

Lead and your health

Things you need to know if you live in the Silvermines area

What is lead?

Lead is a metal found naturally in the environment. Lead has many uses. However, exposure to lead can harm your health.

Lead and Silvermines

The Silvermines area is a safe place to grow up, live, work and produce food. However, it is important to be aware of and reduce your risk of lead exposure if living in the Silvermines area.

Areas that have a history of mining, such as Silvermines, often have a high level of lead in the environment — in the soil, air, water and rock. However, the risk of lead poisoning in Ireland is low.

What is the purpose of this leaflet?

This leaflet is about lead and health. It gives advice on how to keep yourself and your family safe and well if you live or work in the Silvermines area.

Lead and health

Lead can affect your health if it gets into your body. You can inhale or ingest (eat) lead.

It can cause health problems when small amounts of lead enter your body over time. Individually, these small amounts do not cause damage, but if they build up, they can have health effects.

Babies in the womb and young children up to the age of 5 years are most at risk. Their brains and nervous systems are more sensitive to the effects of lead. Young children are also more likely to put their hands and other objects that may have lead from dust or soil on them in their mouths. Lead has a bigger effect on them than on older children or adults but it can cause health problems for them too. For example, in adults, exposure to lead can cause high blood pressure.

Lead – there are lots of places you can find it

Sources of lead in nature

- Lead is found naturally in soil and in dust (which often comes from soil).
- River and stream sediment can contain lead. It might have got there naturally or because of mining activities. **It is best not to disturb sediment.**
- Water from private well sources may have higher lead levels in areas where there are naturally high lead levels in the environment.
- Food such as fruit and vegetables grown in soil containing lead can become contaminated by lead.



Other sources of lead

- Houses built up to and including the 1970s may have lead water pipes or plumbing that can contaminate water with lead.
- A lot of paint sold before 1992 has lead in it. Under EU law, it is now illegal to sell leaded paint for general use.
- Some leaded paint was used on older toys and furniture.
- Some cosmetics may still have lead in them.
- Some traditional or imported folk remedies may contain lead.
- Some porcelain, pottery and leaded crystal glassware.
- Lead objects, such as lead shotgun pellets, antique toys and fishing weights.
- Certain hobbies, such as making leaded stained glass.

Follow a few simple rules to stay safe

Stay safe at home

Limiting your exposure to lead is important, especially for young children. Among the things you can do to help keep safe:

- Keep your house clean — dust and dirt can have lead in them.



- Wet mop floors and wipe window sills regularly.
 - Use a solution of water and household detergent to clean floors and surfaces.
 - Completely rinse sponges and mop heads after cleaning.
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- Clean or take off your shoes before you enter your home to avoid bringing in lead from soil or mud.
 - Replace mop heads, sponges and dishcloths frequently. This will prevent a build-up of lead.
 - Vacuum carpets and mats often.
 - Take precautions if you renovate or paint a house or furniture that may have been painted with paint containing lead. For example, wear protective clothing and a face mask.

Water

The maximum legal level of lead in **drinking water** is now 10 micrograms per litre (a microgram is one millionth of a gram). The public drinking water supply in Silvermines meets this standard.

However, **houses built up to and including the 1970s** may have lead water pipes. A qualified plumber can check inside and outside your home for lead plumbing. Irish Water will replace any lead pipe between the water main and your boundary.



Grants are available to lower income households to replace old lead pipes inside your property boundary and inside your home.

For more information go to:

www.housing.gov.ie/water/water-quality/lead-drinking-water/grant-replace-lead-pipes-and-fittings

If your drinking water comes from a private well you should arrange for it to be tested to check the lead level. For general advice, see:

<https://www.water.ie/water-supply/supply-issues/lead-in-drinking-water/>

<https://www.hse.ie/eng/health/hl/water/drinkingwater/lead/>

Food

- Children and adults should wash their hands before preparing and eating food.
- A healthy diet can help stop lead from being absorbed into your body. Eat foods:
 - High in iron and protein
 - High in vitamin C
 - High in calcium
 - Low in fats and oil

Locally or home grown fruit and vegetables

If you grow your own fruit and vegetables in the Silvermines area:

- Grow them in containers or raised beds and use soil or compost from outside the area, which will have lower concentrations of lead in it. The soil or compost should be spread to a depth of at least 30 centimetres (cm).
- Wash fruit and vegetables thoroughly in running water of drinking quality before you prepare and eat them.



- Peel potatoes and root vegetables before you cook and eat them.
 - Remove the outer leaves of leafy vegetables before you wash and eat them.
 - Wear gloves when you garden.
- Put down either mulch, such as bark chips, or a geotextile barrier on open soil such as flower beds.

If you keep chickens

- They should be kept in runs that prevent the birds coming into contact with the underlying soil by the addition of imported soil, mulch or other covering material.
- Feed the birds from feeders rather than by scattering feed on the bare ground.

What to do about lead at work

If you have to work with lead as part of your job, your employer should tell you how to reduce your exposure to harm. If you are self-employed or need information on how to stay safe when working with lead, go to:

http://www.hsa.ie/eng/Publications_and_Forms/Publications/Chemical_and_Hazardous_Substances/Safety_with_Lead_at_Work.pdf

For activities and play for children and adults

- Grassy areas are generally better than bare exposed soil.
- Don't swim in rivers or streams where sediment may contain high levels of lead.

Keep your child safe from lead

Following a few extra simple steps can make a difference

The Silvermines area is a safe place for children to grow up and live. However, lead can be particularly harmful to babies still in the womb and young children under five.

There are extra steps that can help reduce exposure:

- Discourage children from putting their hands in their mouths and from eating things that fall on the ground.
- Try to stop them from putting soil, dust or other materials that might have lead on or in them into their mouths.
- Keep children away from peeling paint, especially in older houses.
- Wash toys and soothers often as dust with lead in it can collect on them.

Breastfeeding provides ideal nourishment for small babies. It is also the safest option if your water supply has high lead levels (for example if you have old lead water pipes inside the boundary of your property or if you have a private well with high lead levels in the water).

Lead and child health

The Department of Public Health carried out a study between 1999 and 2002 on lead and child health in the Silvermines area.

Blood tests found out how much lead is in a child's blood. High blood lead levels need to be treated. A high blood lead level is a result of greater than 45 micrograms per decilitre [ug/dl].

The average blood lead level in children in the Silvermines area was 2.7 ug/dl in 1999 and 2.1 ug/dl in 2001. These findings mean that the average blood lead level in children in the Silvermines area is not a cause for concern.

Who to contact

If you need advice on lead and health, please contact the Department of Public Health, HSE Mid West at (061) 483 338. For queries about drinking water, contact your local Environmental Health Service at (067) 46602 or Tipperary County Council at (076) 10650000.

The HSE produced this leaflet in consultation with the Silvermines Inter-Agency Group.