LEAD Action News

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The newsletter of The LEAD (Lead Education and Abatement Design) Group Inc.
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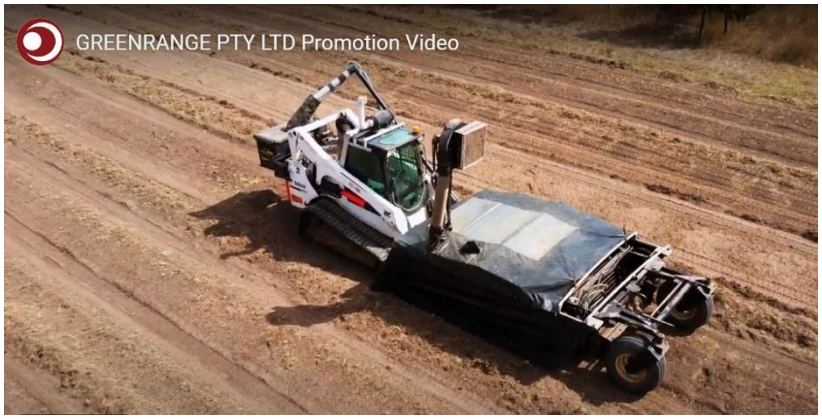
Leaded Humans Weigh Heavily on the Earth

This April 2026 issue of *LEAD Action News vol 23 no 3* has multiple articles which connect the dots between leaded humans and global warming. We are all leaded due to a century plus of leaded fuel use in motor vehicles and still in AvGas plus all the lead that is emitted when coal is burned. Lead's impacts such as reduced IQ and increased risk of dementia have meant that humans weigh heavily on the Earth at the very time when we most need smarter humans to solve the various interacting problems of the climate crisis. This issue also asks what are we doing to remove lead already in children and adults, quickly and safely, in order to increase our chances and the biosphere's chances of surviving and thriving on planet Earth.

The LEAD Group Inc is honored to be an Ally of the Global Alliance to Eliminate Lead in Paint (GAELP), as well as being a Partner of the Partnership for a Lead Free Future (PLF) and I'm pleased to be able to let our readers know in this issue, of multiple GAELP and PLF Partner events and publications, including Pure Earth President Drew McCartor's announcement: "We are expanding our programs to protect more than 500 million children from lead poisoning by 2033, but we can't do it alone."

Your entries in to the 15th Volcano Art Prize (VAP) are also great for you, your business and the planet! The VAP 2026 entry deadline is Mon 27th July 2026 and many past and current year entries into VAP from 2012 to 2026 are published in this issue to inspire you!



2026 Volcano Art Prize Entry **Lead-Safety Message:** Green Range and Lead Pro Aus operate as complimentary companies focused on protecting shooting range environments across Australia. Green Range specialises in environmental infrastructure and range management solutions. Lead Pro Aus works alongside these systems by providing specialist lead recovery and environmental remediation services.

Description of Work: Video showing ShotStop Shooting Curtain System and Lead Pro Aus "Lead Miner" machine collecting spent lead ammunition (for later recycling) from shooting range soil, at www.youtube.com/watch?v=Jd_UVjq0Pjc ; accessible via www.greenrange.com.au/government
URL: https://volcanoartprize.com/portfolio-item/green-range-and-lead-pro-aus/

Contents

Enter Volcano Art Prize 2026 by 27th July 2026!

To be in the running for this **annual lead-awareness-raising global art/photo/film competition open to all ages**, just go through your smart phone photos/videos and pick a landscape-orientation one, create a short Title and Lead-Safety Message and enter as many times as you like, at https://volcanoartprize.com/submitentry/ by midnight at the end of the day, your timezone, on Monday 27th July 2026.

Once the entry deadline has passed, the Volcano Art Prize (VAP) 2026 Judge will choose the First Prize winner of $400 and 30 prize winners of a mug from Pictureproducts and you can help pick the 2026 People's Choice prizewinner. Just go to https://volcanoartprize.com/peoples-choice/ and following pages, to vote (by giving a ThumbsUp) for all the VAP 2026 entries you like, so that The LEAD Group can count up the Likes to see who wins the People's Choice Cash Prize of $200.

Volcano Art Prize

Proudly sponsored by: Pictureproducts Since 1977

It's easy to create a VAP entry!!

See Join us on our Global Lead Awareness - a reel about how easy it is to make a Volcano Art Prize entry!

Be part of a global lead-awareness raising community of photographers, artists and caring individuals!

Enter artworks, photos and short videos in Volcano Art Prize (VAP). This annual art competition has both cash/sponsors' prizes and certificates for children and encourages everyone to increase their lead knowledge by creating their Lead-Safety Message.

Images of people, old paint, pets, backyard chickens/vegetables, lead products/mining/smelting/recycling, solutions - lead-detox foods/activities/supplements, lead testing kits, etc and fun or serious videos all help The LEAD Group charity to spread the word about lead-safety around the world via social media, www.lead.org.au and www.leadsafeworld.com

Each entrant can enter multiple times.

Just go thru the camera roll on your phone or look around for inspiration and submit your own and your children's entries at www.volcanoartprize.com/submitentry by the 4th Monday in July each year. That means Monday 27th July 2026 – so you have less than four months left to enter!!

Only adults in OECD countries pay the AU$10 entry fee. All kids and everyone else enter for free!

The Tooth Fairy Project of Professor Herbert Needleman

LEAD IN AUSTRALIA – WHAT YOU DIDN'T KNOW

LeadTox blog of Rick Mack, Member of The LEAD Group's Technical Advisory Board

April 21st, 2026

[URLs: reprinted from The Tooth Fairy Project – Lead in Australia – what you didn't know https://leadtox.blog/2026/04/21/the-tooth-fairy-project/ and Lead Poisoned Kids FB Group post - https://www.facebook.com/share/p/18iqYCDKc3/]

I've written quite a lot about the importance of bone lead in prolonging the effects of lead poisoning, but I left out an important, item, not deliberately, but because isn't an important fraction of the body's lead stores.

Except it is, in one incredibly relevant way. When I wrote about bone lead, I should have said hard tissue because your children's teeth, and yours, also accumulate lead and tooth lead is an important indicator of body lead burden.

In the very early days of measuring bone lead, volunteers submitted to bone biopsies to measure bone lead. This was before we had a less invasive way to measure bone lead using x-ray fluorescence spectrometry (XRF) which unfortunately still isn't widely available.

But measuring tooth lead levels, either in baby teeth or in extracted teeth is a perfectly good way to estimate the extent of lead exposure. Regardless of blood lead levels, if the tooth lead levels are high, you're dealing with chronic lead exposure.

I'd like to repost a Facebook article about Herbert Needleman that is absolutely worth reading:

He treated one small patient and sent her home.

By every standard of the time, the case was closed.

But something about her stayed with him.

Her name was not recorded in history. His was. Herbert Needleman

In 1957, he was a young pediatrician in Philadelphia when a three-year-old girl was brought in, barely conscious. Lead poisoning. Severe, but treatable. He did what doctors are trained to do. He treated her. She survived.

That should have been the end of it.

It wasn't.

Because he began to notice something others dismissed. Children who survived lead poisoning did not always return to themselves. They came back quieter. Slower. Struggling in ways that were easy to overlook but impossible to ignore once you saw the pattern.

The medical consensus was simple. Survive the poisoning, and you were fine.

He didn't believe that.

What if the damage didn't end when the crisis passed. What if it stayed, hidden, accumulating over time in ways no one was measuring.

The question followed him for decades.

The problem was how to prove it. Blood tests could only show what was happening in the moment. They could not reveal what had been building over years. Bone samples could, but no parent would allow that for research.

He needed something else.

The answer came from somewhere no one had thought to look.

Children's baby teeth.

In the late 1960s, he began working with schools, asking teachers to collect teeth as they fell out naturally. No procedures. No fear. Just something children would lose anyway.

Inside each tooth was a record. A chemical history of exposure over time.

He collected thousands.

And when he analyzed them, the pattern was unmistakable.

Children with higher levels of lead in their teeth showed measurable differences. Lower IQ scores. Weaker language skills. Shorter attention spans. Delayed reading ability.

These were not children anyone considered sick.

They were simply living in an environment no one had fully understood.

His findings were published in 1979.

The implications were enormous. Lead was everywhere. In paint. In pipes. In

the air from gasoline burned in every city. Children were breathing it, touching it, living inside it.

And it was quietly shaping their minds.

The response was not acceptance.

It was attack.

Industries built around lead had too much at stake. They funded opposing research. Questioned his methods. Accused him of misconduct. His career, his reputation, everything he had built was placed under pressure.

He could have stepped back.

He didn't.

He demanded his work be examined openly. It was. Independent reviews confirmed his findings. Every accusation was dismissed.

And the science stood.

Change followed. Lead was removed from gasoline. Regulations were introduced. Public health policies shifted.

Over time, the results became clear. Lead levels in children dropped dramatically.

And something else changed quietly alongside it.

Millions of children grew up with clearer minds. Stronger attention. Greater potential than they might have had before.

Not because of something they did.

Because of something he refused to ignore.

He died in 2017, after spending most of his life asking a question others thought unnecessary.

There are children today learning, reading, thinking more clearly than they would have in another time.

They will never know his name.

But their lives carry the answer to the question he asked.

I'd like to be able to say that things have changed radically in the last few decades, but the

truth is they haven't changed very much and definitely not enough. The air near roads is no longer filled with ultrafine lead dust that kids can breathe in. But the lead from leaded gasoline is still there, in the buildings and homes along major roadways, in lead paint in old houses, old plumbing, legacy toys and furniture, spices and so on.

Exposure to lead may no longer be universal, but it's still there, still harming children AND adults.

Maybe it's time to repeat Dr Herbert Needleman's tooth research to prove that lead is still a problem and treating lead poisoning is possible, not just to save a life but to reduce life-long harm.

Keywords: health, Lead poisoning, life, teeth

2020 Volcano Art Prize (VAP) entry by Manasa Ramesh, Age: 7, School Name: Merryhill Elementary and Middle School. Title: Seal's life. Lead-Safety Message: Lead can harm production of blood cells and the absorption of calcium needed for strong bones and teeth, muscle movements, and the work of nerves and blood vessels. Description of Work: Oil pastels and water colour.
https://volcanoartprize.com/portfolio-item/seals-life/

Info Pack on Interpretation of a Child's Tooth Lead Test Results

Info Pack by Elizabeth O'Brien, Manager, Global Lead Advice & Support Service (GLASS) run by The LEAD Group Inc charity, with kind permission to reprint from the recipient (who was male and born in 1985 in inner Sydney, Australia's most populous city) of this Info Pack emailed on 21 Jan 2021

Today I received your baby tooth lead (Pb) result from the Lidcombe lab of NSW Health Pathology showing the "left lower central incisor baby tooth" you lost in March 1993 when you were aged 8, contained 8.835 mg/kg (milligrams of lead per kg of tooth).

Your four previous tooth lead results ranged from 1.2 to 1.8mg/kg) on teeth (3 molars and a wisdom tooth) lost between 2009 (aged 24 & a half) to 2013 (aged 28).

And, in the article: "The Early Lead Poisoned Child In The Classroom: Symptomatology and Intervention for School Psychologists and School-Based Personnel; A WORD FROM THE EDITOR; Tooth Lead Analysis: Example of a report (May 1994)" at https://lead.org.au/lanv2n3/lanv2n3-10.html - the May 1994 example of a tooth lead result, was also your tooth, lost at age 7. That is:

Example of a Report (May 1994):

Description: Deciduous Crown – Upper left central incisor. Sample mass = 0.1915 g.

Result: 22.2 µg/g (micrograms per gram) or ppm (parts per million) – note that these units are exactly the same as mg/kg so your first tooth lead result can also be written as 22.2 mg/kg.

Thus, during the development of your upper central incisor, you likely had the highest blood lead level of your childhood, resulting in a tooth lead level of 22.2 mg/kg, but today's result shows that the (later developing) lower central incisor had a much-reduced tooth lead level of 8.835 mg/kg and your (much later developing) molar and wisdom teeth results were even lower at 1.2 to 1.8 mg/kg.

If your parents had known that they needed to test blood lead levels between the ages of 1 and 6 years (when your blood lead level was 14 µg/dL or micrograms per decilitre), you wouldn't have needed to test all these teeth but, now that you have these five teeth lead results, they seem to confirm that you probably had a typical blood lead level graph shape rising (from crawling age) to a childhood peak (during top front teeth development) sometime between 12-24 months, then falling again to the pre-crawling level by the time your molars were developing.

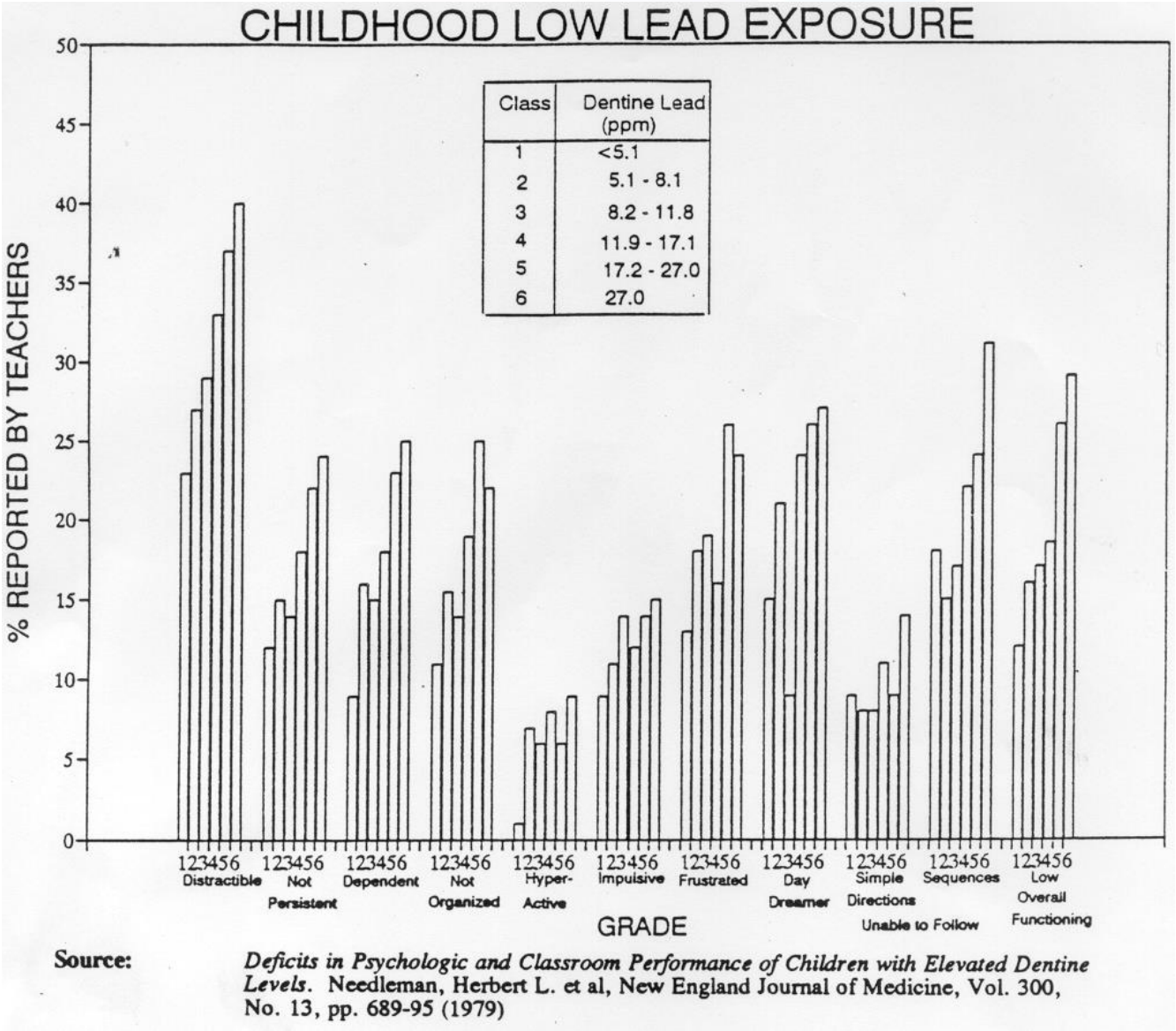
General comments on interpreting tooth lead results:

When interpreting tooth lead results, it's important to know how old the children were when they lost the teeth that you have tested for lead and preferably also, the age at which they developed the particular teeth tested. That will make a difference to the conclusions you can draw from the results. If the tested teeth for two children were developed at approximately the same age, then it can become clear whether one child has had more lead exposure than

the other, at that age. If two tested teeth from one child were developed at different ages, then it can become clear that the child experienced more or less lead exposure at the times of the development of those two teeth.

