

## Appendix 2: Environmental Investigation checklist

This checklist was developed to assist PHUs with investigations to identify likely lead sources and exposure pathways. If the source is obvious, it is not necessary to use this checklist. Outside lead endemic areas such as Broken Hill, Port Pirie and Mount Isa, the most common sources of lead are paint, contaminated soil and dust so these potential pathways should be investigated first.

Imported Ayurvedic or other traditional remedies, imported cosmetics, contaminated spices and other food products have been linked to cases of elevated blood lead in recent years, particularly in multicultural communities. If these cases have used these products, the PHU may have the products tested by the Forensic and Analytical Science Service for non-food samples ([NSWPATH-FASS-CET-TI@health.nsw.gov.au](mailto:NSWPATH-FASS-CET-TI@health.nsw.gov.au)) or the National Measurement Institute for food samples ([ABS@measurement.gov.au](mailto:ABS@measurement.gov.au)) to confirm if the products contain lead.

### Questions to guide environmental investigation

Risk	Question	Response
General questions	How long has the case lived at their home?	
	How old is the house or dwelling?	
	Has there been home construction, demolition or renovation in the recent past, including painting? Was this work done by homeowners or a licensed tradesperson?	
	Are there any activities in the neighbourhood or community that may be a lead exposure source of concern?	
Paint	Was house built before 1970s? <i>Houses built before 1970s are likely to have been painted with lead paint. Lead was banned in paint from December 1997.</i>	
	What is the condition of the paintwork?	
	Has the case lived in, or attended another home regularly, which might have been a lead exposure source?	
	Has a neighbouring property recently been renovated where lead paint has been sanded or stripped?	
	Has lead paint on other objects such as old furniture, antiques, farm equipment or old cars been stripped or sanded by a household member recently?	
Dust	If a renovation was done, was the home washed and cleaned of sources of dust and potentially lead containing materials after renovation activities? Were soft furnishings such as carpets, rugs and lounges covered and sealed with plastic during renovation?	
	Is the home carpeted? Is a HEPA filtered vacuum cleaner used?	
	Does the home have wooden floors? Are there gaps between floor boards?	

Risk	Question	Response
	Are there pets around that might transfer lead into the home environment?	
Soil	Was the land, or neighbouring properties, ever used for industrial purposes which may have involved lead?	
	Has fill been brought to the property?	
	Are there older painted sheds, outbuildings or neighbouring buildings that have been renovated, remain or were demolished that contaminated surrounding soils?	
	Are there areas of bare soil in the yard? Is there a garden?	
Air	How far is the home from lead industries such as mining, refining, smelting and manufacturing or historic lead industries such as boat building or marinas?	
	Have objects containing or painted with lead been burned recently?	
	Are car parks or garages located close to doors or windows allowing petrol fumes to collect in homes?	
Food/water	Is imported canned food with soldered seams consumed?	
	Are food or drink containers that may be made with lead (lead crystal, pewter, ceramic cookware, lead glazing) including ones that were improperly fired (e.g. imported tagines) used?	
	Is there a garden/vegetable garden/fruit trees/chickens and are they likely to be contaminated with lead?	
	Are home-grown or market vegetables washed before being eaten or cooked?	
	Are imported foods or spices such as turmeric or imitation saffron and other imported food products used in family meals?	
	Has new plumbing been installed in the past five years?	
	Is the water supply private (rainwater, bore) or reticulated water?	

**In the six months prior to notification, has the person been exposed to any of the following sources that may contain lead?**

Potential source of lead	Yes	No	Comments
Imported 'traditional' medicines (e.g. Ayurvedic)			
Opium or other illicit drugs			
Imported cosmetic products (e.g. Kajal, Kohl, Thanaka)			
Imported jewellery			
Imported ceremonial (religious) products (e.g. Sindoor)			
Old iron enamelled bathtubs, old pipes, solder or plumbing fittings			
Fishing sinkers			
Curtain weights			

**In the six months prior to notification, has the person participated in any of the following activities that may involve lead?**

Activity with potential for lead exposure	Yes	No	Comments
Restoring homes, boats, cars, furniture or other items that are coated			

with lead-based paints			
Glazing and firing pottery			
Soldering (radiators, stained glass, electronics)			
Casting lead (to make ammunition, fishing sinkers)			
Burning of lead-stabilised plastics or materials coated with lead-based paints			
Recycling of objects containing or coated with lead products (e.g. motor vehicle bodies, batteries, electronic equipment)			
Eating or handling animals hunted using lead shot			
Exposure to lead dust at shooting ranges, in gun shot or non-encased ammunition			
Are there any other hobbies or activities that the person engages in that involve exposure to lead at home?			

**Occupational risks – Note: PHU may wish to refer case to SafeWork NSW or the Resources Regulator if occupational risks are identified**

Potential occupational exposure	Yes	No	Comments
Does the case have occupational exposures (e.g. working in lead mining, smelting or other industries using lead)?			
Do they return home after work without showering or changing from work clothing or with contaminated tools, boots or vehicle?			
Are work clothes washed separately from other household washing?			

**Other potential exposures**

Potential exposure	Yes	No	Comments
Exposure to some fuels (aviation gasoline for piston engines and some racing fuels) still contain lead			
Contact with items (e.g. clothes) used by a household member who has been working in a lead related industry or has had lead exposure and has been diagnosed with elevated blood lead			
Pica disorder – eating disorder that involves eating items that are not typically considered food (e.g. paint chips, soil)			

**ADDITIONAL QUESTIONS FOR CHILDREN –**

**Child behaviour, habits and nutrition**

Potential risks/exposure pathways	Yes	No	Comments
Does the child suck their thumbs/bite their nails?			
Does the child have pica or regularly mouth, chew, or eat non-food items such as dirt?			
Does the child have any imported or antique toys that might contain lead?			
Does the child eat regular/healthy meals and snacks from a range of food groups? <i>Note: Children have a higher risk of lead poisoning when they have poor nutrition and do not eat regularly. Empty stomachs make the body absorb more lead. Foods that are rich in both iron and vitamin C can help improve iron absorption which can help block lead from being absorbed by the body.</i>			
Does the child have favourite places to play inside?			

Does the child have favourite places to play outside?			
Is there a sandpit near the home? Does the child play in the sandpit regularly?			
Does the child go to a childcare centre or to school?			

**Notes and summary**

- Likely source(s) of exposure \_\_\_\_\_
- No identifiable risk
- Testing/samples taken

Summary: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Checklist completed by (insert name and position): \_\_\_\_\_  
 Date finalised: \_\_ / \_\_ / \_\_\_\_  
 PHU: \_\_\_\_\_