results?

Drinking water quality is of very high standard in public water supplies in Ireland. You can access local water quality results at the County or City Council's offices. Alternatively, you can write to your Council for details or check on their website. The Environmental Protection Agency publish an annual report on the quality of Drinking Water in Ireland which will include the results from your local area.

Where Can I Get Further Advice?

a) On your water service and test results:

From your Water Services Authority (Local Authority)
(<http://www.environ.ie/en/LocalGovernment/LocalGovernmentAdministration/LocalAuthorities/>).

From the EPA (<http://www.epa.ie/environment/water/drinking/>)

A qualified plumber can advise on the need for lead pipe replacement.

b) On health issues:

From your GP if you are concerned about existing health problems or symptoms.

From your local Public Health Department or Environmental Health Department for general advice.

Public Health Department: http://www.hse.ie/eng/Find_a_Service/Public_Health/
Contact the Environmental Health Service at your HSE Local Health Office.

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