You can compare your children's (or your own baby) tooth lead results to the findings for other children from three studies in which petrol lead was likely to be the major source of the lead found in the children's teeth.

They're reported at https://www.lead.org.au/lanv2n3/lanv2n3-10.html - that is:



A. "Deficits in Psychologic and Classroom Performance of Children with Elevated Dentine Levels" by Needleman, Herbert et al (1979) in which the graph labelled "CHILDHOOD LOW LEAD EXPOSURE" gives results on a range of US children's learning behaviours, as reported by their teachers, for the different tooth lead level ranges: 1. less than 5.1 ppm [parts per million, which is exactly equivalent to < 5.1 µg/g (less than 5.1 micrograms per gram) which is exactly equivalent to < 5.1 mg/kg (milligrams per kilogram)]; up to 6. greater than 27 ppm [>

27 µg/g or > 27 mg/kg].

According to the *Obituary for Herbert Leroy Needleman* in the Lancet in 2017, at https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)32245-6/fulltext :

"He [Dr Herbert Needleman] came up with the idea of looking at lead in children's shed teeth", says Bernard Goldstein, a friend of Needleman's ... "No one had thought of that before." Needleman set about collecting deciduous teeth from dental practices in suburban and inner-city areas [of Philadelphia, PA]. The latter turned out to have five times as much lead as the former. The differences were so pronounced that, as Needleman described, "I could guess the kids' race and where they lived. If [the lead concentration] was over 20 ppm, it was a black kid from the inner city. If it was under 5, it was a white kid from Northeast Philadelphia."

B. In a study published by H T Delves, Southampton General Hospital, UK

(1982) the range of lead in deciduous crowns collected from a control group of children was 1.0 to 26.9 µg/g, with a mean of 4.7 µg/g.

C. In unpublished research (1990) by Graeme Waller involving a study of 221 deciduous crowns collected from children in the Sydney area the range of lead was: 1.7 to 38.2 µg/g, with a mean of 5.4 µg/g.

An older study in which the major source of lead was also petrol, is:

"Tooth Lead Levels in Birmingham Children" by Mackie et al, (1977) [ABSTRACT ONLY AT http://www.ncbi.nlm.nih.gov/pubmed/889356] which states:

"The mean lead content of deciduous teeth from children living in the city of Birmingham (U.K.) has been shown to be 11.8 ppm dry weight, irrespective of the sex of the donor."

You can also compare your children's results to studies of tooth lead where the major source of the lead was a lead smelter, such as:

"Tooth Lead Levels and IQ in School-Age Children: The Port Pirie Cohort Study" (15/09/1994) by McMichael *et al* at https://academic.oup.com/aje/article-abstract/140/6/489/83420?redirectedFrom=fulltext&login=false [NB the placename in the online Abstract title is wrongly written as "Port Pine"] which states:

"The relation between lead concentration in deciduous central upper incisor teeth and intellectual functioning was examined in 262 children who were followed from birth to age 7 years in the lead smelter town of Port Pirie, South Australia, and its environs....

"The geometric mean concentration of lead in incisors was 8.6 µg/g...

"the decline in IQ points across the tooth lead range from 3 to 22 ppm is 5.1 points. (This range.... encompasses almost exactly 90 percent of the study population)..."

The problem with old studies like the one above, is that it was believed until recently, that low blood lead levels (and therefore presumably low tooth lead levels) caused no IQ loss, and that there was a threshold for IQ loss such as 10 micrograms per decilitre (µg/dL) blood lead level, or 3 ppm for tooth lead.

The whole theory of no IQ loss below 10 µg/dL has been debunked and the latest hypothesis

is that the IQ loss when a child's blood lead level rises from zero to 10 µg/dL, is MORE than the IQ loss in the same child, if the blood lead further rises from 10 to 20 µg/dL. For instance, a child with a blood lead level averaging 10 µg/dL over the first several years of life, has probably already lost up to 7 IQ points, whereas a child averaging 20 µg/dL over the first several years of life has probably lost up to 10 IQ points. Further research may show that the same applies to "low" tooth lead results - the impact of the first rise from say zero to 3 ppm, may be more significant than the impact of a further rise from say 3 ppm to 6 ppm.

IF your children's tooth lead levels are lower than any of the mean results in the 1982 and 1990s studies, we can all celebrate the fact that we were successful in banning lead in petrol in Australia in 2002.

It is quite possible that if there is a difference in the tooth lead results for a younger child and an older child, the decrease could at least partially or wholly be due to this 2002 Australian phase-out date for leaded petrol (or the phase-out year in the country where the children grew up, if that wasn't Australia).

If you had a 19 year old and that child's result was < 5.1 µg/g (the lowest range of the Needleman study subjects results), IF the teeth tested were baby teeth / first teeth, I would venture that the child had probably had more exposure to lead as an infant than other 19 year old children, because, with the amount of lead in petrol having gone down gradually to zero by January 1st 2002, other children aged 19 now (in 2021) would be expected to have demonstrated falling blood lead levels over the first 3 years of their life, and thus lower tooth lead levels compared to 3 year olds born a decade earlier and the decade before that, etc. If the child with a tooth lead result >1 µg/g is struggling at school, it could be as a result of pre-birth exposure to lead, and early-life exposure to lead (both of which are apparent in the tooth lead results if these were baby teeth) but could also be a result of later lead exposure, and/or some other cause/s.

Pathways of Lead Exposure in the Philippines

Part 1 of a two-part series on lead contamination in the Philippines

By Ian Smith BSc BEng MBA, LEAD Group Systems Analyst,

using Claude AI (Opus 4.6, 1M context),

on research by Philippines-based LEAD Group Executive Assistants

Paul Jacobe and Marie Jean Villarosa,

edited by Elizabeth O'Brien BSc GradDipHealthEd, Lead Scientist, The LEAD Group Inc.

With thanks to Eric Ritter, DetectLead and Fluorospec, LEAD Group Secretary, for financial support.

Abstract

A growing body of Filipino-led research is building a compelling evidence base showing that lead contamination reaches across the Philippine environment — in rivers, urban soils, school dust, port waters, aquaculture farms, and consumer products. This article surveys the pathways through which Filipinos encounter lead, drawing on more than a dozen local studies spanning two decades of investigation. Despite the establishment of lead paint regulations in 2013, the threat remains pervasive, multi-pathway, and under-recognised. This is Part 1 of a two-part series; Part 2 examines the health impacts on Filipino children and the growing advocacy response.

2025 Volcano Art Prize (VAP) entry

Artist: Paula Jacobe, Age: 10

Title: Painted Lion

Lead-Safety Message: Thankfully, since the Philippines banned lead in children's paints in 2013, the EcoWaste Coalition and UN/WHO Lead Paint Alliance has achieved a government ban on decorative (house) paints with lead - phased in from 2013 to 2016 - and a ban on lead-containing industrial paints by December 31, 2019.

Description of Work: Lead free children's paints painting of a lion stencil.

https://volcanoartprize.com/portfolio-item/painted-lion/

Introduction: Pathways of Lead Exposure in the Philippines

Lead exposure affects one in every three children globally, with the vast majority living in low- and middle-income countries (Rees, Fuller and UNICEF, 2020). The World Bank estimates that children under five have lost 765 million IQ points to lead exposure, at a cost of US$1.4 trillion worldwide (ARNEC and Vital Strategies, 2025). These are not abstract statistics. They represent permanently diminished futures for hundreds of millions of children.

The Philippines is no exception. Despite enacting Administrative Order 2013-24, which established a

90 parts per million (ppm) limit on lead in new residential paint sold, the country's lead problem extends far beyond a single product. Lead enters Filipino lives through water, soil, dust, imported goods, and the food chain — pathways that regulations have barely begun to address. In Asia, only the Philippines and Bhutan have recently initiated efforts to monitor lead in children; most countries in the region have no active monitoring at all (ARNEC and Vital Strategies, 2025).

What makes the Philippine story both troubling and hopeful is the work of local researchers. Across the archipelago, Filipino scientists — from established university faculty to senior high school students — are systematically mapping where lead lurks. Their studies, many conducted with limited resources, form an evidence base that demands attention. This article traces their findings, pathway by pathway.

Water: From River Source to Coastline

The Angat River is the lifeblood of Metro Manila. Its dam supplies 500 million gallons daily, meeting 97 per cent of the capital's water needs (Santos, Venturina and Violago, 2024). When Santos, Venturina and Violago (2024) assessed arsenic and lead concentrations in the Angat River Network at Banga II, Plaridel, Bulacan, they found levels within the permissible limits set by the World Health Organization (WHO), the United States Environmental Protection Agency (EPA), and the Philippine Department of Environment and Natural Resources (DENR). The river, they concluded, still meets Class B/C safety standards for its intended usage.

But the reassurance is qualified. Sediment samples showed monthly variation, with detectable levels of both lead and arsenic appearing in February, possibly linked to nearby construction activity involving paints and welding materials. The researchers emphasised that continuous monitoring is essential, particularly given the rapid urbanisation and industrialisation surrounding the river network.

2025 Volcano Art Prize (VAP) entry

Artist: Prince, Age: 8

Title: Rizal Monument

Lead-Safety Message: Rizal Monument in Manila includes a sculpture of Philippines national hero Jose Rizal, that was cast, in 1912, from molten bronze containing possibly up to 20% lead. Occupational exposure to lead fumes back then would have been massive and would certainly have contributed to the early death of the bronze workers.

Description of Work: Pen and coloured textas on paper.

https://volcanoartprize.com/portfolio-item/rizal-monument/

Elsewhere, the picture is less encouraging. At the Port of Mukas in Kolambugan, Lanao del Norte, Jimenez et al. (2018) found average lead concentrations of 0.18 mg/L in seawater — 3.6 times the DENR's allowable limit of 0.05 mg/L for marine waters with beneficial usage. The sources were visible: ships being salvaged and repainted using lead-containing materials, welding operations, and residual contamination from leaded petrol. Children were observed swimming near the port, directly exposed to contaminated water. Lead concentrations were detected in fish, macroinvertebrates, and water samples from the coastal lagoon of Manila Bay as well (Jimenez et al., 2018).

In Dumaguete City, Balbon et al. (2024) examined the Banica River downstream of a former municipal landfill in Barangay Candau-ay. Lead concentrations were below 0.003 mg/L at all three sampling stations — within safe limits. However, pH levels had shifted from non-acidic in 1994 to neutral in 2023, suggesting gradual environmental change linked to the deteriorating landfill. The researchers recommended longitudinal monitoring and remediation, including trash segregation, physical barriers between the river and landfill, and microbial remediation.

The water pathway illustrates a critical point: even where individual measurements fall within regulatory limits, the cumulative and chronic nature of lead exposure means that 'safe' readings today are no guarantee against contamination tomorrow. As Collin et al. (2022) note in their global review, lead can persist in environmental systems for extraordinary periods, making ongoing vigilance essential.

Soil: The Ground Beneath Their Feet

Children play in soil. They fall in it, dig in it, and put their hands in their mouths afterwards. In the Philippines, the soil they touch may carry a legacy of decades of leaded petrol vehicle emissions, industrial discharge, and flooding.

Alberto et al. (2006) measured lead levels in urban soils across six cities in the central Philippines. Lead was detected at all 30 sampling sites, with concentrations ranging from 1.5 to 251 mg/kg. Five of six cities showed elevated levels exceeding 25 mg/kg, with San Fernando City recording the highest average at 73.9 mg/kg. One site in San Fernando surpassed the WHO permissible limit of 100 mg/kg. The primary source was vehicular emissions — diesel trucks, buses, and jeepneys — a legacy of the era before the Philippines phased out leaded petrol. The researchers noted that children, who are more predisposed to lead toxicity than adults, face particular risk from contaminated urban soils.

Perhaps the most striking Philippine soil study comes from Ostrea et al. (2015), who investigated lead exposure in 150 children aged six to seven in Bulacan province. Every single soil sample tested positive for lead, with a median concentration of 27.06 mg/kg. River water was also universally contaminated, with a median of 70.00 parts per billion. The critical finding was the mechanism: flooding. The Bulacan region is flood-prone, and when rivers overflow, they deposit lead-contaminated alluvial and riparian soils across communities. The researchers found significant correlations between soil lead levels and lead concentrations in children's hair, concluding that 'alluvial and riparian soils from polluted rivers are important sources of lead exposure in children' (Ostrea et al., 2015, p. 5086).

Globally, lead can persist in soil for up to 2,000 years (Collin et al., 2022). This means that contamination from decades-old sources — leaded petrol, industrial waste, deteriorating lead paint — remains biologically active in Philippine soils today. Root vegetables such as carrots and sweet potatoes may accumulate the highest concentrations, while leafy greens like lettuce absorb lead from the soil as well (Collin et al., 2022). For communities growing food in urban or peri-urban areas near historical contamination sources, the soil pathway represents an ongoing, invisible risk.

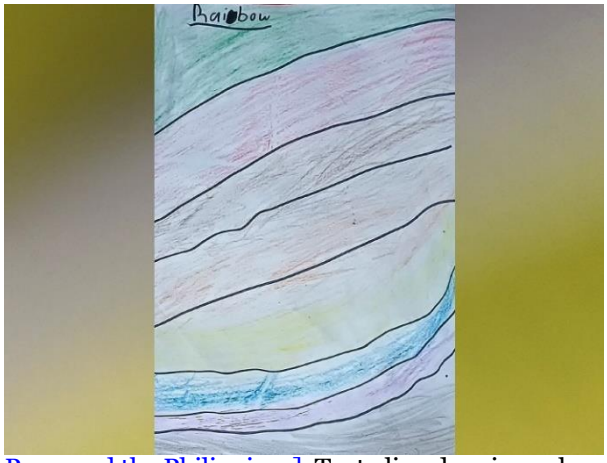
Dust: The Pathway You Cannot See

Lead dust is arguably the most insidious exposure pathway. It is invisible, settles on surfaces children touch daily, and can be ingested through normal hand-to-mouth behaviour. In the Philippines, the

evidence from school environments is alarming.

Ona (2010) collected 108 dust samples from six elementary schools in Tarlac City. Every single sample contained lead. Concentrations ranged from 158.3 to 287.8 µg/ft² — all substantially exceeding the US EPA's maximum exposure limit of 40 µg/ft² for floors. In other words, the dust on the floors of these Philippine classrooms contained four to seven times the amount of lead considered safe by US standards 16 years ago, and contained 32 to 56 times the US EPA (2024) Dust Lead Action Level (DLAL) of 5 µg/ft² for floors, following lead removal activities, effective 13 January 2025. The contamination showed minimal variation across the six schools, suggesting a systemic rather than localised problem.

The implications are sobering. Filipino schoolchildren spend hours each day in these environments, sitting on floors, handling materials, eating lunches. Ona (2010) concluded that 'schoolchildren in Tarlac City, Philippines are at risk of exposure to the hazards of lead dust' and called for policy interventions to address lead pollution in school environments.



2025 Volcano Art Prize (VAP) entry

Artist: Ella Mae Castro, Age: 4

Title: Dusty Rainbow

Lead-Safety Message: When there's too much heavy metal dust and smog in the air in Manila, the rainbow is greyer and less vivid. Lucky for me, Pure Earth has collaborated with local governments to include blood lead testing in to local health programs in the Philippines.

Description of Work: Message from Pure Earth's *Mitigating Lead Exposure in Low- and Middle-Income Countries - A Project to Reduce Lead Exposure in 7 Countries* [Colombia, Egypt, Ghana, India, Indonesia, Peru, and the Philippines]. Texta line drawing coloured in with pencils.

https://volcanoartprize.com/portfolio-item/dusty-rainbow/

Climate change may be making this worse. Research into the intersection of climate and lead exposure has found that warmer temperatures increase the mobilisation of lead dust inside homes, heightening children's exposure during hotter months (ARNEC and Vital Strategies, 2025). In a country experiencing rising temperatures and increasingly extreme weather, the dust pathway is not static — it is growing.

Products and the Food Chain: Lead at the Point of Purchase

In October 2025, the Philippine environmental group EcoWaste Coalition released laboratory results that should have made national headlines. Of 20 imported spray paint samples tested, all contained lead exceeding the country's legal 90 ppm limit. Twelve of the twenty exceeded 10,000 ppm. A counterfeit yellow Bosny Spray paint topped the list at 116,000 ppm — more than 1,200 times the legal limit for new residential paint sold. Most disturbingly, 13 of the paints displayed 'No Pb' labels, falsely claiming to be lead-free (EcoWaste Coalition, 2025).

The paints were mostly marked as manufactured in China or Thailand. The EcoWaste Coalition's findings illustrate a critical enforcement gap: the Philippines has the regulation, but imported products continue to enter the market in flagrant violation of it. As the ARNEC factsheet notes, around 52 per cent of countries worldwide still do not have confirmed legal controls on lead in paint, and even where regulations exist, enforcement is often lacking for local small-scale manufacturers and imported goods (ARNEC and Vital Strategies, 2025).

Lead also enters the food chain. Collin et al. (2022) document how lead bioaccumulates in plants, with root vegetables absorbing the highest concentrations and lead persisting in affected soils for millennia. Odunlami et al. (2024), studying trees and fruits grown near mechanic workshops in Nigeria, found that lead concentrations exceeded WHO/FAO limits in 83 per cent of samples — a pattern with direct relevance to Philippine communities near similar informal industrial sites. In Manila Bay, heavy metal contamination has been detected in aquaculture resources, raising concerns about lead entering the diet through seafood (Jimenez et al., 2018).

Beyond paint and food, the global picture reveals lead exposure from sources that may also affect the Philippines: used lead-acid batteries recycled informally, contaminated spices, traditional cookware and ceramics, cosmetics such as kohl and sindoor, cigarettes and electronic waste (Lead Elimination, n.d.). With 85 per cent of global lead production going into batteries and the number of vehicles in low- and middle-income countries tripling between 2000 and 2018, the demand for lead — and the risk of informal, unregulated recycling — continues to grow (ARNEC and Vital Strategies, 2025).

Conclusion: Mapping the Invisible

The research surveyed in this article paints a picture that cannot be ignored. Lead reaches Filipinos through their water, their soil, the dust in their children's classrooms, the paint on their walls, and the food on their tables. No single pathway tells the whole story; it is the accumulation across all of them that makes lead exposure in the Philippines a systemic public health challenge.

Existing regulations limiting lead in new residential paint sold should be expanded to include all types of new paint sold. (For comparison, the Australian Poisons Standard (NDPSC, 2024) required nearly all paint types sold in Australia to contain less than 0.009% lead by 1st October 2021; anti-corrosion paint was limited to 0.009% lead since 1st October 2023; and marine anti-fouling paint will be limited to 0.009% lead by 1st October 2029.) And it needs to be investigated as to whether enforcement of existing regulations in the Philippines is adequate. Spray paint products labelled 'lead-free' contain more than a thousand times the legal limit for new residential paint sold. Monitoring of blood lead levels in children is nascent at best. The legacy of leaded petrol persists in urban soils decades after phase-out, and climate change threatens to mobilise stored contamination through floods and rising temperatures.

2025 Volcano Art Prize (VAP) entry

Artist: Paulo Castro, Age: 6

Title: Happy Family

Lead-Safety Message: My family will be happy for life if my parents take me to Philippines General Hospital for a blood lead test to find out if I should be treated for lead poisoning. EDTA in food can lower my blood lead level and supercharge my learning at home and at school.

Description of Work: Message from Pure Earth's *Mitigating Lead Exposure in the Philippines: Integrating Lead Detection Into National and Local Health Systems*, and www.leadtox.blog by Dr Ulrich Mack. Texta drawings on coloured paper, cut-out and glued to paper.

https://volcanoartprize.com/portfolio-item/happy-family/

Yet the very existence of this evidence base is cause for optimism. Filipino researchers — from Mapua University engineers testing the Angat River, to Silliman University high school students sampling the Banica River, to Tarlac State University faculty swabbing classroom floors — are doing the foundational work that makes action possible. What gets measured gets managed, and these scientists are measuring.

Their work aligns with the LEAD Group's global vision of a lead-safe world by 2041. Every study, every dataset, every published finding brings that goal closer. The Philippines is not merely a country with a lead problem; it is a country whose researchers are actively building the case for change.

In Part 2 of this series, we examine what these exposure pathways mean for Filipino children's health — and what communities, researchers, and advocates are doing about it.

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2025 Volcano Art Prize (VAP) entry

Artist: James Brando, Age: 4

Title: Masked Man

Lead-Safety Message: My city of Manila is ranked the 11th worst city in the world for air pollution. Wearing a mask protects me from some of the air pollution and from COVID19 too. If my parents take me to the local health program, I could get a blood lead test and then they'd know if I need to start lead detox with oral EDTA.

Description of Work: Message from Pure Earth's https://www.pureearth.org/philippines/ - *Working to Solve Pollution in the Philippines Since 2008; Progress in Blood Lead Level (BLL) Testing in the Philippines (2021-Present)* and www.leadtox.blog by Dr Ulrich Mack. "Lead" pencil drawing with lead-free pencil.

https://volcanoartprize.com/portfolio-item/masked-man/

UK LEAPP Alliance Monthly Report to Supporters

By Tim Pye, Co-Founder, Lead Exposure and Poisoning Prevention (LEAPP) Alliance - A joint initiative of the Lead Containing Materials Association, Lead In The Water and Lead Safe World UK, 8th April 2026

Here is what has been happening in lead poisoning prevention in the United Kingdom since my last report.

Highlights

- We may be able to get some funding.
- Legislation to ban poisonous lead ammunition came into force 1 April 2026, but it is not that simple.
- Initial tests find lead in children's fast-fashion clothing.
- Vote for "Lead - How this story ends is up to us" at the Webby Awards. Currently in 3rd place.
- The 'Just Stop Lead' petition regarding Innospec has been rejected.
- There was a girl in hospital in Hull with lead poisoning.

Status

LEAPP Alliance CIC and Funding

Aveek Bhattacharya of Coefficient Giving has possibly found some funding for the LEAPP Alliance. Coefficient Giving run the Lead Exposure Action Fund which has raised about $104 million and intends to distribute this by the end of 2027. They have already made grants of $60 million. To take advantage of this opportunity, the best option seems to be to setup a Community Interest Company (CIC). This would be a legal entity, like a limited company, but all assets must be used for the benefit of the community. Unlike a charity, a CIC cannot claim Gift Aid, but is quicker to setup.

This would be a big change for the LEAPP Alliance, but something we have been talking about. I will draft a proposal about how this could work. I will be looking for a board of volunteer directors.

Numbers

The LEAPP Alliance currently has 136 supporters who have completed our endorsement form. Some, whose emails are now invalid, have been removed from the list.

Our social media presence is small, but growing.

Platform	Content	Name	Called	Number
Facebook	Page	LEAPP Alliance #	Followers	104
	Page	Lead Safe World #	Followers	118
	Public Group	LEAPP Alliance #	Members	7
	Public Group	Lead Safe World #	Members	6
	Private Group	Parents Against Lead (PALs)	Members	26
	Private Group	UK & Ireland Lead Safe Mamas (& Friends) *	Members	163
Linked In	Page	Lead Exposure and Poisoning Prevention Alliance	Followers	150
Bluesky	Account	LEAPP Alliance	Followers	26
Instagram	Account	LEAPP Alliance	Followers	54

I would like to merge Lead Safe World UK into the LEAPP Alliance page and group, but have not yet worked out how.

* UK & Ireland Lead Safe Mamas (& Friends) is not run by us.

Campaigns

Wildfowl and Wetlands Trust

The WWT are celebrating the introduction of the ban on lead ammunition that came into force on 1st April - Time is almost up for toxic lead ammunition. This a good step forward, but I think the legislation does not apply yet and is full of holes - see below.

Just Stop Lead

I reported last month that Piotr (Pete) Farbiszewski had created a petition asking the UK Government to ban the production of TEL at Innospec. The petition was rejected because it asks for Innospec to make a change and the government are not responsible for Innospec. It would seem the petition needs to be redrafted.

Lead: How this story ends is up to us

This audio docudrama, based in New York, has already won some awards - see https://endleadpoisoning.org/. They are now inviting support for their Webby awards bid. You can find the voting page here. Voting is open until Thursday, April 16th.

News Media

There is a paywall at the links to some of these articles. News media need to earn some money from their work.

BBC Hull and East Yorkshire

"Toddler poisoned by lead paint, mum warns", Stuart Harratt, 18th March 2026.

This is why we do what we do. Samantha Hoodlass's daughter Myah was admitted to hospital and eventually diagnosed with lead poisoning. Samantha admitted "I didn't know anything about lead paint". Why should she? The warnings are just too quiet. We need to get the warnings amplified to prevent this happening to yet more children.

Daily Mail

"Unsafe levels of cancer and autism-linked toxin discovered in popular 'fast fashion' clothing brands", Luke Andrews, 23rd March 2026.

Lead was detected in all 11 samples in this small undergraduate study. This was at levels exceeding 100 ppm. It is suspected that lead acetate is used to bind colours. Simulated stomach-digestion showed that chewing the fabric could cause dangerous exposure. This was done in Indiana, USA, but on clothes from global brands such as H&M, Shein and Zara so could apply in the UK as well.

Financial Times

"On lead, Britain is the laggard of the developed world", Aveek Bhattacharya, 2nd March 2026

This article discusses how British authorities are dangerously complacent when it comes to lead especially in the context of our old building stock and industrial history. Dr Bhattacharya is a LEAPP Alliance supporter.

Financial Times

"Letter: Why ending lead pollution is no longer a pipe dream", Professor Peter Calow, Hubert H. Humphrey School of Public Affairs, University of Minnesota, 10th March 2026

Professor Calow wrote this letter in response to Aveek's article. He agrees with Aveek's points and emphasises the issue of lead pipes. He estimates that 8-9 million UK homes are affected and that it will cost about £10,000 to replace the lead pipes in each. This cost will often be borne by homeowners, but the impacts of lower IQ on employability and crime cost more than the cost of remediation.

ENDS Report

There is some bad news from the EU. "Commission abandons plan to restrict lead bullets after member state backlash".

BBC

I have continued to communicate with Harriett Bradshaw, environmental camera journalist, at the BBC both directly and via the UK Health Security Agency. It is likely that the news hook will be the outcome of the ECLIPS pilot. So, nothing yet. I am also following up with other documentary producers at the BBC and two independent companies.

Consumer Reports

"What Home Lead Test Kits Can Tell You and What They Can't", Lauren Kirchner, 1st April 2026.

Consumer Reports in the USA seems to be the equivalent of Which? in the UK. This article reports on test of DIY lead paint test kits. I have not seen all of them for sale in the UK and they did not include Scitus swabs or Fluorospec UV light tests. They found that all kits, except one, detected lead at 10,000 and 1,000 ppm, but none at 100 ppm. The definition of lead paint is > 90 ppm and these cannot be used to detect lead down to that level. My view is that lead is everywhere, all analysis methods, including labs, have limitations and we just have to do the best we can to reduce risk within the limitations of time and money. We just have to be aware of the limitation of the tests - the results are lead a) detected, or b) too little lead to detect.

Government

Lead ammunition ban

I mentioned above that the ban on lead ammunition was reported by the WWT and others. I have tried to navigate the labyrinth of legislation and announcements. There was a government announcement last July "Toxic lead ammunition banned to protect Britain's countryside". The announcement refers to "UK REACH restriction for lead in ammunition, 27 June 2025". This links to "Restriction decision: lead in ammunition" and "Draft amendment for lead in ammunition restriction". There are two spreadsheets found under "Restrictions under REACH". The current list of restrictions does not include the word "ammunition", but this does appear in the registry of restriction intentions as "*Use of lead in ammunition (projectiles) in all habitats. Military and non-civilian use of lead ammunition is excluded. Primers are excluded*". However, this has the latest update as 13th December 2024, but does say "Opinion adopted". None of these documents mention 1st April 2026.

What I have found is an announcement "UK REACH restriction on lead in ammunition: outdoor shooting ranges" and "REACH (Amendment) Regulations 2026". The key points are:

- lead and its compounds must not be used or placed on the market after 1 April 2029
- in a concentration equal to or greater than 1% by weight in shot, 3% in bullets.

Although this regulation has come into force, it does not start to apply until 2028 and only fully in place in 2029.

Let's have a look at the holes in the legislation and the restriction decision from Emma Hardy MP on 27th June 2025.

The decision does not apply to Police, Military, Government Security Services, Private Maritime Security Companies and Border Force - they can carry on poisoning themselves and others.

- Elite athletes can use lead ammunition - I suppose this is to comply with the IOC requirements. A ban was suggested in The Conversation and elsewhere.

- Indoor shooting is exempted apart from with shot - We seem to care more about wildlife than humans. Remember "Walsall firing range staff treated for lead poisoning".

- The ban does not apply to bullets intended for indoor use but then sold for outdoor target shooting - so that is no restriction on bullets at all.

- The restriction on 3% lead in projectiles other than shot does not apply to:
  - small bullets used for live quarry shooting or
  - indoor target shooting or
  - at an outdoor shooting range

- Still plenty of lead can legally be put into the environment. I think outdoor shooting ranges includes clays as well as targets.

- There is a labelling requirement for projectiles with a calibre of more than 6.17 mm saying "Must not be used for live quarry shooting" - I wonder if that will be respected?

- Lead ammunition with less than 1% for shot and 3% for bullets is still allowed - a typical shotgun pellet weights 0.06 g, so at 1% this is still 600 µg lead. That is many times the FDA child intake reference weight of 2.2 µg so best not swallowed.

- There is no ban on airgun pellets made of lead - What! Why not?

The basic fact is that it seems that lead shot will be banned from use, indoor and outdoor, from 1st April 2029. This has got to be a good thing, but the term "too little, too late" comes to mind.

Open Letter to Ministers

Lee Crawfurd has forwarded a response from Neil Gray MSP, Cabinet Secretary for Health and Social Care in the Scottish Government, in response to the open letter sent to health ministers in all four UK nations.

The response is more extensive than those received from Wales and Northern Ireland. This also defers to the National Screening Committee but has some other information. This includes the Lead in Children Scotland (LiCS) surveillance system. This is a passive system, like LEICSS (United Kingdom Lead Exposure in Children Surveillance System), and started in January this year, but will analyse data from 2015 to 2024. The letter also discusses the management of elevated lead levels in drinking water and the consultation that I shared earlier.

I don't think we have yet had a response from Wes Streeting or anyone in the Department of Health and Social Care.

Awaab's Law

I wanted to see if we could get lead hazards included in Awaab's Law. On further investigation I found that it is already there in phase 3. This is when all remaining HHSRS hazards will be addressed. The implementation timeline is October 2027.

UK Health Security Agency

Simon Reddy asked the South West Health Protection Team (HPT) in the UKHSA for a response to his findings regarding safe drinking water in Torbay schools. The response acknowledged that lead exposure in children is an important and under-reported public health problem and that they are raising awareness with clinicians and health professionals. They refer to the UKHSA webpages - I wonder how many GPs go looking for them. Simon has now asked for more information including evidence of potability and wholesomeness, data from Torbay schools, their view on the impact on food safety, and in what ways the HPT are supporting Torbay Council. Great persistence by Simon - what is true in Torbay may well be the same across the country.

Research

If I reported on all the new research I see each month related to lead toxicity this would be a long update! I think it is correct to say that lead continues to be the most researched environmental toxicant. Here are acouple of items.

ECLIPS

The ECLIPS project pilot in Leeds continues to progress. About 500 blood lead sampling kits have now been distributed. This will be followed by invitations for participation via posters in clinical settings. See more on the website.

Lead-Attributable Cardiovascular Disease Burden

This study is titled "Lead-Attributable Cardiovascular Disease Burden: Global Burden of Disease Study 2023" (Stanaway et al, 2026). It is important because of the quantity of data points, n=42,028. It was found that 3.5 million deaths globally in 2023 could be attributable to lead exposure (5.8% of all deaths) and that lead is the second leading environmental risk (it does not say what #1 is). They concluded " *Cumulative lead exposure remains a major, preventable contributor to global CVD mortality. Strengthened surveillance, regulation, and remediation are urgently required to reduce*

the lead-attributable burden." Too right!

Actions

Here is my do/doing/done list from last month with updates in bold.

- Respond to requests for help or advice from individuals as they arise and send test or sampling kits if appropriate - ongoing
- Arrange to speak to construction companies at Croydon College - done, waiting to hear
- Work with television producers - ongoing
- Investigate the emerging healthy homes standards - to do
- Try to find out if lead hazards could be included in Awaab's law - done
- Try Lauren's HTML on our website hosting platform- to do
- Continue to support the ECLIPS project - ongoing
- Ask the Residential Property Surveyors Association if they will follow RICS and include lead risk-assessments in their standard - done no response yet
- Ask the Law Society again about including lead hazards in standard forms completed by vendors on sale of homes - done no response yet
- Keep telling Chris Packham that he should help us because he knows lead is toxic and is linked to the conditions he covered in his "Our ... minds" television series - ongoing
- Write a proposal for a funded LEAPP Alliance CIC
- Encourage LEAPP Alliance supporters to enter Volcano Art Prize by 27 July 2026

If anyone wants to pick up any of these tasks, or contribute to the LEAPP Alliance in other ways, then please let me know.

2025 Volcano Art Prize (VAP) Entry. Photographer: Tim Pye. Title: Lead is a crime. Lead-Safety Message: There is no lead on this roof. Not because of toxicity concerns but because lead might get stolen. Lead increases criminality and the lead flashing on a roof provides the opportunity for crime. Description of Work: Photograph of a sign on a wall.

https://volcanoartprize.com/portfolio-item/lead-is-a-crime/

When Pure Earth took the TED2026 Mainstage

Drew McCartor, President, Pure Earth, Thursday, April 23, 2026

Reflecting on TED2026

Last Tuesday, I stood on the TED2026 mainstage in Vancouver to explain the scope of lead poisoning globally, and describe Pure Earth's plans to solve this massive health problem at scale. The video of my TED Talk will take a few months to publish, and we will share when it is posted.

It was, without question, one of the highest-visibility moments in Pure Earth's history: more than 1,000 of the world's most influential thinkers, philanthropists, and leaders were in the room. I closed the talk by describing the solutions Pure Earth is implementing today and the opportunity we have to protect generations to come. The audience responded with a standing ovation.

It was a rare and meaningful recognition of the collective impact Pure Earth teams are having through hard work, vision and dedication. In the days since, dozens of funders, scientists, policymakers, and advocates have approached me, expressing shock at the scale of this challenge and asking how they can help.

We are expanding our programs to protect more than 500 million children from lead poisoning by 2033, but we can't do it alone. Many of you have been following, supporting, and partnering with Pure Earth for months, years, and even decades. We look forward to embarking on this next chapter together.

Explore Pure Earth's Audacious Project to Protect 500 Million Children

Pure Earth at the Skoll World Forum in Oxford

Photo Credit: Fisher Studios

This week, I'm at the **Skoll World Forum** in Oxford as a delegate, with my colleagues Carol Sumkin, Jen Marraccino, and Dr. Chris Kinally. Yesterday, at The Impact Lounge, Pure Earth joined leaders from the World Bank, UNDP, The Audacious Project, and the Storytelling Solutions Project to explore how visual storytelling drives social impact, including a screening of our award-winning documentary One in 36 Million.

Today, we're part of two events. The first, hosted by Pure Earth and Coefficient Giving and moderated by 3x Grammy winner and UN Goodwill Ambassador **Ricky Kej,** will bring together leaders from TED, the Center for Global Development, and more to discuss scalable solutions to toxic lead exposure. The second event convenes Pure Earth, OpenAQ, the Center for Global Development, and the University of Oxford to chart a path from fragmented awareness to coordinated action on children's environmental health, including lead poisoning, air pollution, and toxic exposures.

Earth Day 2026: Miners Leading Reforestation in Peru

This Earth Day, we're celebrating artisanal and small-scale gold miners in Madre de Dios, Peru, who are working with Pure Earth to use mercury-free methods to reforest land damaged by gold mining. So far this year, the miners we've trained with funding from Brilliant Earth have planted over 1,800 trees, reforesting more than 16 hectares and helping bring degraded land back to life.

Victoria Condori, a member of the Women's Mining Network of Madre de Dios, is leading these reforestation efforts at her mining site. "Nature is wonderful," says Victoria. "And if I help it, it will be better, not for me, but for those who come after me."

Read More on the Blog

***OUR MISSION** - Pure Earth protects human health and the environment in low- and middle-income countries by collaborating to prevent exposure to the most harmful toxic pollutants sustainably and at scale.*

Solve Pollution. Save Lives. Protect The Planet. Donate to Support Our Work

Info Pack on Lead in Drinking Water in Australia

By Elizabeth O'Brien, Lead Scientist and Lead Advisor, The LEAD Group Inc,
Nominee for the Australian of the Year Awards 1996 and 2016, Info Pack - April 2026

Finally, after at least 33 years of having the same Australian Drinking Water Guideline limit for lead of **0.01mg/L** (0.01 milligrams of lead per litre of water), in June 2025, the lead limit was halved to **0.005mg/L**. See https://www.nhmrc.gov.au/about-us/publications/australian-drinking-water-guidelines

Nevertheless, because The LEAD Group aims for everyone's blood lead level to be below 1µg/dL (1 microgram per decilitre), and that action should be taken to lower blood lead levels of 1ug/dL and over (whereas the Australian government only recommends action be taken for blood lead levels of 5µg/dL and over), The LEAD Group continues to recommend that all drinking water lead results should be less than 0.001mg/L, written as **<0.001mg/L.**

Unlike in the United Kingdom and the USA where lead water pipes were used extensively, I've seen no evidence of lead water pipes being used in Australia. Instead, new brass taps have been found to add lead to the water for between a few months and a handful of years, and the other major culprit is lead in rainwater (from lead roof flashing, lead paint on rooves, leaded brass or rubber in water pumps, etc), which affects mostly rural Australians who depend on rainwater for drinking.

In Australia, to test water and/or dust wipes and ceiling dust, soil or paint, etc, you can purchase a LEAD Group 8-Sample Posted Kit at www.leadsafeworld.com/shop using Paypal or Credit Card. *Drawing credit (tap): Patricia Parkinson*

Before you drink rainwater from your new tank, I recommend you test water from the kitchen tap (a first flush sample and a flushed sample); and use the other 6 samples to test any combination of soil, dust, paint or egg samples. If you want to test water from two or more taps with a

LEAD Group Posted Kit, please add a note in the Shipping Comment: "4 samples will be water" or "6 samples will be water" and also specify how many dust wipe samples you want to test (if any).

Harvey et al *Widespread copper and lead contamination of household drinking water, New South Wales, Australia* (web-published in November 2016 at http://www.sciencedirect.com/science/article/pii/S0013935116303280) recommends a major shift to non-leaded plumbing products in Australia. As one of the co-authors, Professor Mark Taylor, is on The LEAD Group's Technical Advisory Board, The LEAD Group has thus become the prime community advocate for this switch to non-leaded plumbing and non-detectable lead in drinking water.

So, what does The LEAD Group recommend before this policy is taken up by Australian governments, for people wanting to ensure that their drinking water does not contain lead? Firstly, buy a LEAD Group Kit and test two water samples (the first flush and the flushed sample) from each tap that anyone in the family (including pets) drinks from. If your current drinking water returns the two lab results showing non-detectable lead, you can start or keep drinking it!

If your drinking water lead levels are detectable, we recommend you further investigate where the lead is coming from. The lead author of the Harvey et al 2016 research on non-Sydney NSW drinking water, Paul Harvey, who did his doctorate under Professor Taylor at Macquarie University, found that new taps and other plumbing products purchased/installed in the past 5 years can add detectable lead levels to the water. Two LEAD Group Kit purchasers have also found that the cheap Chinese-made pump or the ball valve that their plumber installed, also added huge amounts of lead to the water and the pump had to be replaced with a stainless steel pump before the rainwater was tested again and found to be lead-safe to drink.

If you are buying a new water pump, the best we can recommend is that you buy a stainless steel one made in Germany or the USA – but ALWAYS test the water before drinking it even if you have followed all recommendations on "safe" plumbing products and replaced lead flashing or simply ensured there is only non-lead flashing like Wakaflex by EvoBuild on the rainwater collection area.

2021 Volcano Art Prize (VAP) Entry. Photographer: Jason Fargie. Title: Beware Lead Flashing on Your Roof. Lead-Safety Message: Replace lead flashing with non-lead flashing like Wakaflex, in order to reduce lead in rainwater and stormwater.

https://volcanoartprize.com/portfolio-item/beware-lead-flashing-on-your-roof/

If you are buying new taps and fittings, Paul Harvey recommends stainless steel because all brass and bronze contains some lead. Note that brass and bronze in plumbing pipes made in the USA has been permitted to be labelled as "lead free" if it is limited to less than 0.25%, since 2014 (see the policy: "reducing definition of "lead free" for pipes from 8% to 0.25% by weight effective 2014" in the article by EDF US *Lead Impacts of Policy Data 1971-2016* from www.edf.org/leadpolicytool - published 9th Sept 2016). By comparison, up to 4.0% lead in

brass or bronze is permitted in plumbing products sold in Australia until we move next month, 1st May 2026, to the deceptive labelling of less than 0.25% leaded brass taps as "lead-free". Professor Taylor and I agree that only stainless steel taps should be permitted to be labelled "lead-free".

There are a number of aspects that need to be considered when managing lead in drinking water when the drinking water is from a rainwater tank.

See "*Lead: a modern day problem in plumbed rainwater. Could the pump or ball valve be adding lead to our rainwater?*" as well as "*Drinking water lead contamination flows on*", by Paul Harvey, in LEAD Action News vol 17 no 1 at: https://www.leadsafeworld.com/wp-content/uploads/2016/09/lanv17n1/LANv17n1-Lead-safety-art-awards-in-lead-week-of-action.pdf; and https://www.lead.org.au/lanv17n1/LANv17n1-Lead-safety-art-awards-in-lead-week-of-action.pdf

Sadly, the advice from the Australian federal government (March 2011) only adequately deals with one such lead issue, leaf litter, although it does advise removing or replacing inappropriate materials. Here's their advice:

"Health Hazard: Lead contamination

Cause 1

Lead based paints and primers on roofs

Preventative measure: Do not collect rainwater from roofs painted with products containing high lead concentrations (for example, pre-1970s paint). When painting roof, check suitability with paint retailer.

Cause 2

Uncoated lead flashing on roofs

Preventative measure: Paint existing material or use pre-coated products.

Monitoring: Inspect roof and gutters every six months.

Corrective action: Use coated lead flashing or alternative materials on new roofs. Paint existing uncoated flashing.

Cause 3

Increased corrosion of metals due to low pH from long periods of contact between rainwater and leaves

Preventative measure: Keep gutters clean. Install leaf protection devices on gutters.

Monitoring: Inspect gutters every six months.

Corrective action: Clean gutters. If large amounts of leaves are detected on regular inspections clean more often.

Cause 4

Chemical contaminants from tanks, pipe work, etc

Inappropriate material that does not comply with Australian or Australian/New Zealand

Standards relating to food grade products or products for use in contact with drinking water.

Preventative measure: Use only approved materials.

Monitoring: Check suitability of product with retailer or supplier.

Corrective action: Remove or replace product."

[Ref: http://www.health.gov.au/internet/main/publishing.nsf/Content/0D71DB86E9DA7CF1CA257BF0001CBF2F/$File/enhealth-raintank.pdf ; ACCESSIBLE VIA http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-enhealth-raintank-cnt.htm

By comparison, the original version of monograph "*Guidance On The Use Of Rainwater Tanks - National Environmental Health Forum Monographs - Water series No. 3 [1998]*": https://web.archive.org/web/20030607105946/http://enhealth.nphp.gov.au/council/pubs/pdf/rainwtr.pdf states:

"As a precaution lead flashing should not be used on those parts of a roof used as a rainwater catchment area. In the case of an existing roof, lead flashing should be replaced if possible."

2012 Volcano Art Prize (VAP) Entry. Photographer: Peter Webb. Title: Lead flashing. Lead-Safety Message: Replace lead on your roof with non-lead flashing / gutters / paint etc before installing a rainwater tank. https://volcanoartprize.com/portfolio-item/pb-2/

The LEAD Group definitely advises this replacement of lead flashing. Additionally, we agree with the advice in the 2011 monograph that lead-headed nails in the rainwater collection roof area should be replaced with plastic washers, but we do not agree that coating lead flashing (or leaving thermo-baked coated lead flashing) or overcoating lead paint on a roof is an adequate management technique – lead flashing should be replaced with non-lead flashing and lead paint should be safely removed or the lead-painted roofing replaced. All paint sold today is non-leaded so any new paint you buy is safe to use. Do not use old paint – it may be leaded (and it may not be labelled as leaded).

Usually the cheapest way to ascertain whether lead may be a problem in the water you have

been drinking is to have a blood lead test (ask the doctor for a blood lead series referral) and if the result is higher than 1 microgram per decilitre, THEN you can test the drinking water for lead, as well as other potential sources of lead such as house dust, soil, paint, ceiling dust, toys, hobbies, work, childcare centre, etc. Of course, if you're trying to completely prevent lead poisoning eg you've just moved in to a home or you're bringing home a newborn, then you would need to test lead in the drinking water as your first step.

The LEAD Group's DIY-sampling lead test kits can be purchased at www.leadsafeworld.com/shop including payment by EFT if preferred. Order the Kit at the online shop and then see our bank account details at https://leadsafeworld.com/direct-bank-transfer/ and email the receipt.

The LEAD Group Kit cost includes a report in which we provide advice on lead management which is sent with the Kit results. Both the 2-Sample Posted Kit and the 8-Sample Posted Kit can be used to test two Water Samples. Please let us know if you buy a Kit to test Water, so that we can include the correct sampling equipment when we post you the Kit. Also let us know if you buy the 8-Sample Kit and need more than two samples to be Water eg you have more than one drinking water tap or more than one rainwater tank.

If you become a LEAD Group Member first, you'll receive a $20 discount off the normal cost of the 2-Sample Posted Kit (all kit costs include laboratory analysis for lead) so you can even send one first flush sample of drinking water to the lab, obtain the result and decide whether you need to do something to lower the lead level in the water, then send the other sample (also a first flush sample) after you have attempted to fix the problem, to see if the water has gone down to an acceptable lead level. Similarly, if you purchase The LEAD Group's 8-Sample Posted Kit (Members receive a $25 discount), you could send samples from, say, each of your rainwater tanks, and perhaps a sample of any roof paint, especially if it is peeling, (or of dust wipes inside the house or soil or ceiling dust, etc) before and after fixing your lead in drinking water / lead in dust problems. For more details and to order a kit online, see https://www.leadsafeworld.com/solutions/lead-group-diy-sampling-lab-analysis-lead-test-kits/

There are several ways to "fix" lead problems in rainwater tanks, mentioned in the article by Dr Neville Gibson, MSc, PhD, called "What to do if you have too much lead in your tank water" (at https://www.lead.org.au/fs/tankwater.pdf) but some of Dr Gibson's solutions would work equally well for non-rainwater or non-tankwater drinking water.

The LEAD Group has also written the factsheet "Lead In Drinking Water In Australia" at https://www.lead.org.au/lanv8n1/l8v1 as well as "Lead-safety for roofers and rainwater users!" at https://www.leadsafeworld.com/solutions/lead-safety-for-roofers-and-rainwater-users/

You will also find a link to Evo Building Products non-lead flashing products (called "Wakaflex") at https://www.leadsafeworld.com.au/partners/lead-free/

Lead free stainless steel potable water plumbing products are available at http://vinco.com.au/product-category/lead-free-bathroom-kitchen-tapware/?term_id=70

You can check out the Vinco Stainless Steel tapware at http://vinco.com.au/product-category/lead-free-bathroom-kitchen-tapware/?term_id=70 and contact them via sales@vinco.com.au or (02)95174800 to find out where to purchase.

It turns out Reece Plumbing only has brass taps by Nicolazzi (made in Italy) on their website, but https://www.reece.com.au/assets/brands/155000/Teknobili-Nobili-Tapware-Mixers-Brochure-V20.pdf says two kitchen sink mixer taps made by Nobili (in Italy) are "also available in stainless steel".

LEAD Action News vol 17 no 2 contains articles on lead-free Vinco full stainless steel tapware and lead free PVC pipeware etc. See https://www.leadsafeworld.com/wp-content/uploads/2016/11/LANv17n2-VAP-Awards-ILPPWA-Lead-Poisoning-Stuttering.pdf AND https://www.lead.org.au/lanv17n2/LANv17n2-VAP-Awards-ILPPWA-Lead-Poisoning-Stuttering.pdf

And lead may not be the only tankwater problem that needs fixing. You may wish to refer to:

"Guidance On The Use Of Rainwater Tanks - National Environmental Health Forum Monographs - Water series No. 3" [2011] or Information on the health department website (as above).

2013 Volcano Art Prize (VAP) Entry: Collage artist: Jongmin Choi. Lead-Safety Message: To achieve lead-free rainwater for drinking, employ the right plumber to remove lead from the roof, and install a first flush diverter and lead-free potable-water-safe flashing, piping, tank, pump etc. https://volcanoartprize.com/portfolio-item/504/

UN & WHO Lead Paint Alliance Plethora of Global Events

Eliminating lead paint matters! 17 April 2026

Introduction

The Alliance is pleased to present its April 2026 newsletter in which we share updates about the ongoing work to phase out lead paint worldwide, including new lead-related resources, updates on progress towards laws, and lead paint in the news.

Upcoming Events

Short Films for Social Change at The Impact Lounge in Oxford (21 April 10:00-13:00 GMT | In-person only)

At The Impact Lounge at the Marmalade Festival, Pure Earth will join leaders from the World Bank, UNDP, The Audacious Project, and the Storytelling Solutions Project to explore how film and visual storytelling can drive real social impact. The event will showcase several powerful short films, including Pure Earth's award-winning documentary ***One in 36 Million***, that are reshaping narratives around today's pressing issues. This session starts at the Phoenix Picturehouse at 10am with a short film festival

and lively discussions. At 12pm, we will then head across the street to the Branca Restaurant for food, drinks, and further conversations. **Learn more and register here**

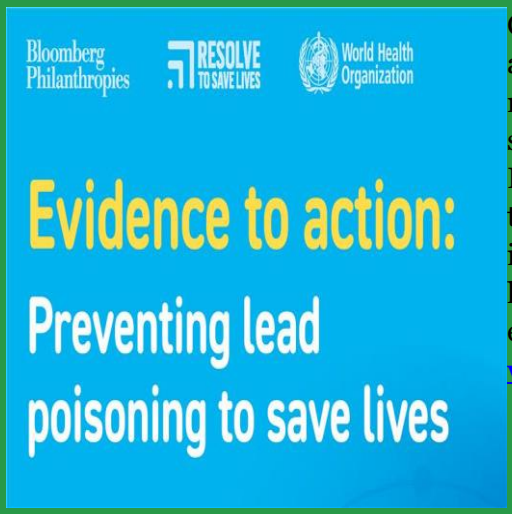
The Invisible Crisis: Lead, Air Pollution, and Children's Environmental Health (22 April 12:30-13:30 GMT | In-person only)

Speakers from Pure Earth, OpenAQ, the Center for Global Development, and the University of Oxford will discuss how we can move from fragmented awareness to coordinated action on lead poisoning, air pollution and toxic exposures. Participants will also explore the links between environmental health, climate action, and economic development, and the role of financing, data, and partnerships in scaling impact. **Learn more and register here**

Skoll World Forum Sidebar Event: Improving the Health and Futures of Over 500 Million Children (22 April 15:00-16:30 GMT | In-person only)

Co-hosted by Pure Earth and LEAF (Coefficient Giving) at the Goodman Library at Oxford University, 3x Grammy Award winner and UN Goodwill Ambassador Ricky Kej will guide a conversation anchored in real-world case studies on scalable solutions to toxic lead exposure. Pure Earth President Drew McCartor will discuss Pure Earth's ambitious goal of improving the lives of over 500 million children. The speaker lineup also includes Tanvi Monga (TED), Dr. Lucia Coulter (Lead Exposure Elimination Project), Lee Crawfurd (Center for Global Development), Tom Hird (Coefficient Giving), Dr. Mary-Ann Etiebet (Vital Strategies), Tammy Tan (Lead Research for Action), Will Fitzgibbon (The Examination), and Pure Earth's Dr. Chris Kinally. **Learn more and register here**

Evidence to action: Preventing lead poisoning to save lives (18 May 8:00-9:30 CEST |Virtual event)



Co-hosted by WHO, Bloomberg Philanthropies and Resolve to Save Lives, this event in the margins of the World Health Assembly will set the stage for a new WHO Technical Package for Lead Poisoning Prevention, to be released together with the WHO Global Action Plan on Lead Mitigation in 2027. Drawing from country examples, public health leaders will outline actionable steps to end exposure to this toxic element. **Register to watch the livestream here**

The Global Framework on Chemicals – First International Conference (16 - 20 November 2026)

The First International Conference will take place from 16 to 20 November 2026 at the Geneva International Conference Center in Switzerland. The conference will feature a high-level segment, bringing together governments, industry, companies, and non-governmental and intergovernmental organizations, for a planet free of harm from chemicals and waste. The Global Framework on Chemicals provides the foundation for a future in which humanity benefits from chemicals in a safe and sustainable way. Its five strategic objectives and 28 targets guide countries and stakeholders to address the full lifecycle of chemicals, including products and waste, while preventing harmful impacts on human health and the environment.

Recent Events

Towards a coordinated, multi-sectoral lead management approach in Latin America and Caribbean region (30 October 2025)

The United Nations Environment Programme (UNEP), with support from the European Union, facilitated an online regional consultation on lead sources and management in Latin America and Caribbean countries, following similar initiatives in Africa and Asia-Pacific. The consultation aimed at assessing the feasibility of a coordinated, multi-sectoral approach by countries in Latin America and Caribbean region to manage lead exposure. Objectives included sharing information on current lead management efforts and needs, identifying major sources of exposure and existing regulations, showcasing country-level strategies, and discussing barriers and opportunities for implementing coordinated lead reduction actions across sectors. The full report and meeting recording can be accessed **here**.

LEEP and UNEP Regional Lead Paint Regulation Capacity Building Workshops (28-29 January 2026, Nairobi, Kenya and 11-12 February 2026, Lome, Togo)

Lead Exposure Elimination Project (LEEP) in collaboration with the United Nations Environment Programme (UNEP)'s Chemicals and Health Branch and the Kenya Bureau of Standards (KEBS) and the Ministry of the Environment, Forest Resources, Coastal Protection and Climate Change of Togo organized two regional capacity-building workshops to catalyze government commitments and accelerate implementation of lead paint regulations across Africa. These workshops brought together government representatives, industry, and civil society to strengthen national and regional action toward implementing and enforcing lead paint regulation. The primary objectives of the workshops were to catalyze government commitments to adopt or strengthen lead paint regulations; build political momentum for lead paint elimination through peer learning, regional coordination, and high-level ministerial engagement; and strengthen technical capacity among government officials on regulatory approaches, enforcement mechanisms, and paint industry engagement. The workshop generated strong political momentum, with renewed country commitments, deep technical engagement, and presentations from paint manufacturers demonstrating pathways to transition to lead-free materials. Several governments have already initiated follow-up actions, including launching paint studies and beginning stakeholder consultations to inform new regulations.

Hybrid Expert Group Meeting to develop the measurability structure of the Global Framework on Chemicals (19-20 February 2026)

WHO led the task group on the Global Burden of Disease high-level indicator, which includes lead being the largest contributor to the GBD estimates for selected chemicals **published by WHO** and the Institute of Health Metrics and Evaluation.

Among existing indicators with custodians, the Number of countries with Legally binding controls on lead paint, as tracked from the **WHO Global Health Observatory**, is included among the list of proposed indicators to be adopted at the first International Conference of GFC in November 2026.

WHO Webinar: Strengthening Global Efforts in Lead Poisoning Prevention Confirmation (4 March 2026)

WHO hosted a webinar on elements of the WHO Global Action Plan mandated by World Health Assembly resolution 78.27 (2025) to be presented to the 80th World Health Assembly in May 2027. The webinar included draft elements of the WHO global technical package on lead poisoning prevention being developed in collaboration with Resolve To Save Lives and was attended by 120+ participants from 46 countries. Audience questions focused primarily on feasibility and implementation— particularly around laboratory capacity, surveillance systems, regulatory authority, and intersectoral coordination. Participants also sought clarification on practical challenges such as blood lead testing, enforcement mechanisms, stakeholder engagement, and how countries with limited resources can prioritize actions.

IOMC Webinar: Preparation of the Global Framework on Chemicals – First International Conference Report on Existing Emerging Policy Issues (EPIs) and other Issues of Concern (IOCs) (19 March 2026)

This sixth webinar in the series of IOMC webinars supporting the development of the **Global Framework on Chemicals** provided an update on the preparation of the report on existing emerging policy issues (EPIs) and other issues of concern, in response to the invitation in ICCM-5 **resolution V/5**. This webinar provided an opportunity for the responsible IOMC organizations to present the status of the development of the report for the first International Conference and for dialogue with stakeholders for the following

existing emerging policy issues (EPIs) and other issues of concern:

- **Lead in paint**
- **Chemicals in products**
- **Hazardous substance within the life cycle of electrical and electronic products**
- **Nanotechnology and manufactured nanomaterials**
- **Endocrine-disrupting chemicals**
- **Environmentally persistent pharmaceutical pollutants**
- **Perfluorinated chemicals and the transition to safer alternatives**
- **Highly hazardous pesticides**

UNEP and WHO prepared and presented the status on lead in paint.

Partner Corner

GAELP Welcomes 1 new members

The Alliance is pleased to welcome its newest partner, the **California Institute of Environmental Design & Management (CIEDM)**. This organization joins over 100 **partners** who have committed to help catalyze the efforts of a diverse range of stakeholders to achieve international goals to prevent children's exposure to lead from paint and to minimize occupational exposures to lead paint. More information is available from the Alliance website on **how to become a partner and a sample letter of intent** to join the Lead Paint Alliance.

Update on Alliance Business Plan

Global Alliance to Eliminate Lead Paint

Building on the consultations from the Extended Global Advisory Council meeting, UNEP and WHO have revised the Alliance Business Plan, which is now published and can be accessed **here**. The business plan priorities for up to 2030 focus on eliminating lead in all types of paint through a combination of legal, industry, and advocacy efforts. Key goals include supporting governments in establishing and enforcing laws to restrict lead paint; encouraging industry to cease its manufacture, import, and sale; and raising awareness of the health and environmental risks posed by lead paint and lead chromates. The plan also emphasizes engaging Alliance partners and expanding stakeholder involvement across sectors, while coordinating with international initiatives such as the Partnership for a Lead-Free Future and the Global Framework on Chemicals to align efforts and access funding opportunities. Indicators have been developed to track and assess progress in implementing the Business Plan.

GAELP Partner Pure Earth receives the Audacious Project Grant to reduce childhood lead poisoning

Pure Earth announced an **Audacious project** to protect over 500 million children from lead poisoning by 2033, which reflects growing momentum in addressing childhood lead poisoning and will drive urgent progress toward the Partnership for a Lead-Free Future's collective goal of ending childhood lead poisoning by 2040. This initiative aims to strengthen national capacity to monitor blood lead levels, pinpoint key exposure sources, and design focused, country-driven prevention measures. By institutionalizing surveillance and prevention within public systems, it seeks to create lasting structures that deliver sustained impact over time.

UNICEF's work on measurement, including testing paint, strengthening regulations and supporting development of national plans

UNICEF is working with governments in four countries (Bangladesh, Cambodia, India and Viet Nam) to design large-scale environmental lead exposure surveys. The purpose of these surveys is to determine the prevalence of elevated blood lead levels (BLLs) in children (age 12-59 months) and pregnant women and to characterize key sources of exposure. Tens of thousands of environmental measurements will be taken in households and community spaces of a range of environmental media, including paints. In addition, the presence of lead contamination in various market products, such as paints, will be assessed.

Across several countries, UNICEF is supporting efforts to strengthen regulatory frameworks on lead, including in paint, by promoting more integrated and cross-sectoral approaches that link consumer products, environmental sources, and public health. This includes support to regulatory reviews, policy development, and institutional coordination, alongside efforts to strengthen compliance and enforcement systems. In Bhutan, work is underway to address lead across multiple sectors, including paints, through coordinated regulatory action. In Viet Nam, regulatory review processes have also considered paints as part of a wider assessment of legal and institutional frameworks.

UNICEF is supporting comprehensive Children's Environmental Health Assessments (CEHAs) in 14 countries, which include systematic literature and desk reviews to identify key sources of lead exposure, including lead in paint, assessing existing mechanisms for prevention and response, and highlight critical gaps that require action. Across 34 countries, UNICEF is providing technical assistance to drive advocacy, strengthen multi-sectoral coordination and develop action plans for addressing sources of lead exposure.In Peru, UNICEF's high-level advocacy and participation in the multi-sectoral working group on heavy metals contributed to regulatory reform in 2025 establishing a maximum limit of 90 parts per million (ppm) of lead in paints, strengthening safeguards against lead in paints and other coating materials.

Updates from the U.S. Environmental Protection Agency (EPA) and U.S. Federal Interagency Efforts

EPA is continuing work under the government-wide **Federal Action Plan to Reduce Childhood Lead Exposure** by addressing lead under various statutory authorities and responsibilities. Recently, EPA shared its **annual commitments** to these efforts in addressing lead contamination and exposure prevention. Relevant for global efforts, EPA is committing to support completion for one or more tools on best practices for lead pollution reduction in low- and middle-income countries to encourage global reductions in lead use and in import of lead-containing products into the US as well as continuing to recruit EPA technical authors and reviewers for additional tools and consults.

The **President's Task Force on Environmental Health Risks and Safety Risks to Children** also published an interim **Federal Lead Resource Guide**. The guide is a collection of select federal lead-related resources, programs and assistance opportunities for use by the public, including information on awareness-raising, financial opportunities, regulatory resources, technical information, toolkits and guidance documents.

Update from the Rotterdam Convention Secretariat

Notifications of final regulatory action to severely restrict lead chromates submitted by Cameroon and Morocco were published in the Rotterdam Convention **database of notifications** and the **PIC Circular** in December 2024. A notification of final regulatory action (FRA) severely restricting a broad range of lead compounds, including pigments (such as lead chromates), corrosion inhibitors, and lead soaps submitted by Switzerland was also published in June 2025. A further notification of FRA to severely restrict lead chromates submitted by Australia was published in December 2025.

As stipulated in Article 5 of the Rotterdam Convention, when the Secretariat has received at least one notification from each of two Prior Informed Consent (PIC) regions regarding a particular chemical that it has verified meets the requirements of Annex I, it forwards them to the Chemical Review Committee (CRC). The CRC reviews the information provided in such notifications and, in accordance with the criteria set out in Annex II, recommends to the Conference of the Parties whether the chemical in question should be made subject to the PIC procedure and listed in Annex III.

The Secretariat has forwarded the notifications of FRA related to lead chromates, as well as related to other chemicals, to the Committee. These are expected to be considered at its **twenty-second meeting**, tentatively scheduled to take place in Rome from 15 to 18 September 2026.

The criteria for listing banned or severely restricted chemicals in Annex III to the Rotterdam Convention, set out in Annex II, includes consideration of whether there is evidence of ongoing international trade in the chemicals under review. Parties and other interested observers have been **invited** to submit **by 20 June 2026** information on ongoing international trade for lead chromates, among other candidate chemicals.

Updates from IPEN

IPEN is currently rolling out projects with partner NGOs in more than 20 countries to document national trade data on lead chromates and raise awareness among stakeholders on the importance of regulating its international trade through the Rotterdam Convention. In the past three years, IPEN and its local partners in four countries have actively campaigned to encourage their governments to take action which led to the submitted lead chromate notifications by Cameroon, Morocco, Switzerland, and Australia.

Progress Towards Laws: Country updates

ANGOLA Following completion of a second paint study, INGA (Ministry of Environment) and LEEP convened a high-level workshop to present the findings and advance dialogue on eliminating lead paint in Angola. The event brought together over 80 participants, including Secretary of State for Environment and other representatives from the Ministry of Environment, provincial environmental directors, civil society organizations, and major paint manufacturers. The workshop was also covered by national television and featured on the Ministry of Environment's website, helping elevate the issue publicly. Importantly, the Judicial Cabinet publicly confirmed during the workshop that the draft Presidential decree is expected to soon be ready for submission to the Council of Ministers for approval. In the days following the workshop, INGA and Ministry representatives reinforced the message through radio and television appearances, sustaining media momentum and public visibility of the issue.

CAMBODIA With financial support from the Ministry of the Environment of Japan, UNEP supported Cambodia in conducting a market survey on the presence of lead in selected products (e.g. paints and toys), **developing and adopting a national regulation on lead in paint** based on the UNEP Model Law and Guidance for Regulating Lead Paint, raising public awareness of the impacts of lead on human health and the environment, and preparing a baseline assessment of lead-acid battery management.

DEMOCRATIC REPUBLIC OF CONGO In January, the DRC government's National Standardization Committee officially adopted nine East African Community (EAC) standards on paints including a 90-ppm lead limit, along with ten complementary ISO standards, marking a major step toward eliminating hazardous lead paint from the Congolese market. The Office Congolais de Contrôle (OCC), the government conformity assessment agency under the Ministry of Commerce, and LEEP **conducted a paint study in 2025** that found that 55 percent of samples tested contained unsafe levels of lead. As a result of these findings, the DRC took decisive regulatory action. The next critical step is for the government to publish these standards in the official gazette and raise awareness among the relevant stakeholders. Following the release of the paint study results, the OCC took proactive steps to engage the paint industry, including inviting participation in reformulation efforts and for manufacturers to take advantage of LEEP's technical support to transition toward compliant, lead-free paint production.

EURASIAN ECONOMIC UNION (EEU) In December 2025, the Board of the Eurasian Economic Commission (EEC) has approved **Disposition No. 188** "On the Technical Regulations of the Eurasian Economic Union (EEU) on the Safety of Paints and Varnishes." The **Technical Regulation** will enter into force starting January 1, 2028, and will set a lead limit of 5,000 ppm in all paints. This lead limit will be reduced to 500 ppm by January 1, 2031, and will finally be set at 90 ppm by January 1, 2033. EEU member countries include Armenia, Belarus, Kazakhstan, Kyrgyz Republic, and Russia.

MALI The National Directorate of Sanitation and the Control of Pollution and Nuisances (DNACPN) within the Ministry of Environment in collaboration with LEEP recently held a workshop and conducted a paint study in Bamako to determine whether and to what extent lead paint is available on the market (results pending). More than 40 participants attended the kick-off workshop, including the Secretary General of the Ministry of Environment, a Technical Advisor representing the Minister, manufacturers, the Chamber of Commerce, the Construction Enterprises Association, the Consumers' Association of Mali and civil society organisations working on environmental and health issues. Discussions were highly engaging, with stakeholders agreeing that working towards regulation would be critical, should the study confirm the presence of lead paint on the Malian market. The Director of DNACPN publicly reinforced this commitment during a national television interview.

MEXICO In January 2026, the **Draft Mexican Official Standard** (PROY-NOM-003-SSA1-2025) on the "Maximum Permissible Limit for the Total Lead Content and Sanitary Requirements for the Labeling of Paints and Related Products" was published in the Official Gazette of COFEPRIS for public comments within 60 days. COFEPRIS, a regulatory agency under the Ministry of Health, led a Technical Working Group (TWG) responsible for drafting the lead paint standard, which sets a total lead limit of 90 ppm in all paints and related products. The standard is expected to be finalized and adopted within the year.

SOUTH AFRICA The South African Paint Manufacturing Association (SAPMA), in collaboration with the Lead Exposure Elimination Project (LEEP), has prioritised industry education and compliance through the "Lead with LEEP" initiative. SAPMA and LEEP are working together to simplify and communicate key information in a practical way. This includes developing clear visual infographics to explain regulatory requirements, creating FAQs to address common areas of confusion, and sharing targeted digital content with industry members. Centralised resources are available on the SAPMA website to ensure that information is easily accessible when needed.

In the News: Lead Paint and Other Sources of Lead Exposure

These articles do not necessarily reflect the views or work of the Global Alliance to Eliminate Lead Paint.

Information and Action to Address Health Effects of Lead Exposure

The Long-Lasting Effects of Early Childhood Lead Exposure: Evidence from Piston-Engine Aircraft Emissions.
Duong and Zhong. November 2024

Beyond mining: A pioneer attempt to assessing lead exposure risks in Nigeria.
Fabolude et al. Environmental Impact Assessment Review. July 2025

APEC calls for roadmap to eliminate lead from new water systems in Asia-Pacific Region.
KTLA. July 2025

Evaluation of Lead Concentrations in Blood Samples from Donors in a Tertiary Hospital Located in the Niger Delta, Nigeria.
Uku et al. International Journal of Research and Reports in Hematology. August 2025

Preventing lead (Pb) contamination in rural community water systems in LMICs through analytical screening, policy and standards enforcement, and supply chain interventions.
Roy et al. Groundwater for Sustainable Development. November 2025

A simple kit to detect extractable lead concentrations in soil.
Moura et al. Geoderma. September 2025

NESREA seals 29 facilities in S'West for environmental pollution.
PUNCH. September 2025

Buffalo forfeits more than $1 million in federal lead funds.
Investigative Post. September 2025

Chicago has the most lead pipes in the nation. We mapped them all.
Grist. September 2025

Toward a Lead-Free Future: Mobilizing to End Childhood Lead Exposure.
Partnership for a Lead-Free Future (PLF). September 2025

Mobilizing to End Childhood Lead Poisoning: Year 1 Progress Update.
Partnership for a Lead-Free Future. September 2025

Toward a Lead-Free Future: The Fase for Action Now.
Devex. September 2025

Improving the Lead Impact Model Biokinetic modeling for lead exposure attribution.
Rethink Priorities. September 2025

Using Lead Isotopes as Tracers of Ocean Pollution.

Olivelli. Nature Reviews Earth & Environment. September 2025

Environmental Lead Risk in the 21st Century.
Chen et al. Communications Earth & Environment. September 2025

FG Inaugurates National Working Group to Eliminate Lead Poisoning in Nigeria.
Arise News. September 2025

Assessment of lead levels in decorative paints and potential health risks in Malawi.
Mologo et al. Discover Environment. September 2025

Lead batteries are poisoning millions of children. Here are 3 proven ways to stop it.
Pawar. Vox. September 2025

Elevated blood lead levels and associated risk factors among school children in a non-industrialized city in Indonesia.
Nurjannah et al. PLOS One. October 2025

The Impact of Lead Water Pollution on Birth Outcomes: A Natural Experiment in Scotland.
Higney et al. Environmental and Resource Economics. October 2025

Candidate biomarkers of lead-exposed municipal water biofilms provide insights into lead monitoring potential.
Mirza et al. Journal of Applied Microbiology. October 2025

Impact of Occupational Lead Exposure on Lung Cancer Risk in Korean Male Workers: A Retrospective Cohort Study.
Lee et al. Cancer Research and Treatment. October 2025

B-274 Leveraging Dried Blood Spots (DBS) for Universal Lead Screening in Children Free.
Olaniyan et al. Clinical Chemistry. October 2025

Protein Powders and Shakes Contain High Levels of Lead.
Consumer Reports. October 2025

Knowledge on lead exposure among Paint workers in Kirtipur Municipality, Nepal.
Paudel et al. International Journal of Occupational Safety and Health. October 2025

The strange role of lead poisoning in humanity's success.
The Economist. October 2025

Prenatal and Early Postnatal Lead Exposure, Sensitive Periods, and Later Adult Mental Health.
Lin et al. JAMA Psychiatry. October 2025

Togo steps up fight against lead in consumer products.
Togo First. October 2025

Life in the World's Most Polluted Town.
Action for Southern Africa. October 2025

Untold: Toxic Legacy.
Laura Hughes. Financial Times. October 2025

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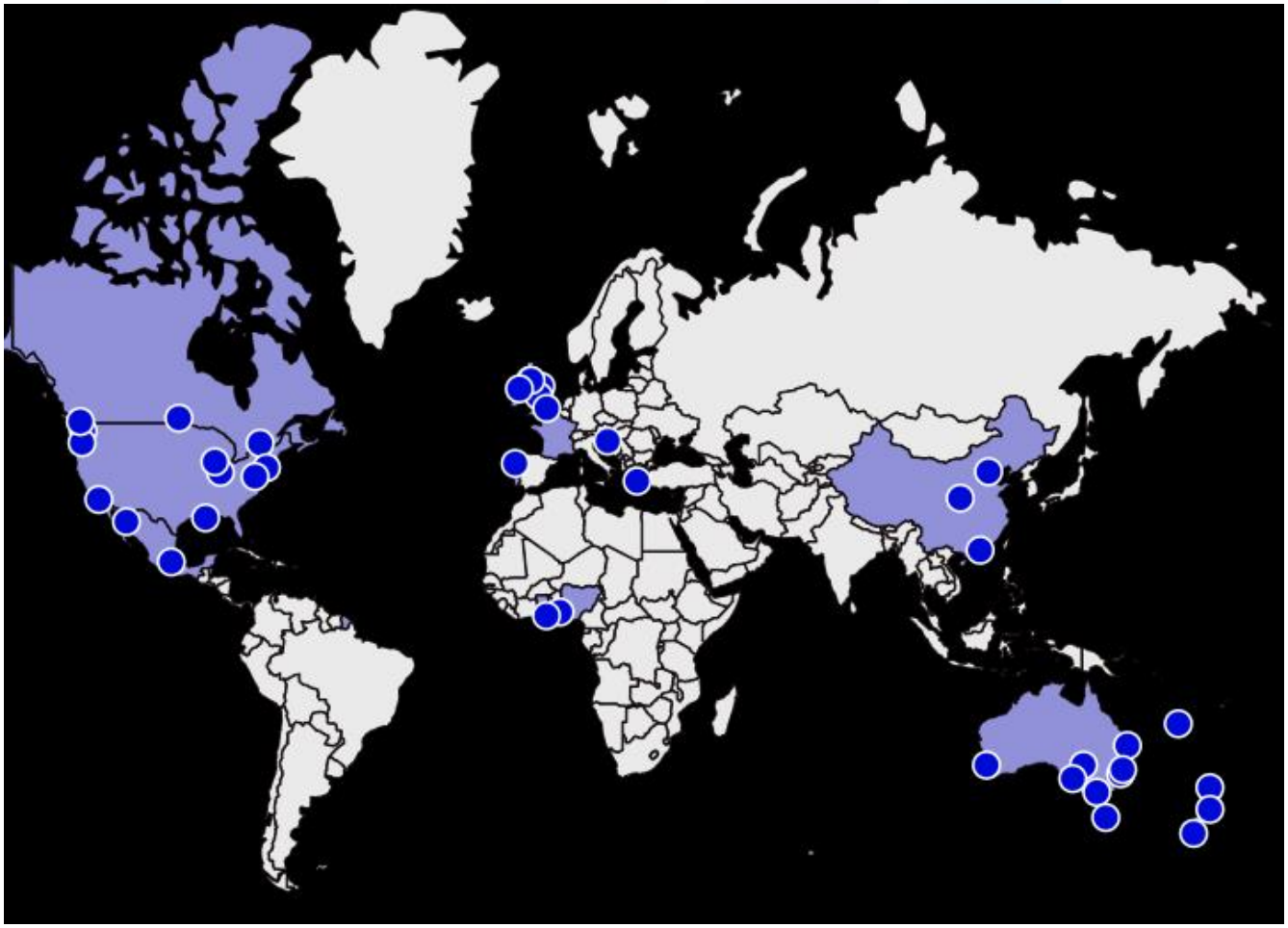
Not yet subscribed to the Lead Paint Alliance newsletter? SUBSCRIBE

Read more about the Lead Paint Alliance on www.unep.org/noleadinpaint

MapMyEnvironment Soil and Dust Lead Maps

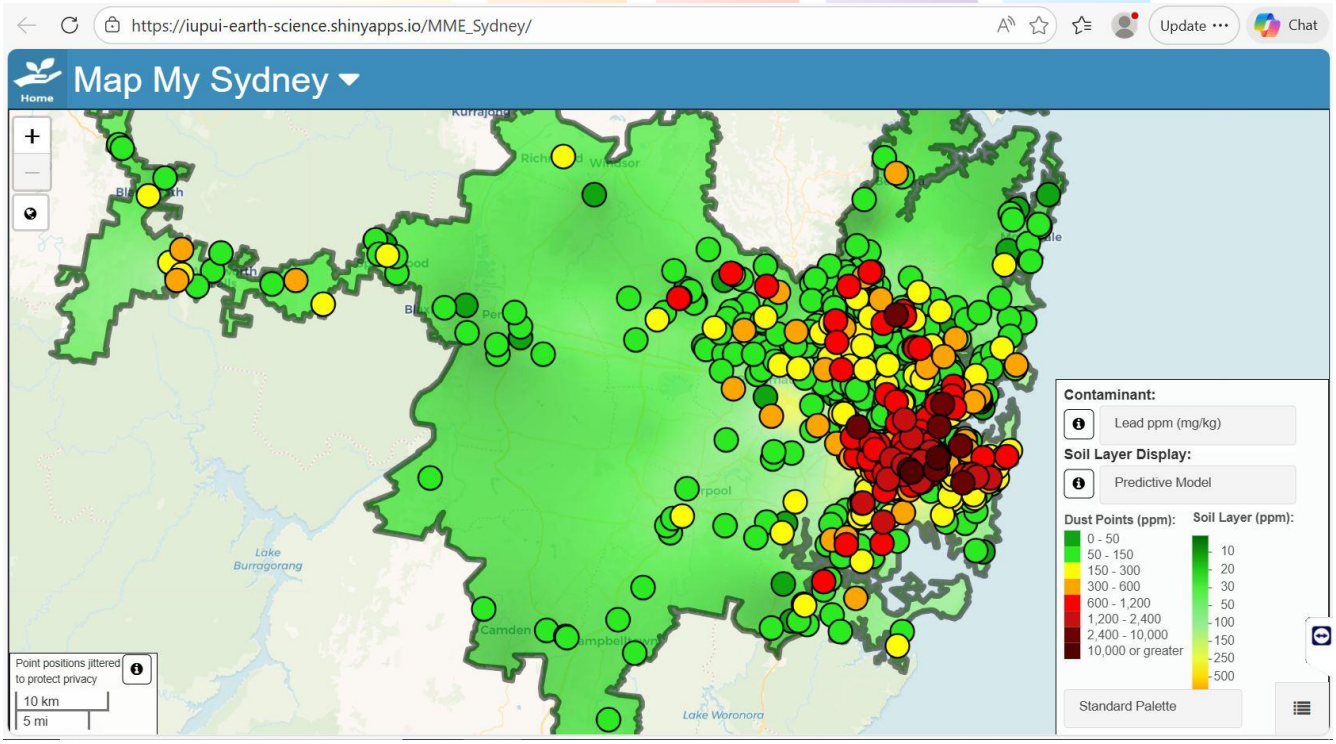
Article and images extracted and collated by Elizabeth O'Brien, The LEAD Group Inc charity with assistance from Melissa Pantz, LEAD Group Kit Purchaser

As at April 21, 2026, there is soil and vacuum dust data from 39 cities in 15 countries mapped on https://www.mapmyenvironment.com/



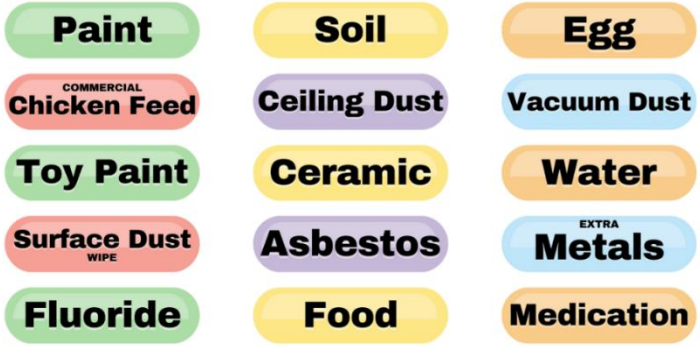
"You can view urban environmental data from these cities within our global map, or one of our Spotlight Cities": Indianapolis, USA; Sydney and Melbourne, Australia; Newcastle UK; Canada Dust Study. For example, click on **view global map** to go to https://iupui-earth-science.shinyapps.io/MME_Global/ and zoom in on Sydney or go direct to Map My Sydney - https://iupui-earth-science.shinyapps.io/MME_Sydney/ to see the Map My Sydney Soil Lead Map as below; or zoom in on the global map to see the Melbourne area of Victoria Soil Lead Map and Vacuum Dust Lead Map as shown further down below.

LEAD Group Kit purchaser Melissa commented: "I'm looking forward to seeing what information my Kit comes back with. The interactive map is unnerving, because it shows high levels of lead contamination near our house. However, it also shows that there are high levels across many inner-city suburbs, and the only way to avoid this might be living further out."



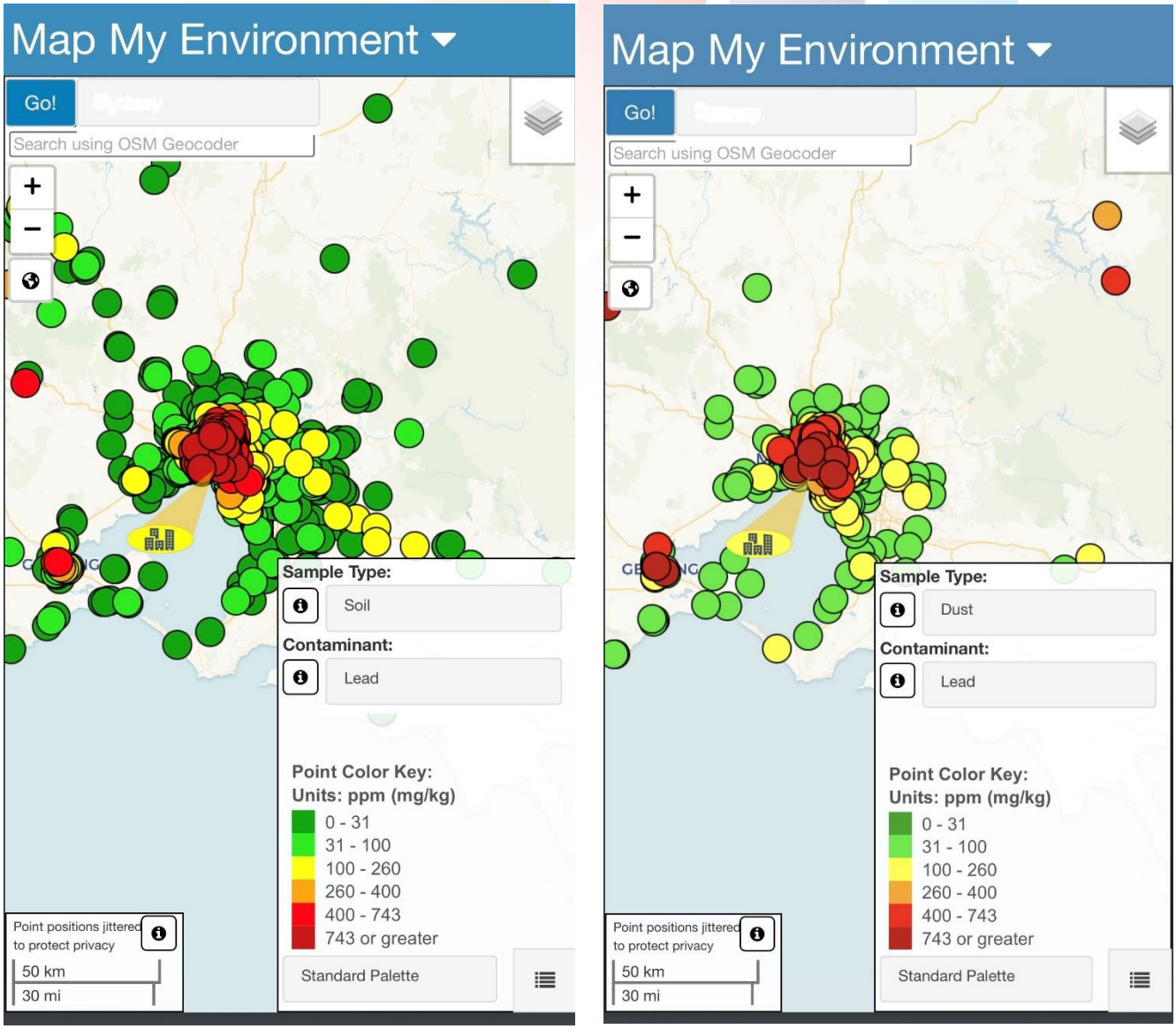
Various webpages at [Map My Environment] have maps and info on submitting soil or vacuum dust samples from Australia, New Zealand, Portugal, Greece, United Kingdom (and other parts of Europe), United States and Africa for free testing via XRF (x-ray fluorescence).

According to Professor Mark Taylor – a major player in putting the Map My Environment website together, and a Member of The LEAD Group's Technical Advisory Board – the XRF (x-ray flouorescence) testing used by the Map My Environment teams captures around 80% of the lead found in the more accurate laboratory analysis used for instance, in a LEAD Group Kit. Note that the ppm or parts per million units used in Map My Environment, are exactly equivalent to the mg/kg or milligrams per kilogram units used for soil lead and vacuum dust lead in a [LEAD Group Kit] from [https://leadsafeworld.com/shop] . Eg 300 ppm = 300 mg/kg lead in soil, but in addition to receiving accurate laboratory analysis results on the following range of sample types at your place, you also receive Interpretation and Comments on your LEAD Group Kit results, including recommendations on actions to take in priority order to make your home and yard lead-safe.



Water samples and surface dust wipe samples can only be collected with a Posted LEAD Group Kit but all other sample types can be collected with either a Posted or an Emailed LEAD Group Kit.

See [https://leadsafeworld.com/outside-australia/] if you're not in Australia but are considering buying a LEAD Group Kit.



The three other Principal Investigators of Map My Environment team alongside Mark Patrick Taylor of Macquarie University, Sydney, Australia, are:

Gabe Filippelli, Professor of Earth Sciences at Indiana University Indianapolis (IUI), USA

Jane Entwistle, Professor of Applied Geochemistry and Health at Northumbria University, UK

and Kin Fai Ho, Associate Professor of Public Health at The Chinese University of Hong Kong.

With adequate funding and technical support, de-identified LEAD Group Kit results could one day be mapped and online too. That would be a dream come true for this writer, Grandma Lead.

Three more US studies show lead linked to higher dementia risk

The following are extracts from the article ***Air Pollution, Lead May Drive Thousands of Alzheimer's Cases*** *by* ***Michele Late,*** *Public Health Watch newsletter, February 21, 2026.*

Thanks to Richard Rabin, MSPH, Senior Trainer and Technical Consultant, Massachusetts Coalition for Occupational Safety & Health, for sending us the link: https://publichealthwatch.org/newsletter/the-watch-air-pollution-lead-may-drive-thousands-of-alzheimers-cases/

[Question from LEAD Action News Editor: is anyone researching the potential of lead detox methodologies in adults to reduce dementia and other health risks of lead exposure?]

Being exposed to environmental poisons such as air pollution and lead can harm cognitive health. New research finds people exposed to the contaminants may have higher risks for dementia and problems thinking later in life.

As many as 18% of new dementia cases diagnosed annually in the U.S. — about 90,000 — could be linked to lifetime lead exposure, new findings in *Alzheimer's & Dementia* show.

Researchers examined health records of U.S. older adults, finding people with the highest estimated levels of lead in their bones had nearly three times the risk of Alzheimer's disease and more than twice the risk of any type of dementia….

The cognitive harms posed by lead can start early on in life. Another new study in *Neurology* links lead exposure before birth to lower performance on cognitive tests 60 years later. Researchers tested cognitive performance in a group of older adults and compared the results to levels of lead found in baby teeth collected from the seniors when they were young. …

Cognitive function can also be harmed by unhealthy air, a hazard that more than 130 million Americans are exposed to regularly. A Feb. 17 study in *PLOS Medicine* found long-term exposure to fine-particle air pollution, also known as PM2.5, can directly raise risks for Alzheimer's disease….

Alzheimer's disease, the most common form of dementia, affects about 57 million people worldwide, and incidence is growing as more people live longer. PM2.5 comes from sources such as vehicle exhaust, power plants, wildfires and other types of burning fuel *[Editor's note: each of these emission sources typically contains lead].*

Environmental Lead Risk in the 21st Century

Editor's note: I hope that I inspire LEAD Action News readers to read the full amazing article, by reprinting the following figures and extracts from Environmental lead risk in the 21st century *and its* Supplementary Information *by Mengli Chen, Edward A. Boyle, Ludovica Gazze, Francis J. DiTraglia, Reshmi Das, Jerome Nriagu, Yigal Erel, Caroline M. Taylor & Dominik Weiss,* Communications Earth & Environment Review Article - A Nature Portfolio journal - https://doi.org/10.1038/s43247-025-02735-x - 30th September 2025.

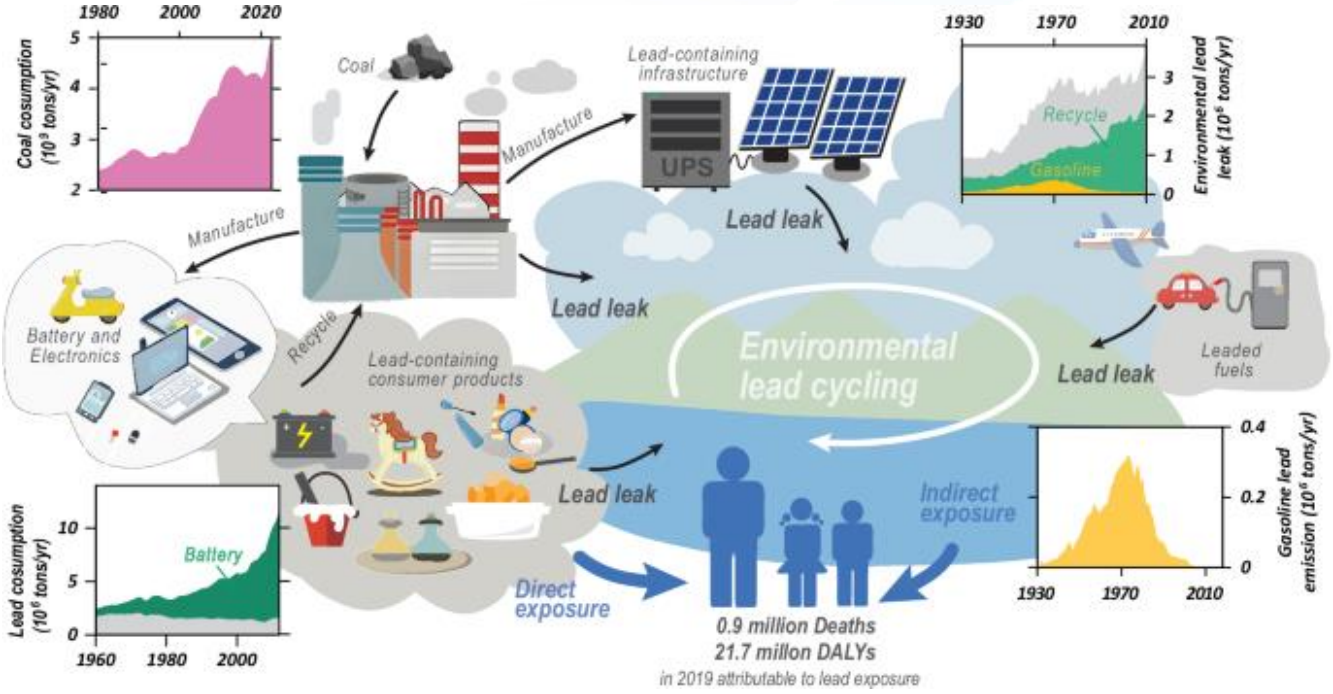


Fig. 1: Schematic of the environmental lead cycle

...

Following the phasing out of leaded gasoline, coal combustion, aviation fuel (avgas), along with the production, use, and recycling of lead-containing products became the new dominant atmospheric emission sources [of lead].

Coal combustion contributed ~50% of the atmospheric lead emissions in China in 2009, 12% to 42% in India in the 2010s, and about 30% globally in 2005-2012...flue gas desulfurization systems decrease this.

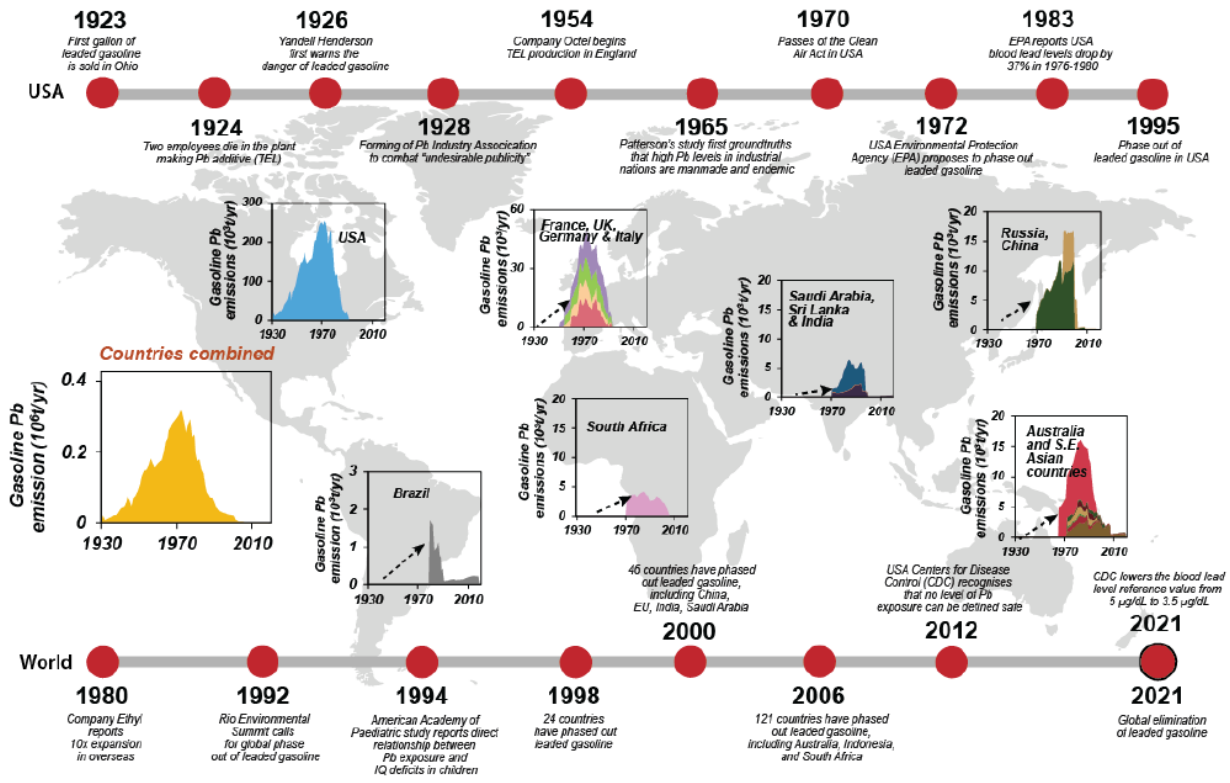


Fig. S2 Global timeline of gasoline lead emission

Estimated atmospheric lead emissions from gasoline from selected countries across the world with key events illustrated in the context of the 100 years' timeline of leaded gasoline in the USA (top) and the world (bottom)100. The countries presented in this figure comprise about 65 % of the global gasoline usage76. Arrows in the inset figures illustrate likely trends of gasoline lead emission where emission data are not available. For example, leaded gasoline was introduced in Japan in 1927, United Kingdom in 1928, Canada in 1926, Ireland and Australia in 1932, Italy in 1935, Germany in 1936, Mexico in 1937, France in 1939, and Russia in 1942101. Each of the inset figures is plotted as the integrated emission of the countries mentioned. Note the difference in scales among countries. The combined emission is illustrated in the leftmost inset figure in yellow. The total integrated emission is plotted in Fig. 1 and Fig S3 as yellow filled areas. Table S1 presents emission data compiled from the literature along with new estimates constructed for this study. Full methodological details appear in Text S3.

Lead Cables 66,000 miles overhead or underwater

[URL: https://blogs.edf.org/health/2023/07/26/lead-cables-66000-miles-overhead-or-underwater/]

Posted: July 26, 2023

Contamination, Drinking water, Health hazards, Health policy, Regulation, Risk assessment, Risk evaluation

WRITTEN BY

Tom Neltner, Senior Director, Safer Chemicals Initiative

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Abandoned telecom cable leaching lead into Idaho fishing waters Photo: Monique Rydel-Fortner

What's New?

A blockbuster ***Wall Street Journal*** (WSJ) investigation showed that lead-sheathed telecom cables are releasing toxic lead into water or surface soil. We are aware of more than 2,000 of these cables across the nation—and more than 300 of those pose a threat to community drinking water sources.

Recognizing the potential risks to public health, EDF, Clean Water Action, and Below the Blue asked EPA on July 17 to investigate potential harms and replace abandoned lead cables strung between telephone poles, as well as any that are accessible to children.

In response, AT&T reported that it has more than 66,000 miles of lead cables, most of which are the overhead type, with the balance running underwater. This is a stunning amount – enough to circle the earth 2.5 times!

Legislators are already demanding that telecom firms act, and EPA and the Department of Justice say they are reviewing the issue. In addition, New York Governor Kathy Hochul directed three key state agencies to investigate the risks. In response, the agencies sent letters to 246 telecom providers requesting their inventory of lead cables. I also appeared on CNBC's Squawk Box to explain the situation, EDF's role in the investigation, and the cables' potential risks.

Why It Matters

Health experts have long been aware of the hazards of lead-based paint and lead service lines, but the WSJ investigation surfaced an additional source of widespread lead contamination that was previously unknown: lead telecom cables installed between the 1880s and 1960s.

These cables consist of lead pipes with a bundle of copper wires inside and asphalt coating on the outside. For underwater uses, the lead pipes were wrapped in steel cables. Many of these cables were abandoned in place by the telecom companies when they failed or became unnecessary.

Submarine telecom cable

showing lead pipe filled with copper wires Photo: Monique Rydel-Fortner

Lead cable sags between utility poles in Pennsylvania neighborhood Photo: Monique Rydel-Fortner

The WSJ investigation documented that the cables are releasing lead into the environment. However, the risk posed by the releases and the full extent of the problem is unknown.

We expect that as the cables continue to deteriorate further and release lead into the environment, the risk will increase. The combined risk is likely lower than that posed by more familiar sources of lead exposure (paint and drinking water pipes), where Congress has already recognized the issue and invested billions in cleaning up this legacy. But the risk from lead cables appears to be significant, especially because there is no safe level of exposure to lead.

EDF's role in the WSJ investigation

Last year, WSJ reached out to EDF and described federal litigation over six miles of lead cables found abandoned on the bottom of Lake Tahoe. We were initially skeptical of the scope of the issue and reached out to Below the Blue, the community-based organization that brought the existence of the cables in Lake Tahoe to light. We talked with that organization's cofounders and learned they also work at Marine Taxonomic Services, Ltd. (MTS), an environmental consulting firm with over 40 years of expertise specializing in underwater sampling work that involves diving.

Recognizing the potential significance of the issue, EDF agreed to provide guidance, assistance, and funding to MTS to help WSJ identify cables and conduct sampling. MTS and EDF developed a sampling protocol to look for lead releases to the environment where they were most likely to be found – near the lead cable. It is standard scientific protocol to screen for a problem in order to determine whether a full risk assessment is needed and, if so, how best to conduct it. WSJ selected the labs and paid for the lab analysis.

As with all sampling for all pollutants, our hope is that we would *not* find lead contamination that threatens the health of children or the general public. But if releases were found – as they were here – EDF is committed to making the findings public and seeking an independent investigation to assess the risks.

Next Steps

In our letter to EPA, we asked the agency to prioritize the immediate removal of lead cables accessible to children or strung overhead between telephone poles because they pose the greatest risks for exposure to lead, and they can be easily fixed. If the cables are still in service, they should be encapsulated and labeled, taken out of service as soon as possible, and then removed. EPA should also ensure surface soil contaminated by these cables is removed or permanently covered.

For the underwater cables, the situation is more complicated, because disturbing the lead cables may release contaminated sediment into the water. We asked EPA to assess the condition of the underwater cables to determine their condition, their current and anticipated releases to the environment, and the risks posed by their removal or leaving them in place. EPA should use these assessments to ensure action is taken to protect public health—prioritizing cables located in source water protection areas.

We recognize that EPA has many competing priorities and limited resources. The agency should look to the two telecom companies that are responsible for installing or managing the vast majority of the lead-sheathed cables to support the assessment and actions needed to protect the public from potential exposure. We plan to check-in with the agency in a month to understand what it plans to do.

Toxic Toys and the Death of Oversight

Plagues, Pollution & Poverty Substack

BRUCE LANPHEAR, Exposing Hidden Threats to Human Health

A Compelling Case for Stronger Public Health, Apr 30, 2025

https://blanphear.substack.com/p/a-case-for-bigger-public-health

The Shocking Truth About Lead in Toys

In the fall of 2007, I found myself in a Senate hearing room in Washington, D.C., testifying about something most Americans assumed was already under control: keeping dangerous levels of lead out of children's toys.

It wasn't.

The topic was lead poisoning and the torrent of imported toys flooding into American homes—many laced with lead paint or soft plastics containing toxic metals. Millions of toys. Thousands of brands. And, as it turns out, just one guy checking them.

His name was Bob. He worked at the Consumer Product Safety Commission (CPSC), and he was the

only staff member regularly testing toys for lead. One guy. For the entire country. And he was about to retire.

I wish I were making this up.

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What the Science Tells Us

I was there to testify as a scientist about research showing—repeatedly—that even tiny amounts of lead can permanently alter children's brains. Lower IQ. Impulse control problems. Learning disabilities. You name it. And no safe level of exposure has been identified. None.

But this hearing wasn't just about science. It was about what happens when a government decides to shrink itself into irrelevance.

Senator Amy Klobuchar, a freshman senator at the time, came prepared. She asked Nancy Nord, the acting chair of the CPSC, how many staff were assigned to oversee the 60 toy recalls that year—covering 9.5 million toys.

Nord hesitated. "I'm not sure," she said.

"So there could be one person assigned to those recalls?" Klobuchar asked.

"That is possible."

It wasn't just possible. It was only one person, and his name was Bob.

The Free-Market Fantasy

Klobuchar kept going. She asked if the CPSC had accepted the emergency funding Congress had offered to hire more inspectors.

"We declined it," Nord said.

Let me say that again: the head of the agency responsible for keeping toxic toys off the market turned down funding that would have helped her… keep toxic toys off the market.

Why? Because expanding the agency didn't fit the free-market fantasy playbook that's ruled Washington for decades—the idea that government should be small enough to drown in a bathtub, or at least small enough that Bob could handle it alone.

Regulatory Neglect with Real Consequences

You couldn't script this level of dysfunction.

I sat there thinking about the irony. For years, we'd been warning anyone who would listen that lead was harming children—not just in toys, but in old paint, drinking water, dust, and soil. But again and again, we were told the same thing: "There's not enough money." "There's not enough staff." "We have to be strategic."

Translation: We're not going to do anything.

Senator Klobuchar, to her credit, wasn't having it. She cut through the bureaucratic fog like a Midwestern mom with an agenda. "We're talking about children's lives," she said.

And that, really, is the point.

Lead poisoning isn't some abstract policy issue. It's not a left vs. right debate. It's about kids getting poisoned—and it's about who we expect to stop it. Spoiler: it's not going to be private industry. They had decades to do the right thing and chose profit every time. It's going to be government. Or no one.

A Rare Victory for Public Health

In 2009, the CPSC did something historic. Under mounting pressure, and with new legislation behind it, the agency reduced the allowable level of lead in paint for children's products from 600 parts per million to 90 ppm. That was a massive step forward—one that aligned U.S. standards with what public health experts had been recommending for years.

Did the private sector volunteer to make that change? Of course not. Industry lobbyists fought it. But government scientists, regulators, and staff pushed it through anyway—because it was the right thing to do.

This story, ridiculous as it sometimes feels, gives us a glimpse into the hundreds of invisible ways government protects us every day. Not just from lead—but from an onslaught of toxic products, dangerous shortcuts, and corner-cutting corporations. That's why the private sector has spent decades trying to dismantle the system. They don't want oversight. They want loopholes and shrink-wrapped liability shields.

Enter the Wrecking Ball

Fast forward. Bob has retired. The CPSC is still underfunded. And then came the Trump administration, which didn't just ignore public servants—it went after them like a demolition crew with a wrecking ball.

They hollowed out the CDC. Gutted the EPA. Purged the FDA. If there was an agency that used science to protect people, they either fired the staff, defunded the programs, or replaced the experts with donors and ideologues.

They weren't downsizing government—they were sabotaging it.

Consider a recent example you may have missed.

New Crisis, Same Story

In April 2025, the CDC released a report on a national lead poisoning outbreak tied to cinnamon applesauce pouches. The cinnamon, imported from Ecuador, was laced with lead chromate—a vivid yellow compound banned in food but sometimes added to boost color. More than 500 children across 44 states, D.C., and Puerto Rico were poisoned. Many had stomach pain, fatigue, or behavior changes. All had one thing in common: they were exposed to a neurotoxin in a snack marketed as safe.

The kicker? This report came just days after the CDC's Lead Poisoning Prevention Branch was officially dissolved.

This crisis wasn't uncovered by luck. It took sharp-eyed doctors, fast coordination among states, and decisive action from the CDC, FDA, and Consumer Product Safety Commission. Their work led to recalls, testing, and tighter import controls.

This is what government does at its best: protecting children from hidden harm. No private company would've found this. Few parents could've connected the dots. It took a system built for prevention.

Dismantling that system in the name of "efficiency" wasn't cost-cutting. It was sabotage.

In Praise of Public Servants

But here's what I've learned: the people who work in these agencies are the last line of defense between you and a very dangerous kind of freedom. The freedom to sell anything, no matter how toxic. The freedom to ignore evidence. The freedom to look the other way.

Bob wasn't a faceless bureaucrat. He did the work no one saw, no one praised, and too many dismissed. But without him—and the thousands of other people in public service—we don't get clean water, safe food, inspected toys, or breathable air.

And we get hearings where the head of a safety agency admits she doesn't know how many people are assigned to stop millions of toxic toys from reaching children.

Government Isn't "Them"—It's Us

There's a strange comfort in blaming government. It's easy. Vague. Popular. But the truth is, government isn't "them." It's us. It's the scientists, analysts, inspectors, and public health officers who still show up every day, trying to protect people despite everything.

What we need is not just a bigger commitment to public health—but the courage to back it up with power, people, and purpose.

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Current Lead Shot Recovery Operations in Australia

By Lead Pro Aus Pty Ltd

www.leadproaus.com.au

office@leadproaus.com.au

Lead shot recovery at shooting facilities is now undertaken using custom-designed equipment engineered specifically for Australian conditions.

Lead Pro Aus Pty Ltd operates “Lead Miner” recovery units, Lead Miner #1 and Lead Miner #2, both manufactured in Wisconsin, USA and imported into Australia. These machines were introduced following the retirement of earlier equipment and remain operational today.

Modern recovery systems are designed to:

- Recover surface lead shot from managed fall zones
- Reduce operator exposure
- Minimise manual handling
- Support licensed recycling pathways
- Operate in accordance with environmental and workplace safety requirements

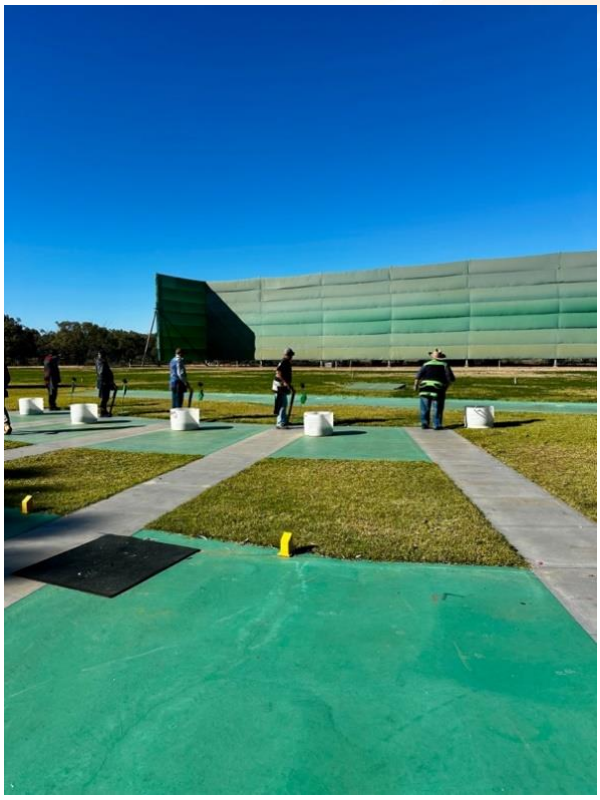
Recovered lead is processed through approved recycling facilities.

Environmental Management Context

Clay target shooting produces accumulated lead shot over time. Responsible management of this material is an important part of long-term site sustainability.

Lead shot accumulation is an inevitable by-product of clay target shooting. Without management, spent shot can migrate into soils and waterways over time. Responsible recovery programs form a key part of long-term environmental stewardship for shooting facilities.

Supporting Industry Responsibility



Australia has hundreds of clay target shooting clubs operating across metropolitan and regional areas. Sustainable operation requires:

- Responsible lead recovery programs
- Ongoing surface management
- Environmental risk mitigation
- Collaboration between clubs, regulators and specialist contractors

Lead Pro Aus Pty Ltd works nationally with clubs and governing bodies to assist in maintaining safer and more environmentally responsible facilities.

Our approach focuses on practical, long-term solutions that support both the sport and environmental protection.

Surface recovery is typically conducted as part of broader site management programs, which may include:

- Containment systems
- Fall zone management
- Surface maintenance
- Ongoing monitoring

Lead Pro Director Craig Mitchell's background combines practical shooting experience with over 20 years in environmental earthmoving and construction. This integrated knowledge allows Lead Pro to approach each site with both operational understanding and environmental responsibility.

Projects have included major Australian facilities such as:

• Sydney International Shooting Centre
• Large metropolitan and regional clay target clubs
• National competition venues

Lead Pro provides:

• Surface lead shot recovery
• Wad and clay target clean-up
• Ongoing site management support
• Environmental risk reduction strategies
• ShotStop ballistic curtain supply and installation through Green Range Pty Ltd

The Lead Miner recovery systems are purpose-built to minimise operator exposure, reduce material handling, and efficiently bag and prepare lead for licensed recycling.

In addition to lead recovery, Lead Pro supports shooting ranges in managing contamination footprints through engineered solutions including ShotStop curtain systems, which significantly reduce the spread of shot fall zones and improve ongoing recoverability.

Our mission is simple:
To help shooting facilities operate safely, sustainably, and responsibly — protecting both participants and the surrounding environment.

For current information regarding lead shot recovery services in Australia:

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