

LEAD Action News vol. 20 no. 4, June 2020. ISSN 1324-6012
The newsletter of The LEAD (Lead Education and Abatement Design) Group Inc.
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## Want something to do during lockdown - enter Volcano Art Prize 2020!

## Want something to do during lock down?



Volcano Art Prize is an annual digital art competition for environmental art.

Winning entrants will be awarded with cash prizes or mugs printed with their own image by our sponsor Picture products.

Volcano Art Prize (VAP) 2020 Entry: the above slide is from JustOne Lead Soldier's *Lockdown*, *DIY* and Lead slide show at <a href="https://volcanoartprize.com/portfolio-item/lockdown-diy-and-lead/">https://volcanoartprize.com/portfolio-item/lockdown-diy-and-lead/</a>

Just go to <a href="https://volcanoartprize.com/peoples-choice/">https://volcanoartprize.com/peoples-choice/</a> and following pages, to vote (by Facebook Like) for all the VAP 2020 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. The VAP 2020 Judge will also view all the entries on the People's Choice pages, to choose the First Prize Winner of \$400 and 30 prize winners of a mug from Pictureproducts.

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 Lead-Safety Message and get your entries in at <a href="https://volcanoartprize.com/submitentry/">https://volcanoartprize.com/submitentry/</a> by midnight at the end of the day, your timezone, on Monday 27<sup>th</sup> July 2020.



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## How do COVID-19 deaths compare to annual lead poisoning deaths worldwide?

By Elizabeth O'Brien, Editor, LEAD Action News, published by The LEAD Group, 29th June 2020.

The article Global coronavirus death toll exceeds half a million: Live - Grim milestone passed as worldwide COVID-19 infections top 10 million, by <a href="Ted Regencia">Ted Regencia</a>, <a href="Usaid Siddiqui">Usaid Siddiqui</a> & <a href="Farah Najjar">Farah Najjar</a>, <a href="Teg 2020">29th June 2020</a>, at <a href="https://www.aljazeera.com/news/2020/06/global-coronavirus-death-toll-nears-500000-live-updates-200627234018796.html">https://www.aljazeera.com/news/2020/06/global-coronavirus-death-toll-nears-500000-live-updates-200627234018796.html</a> - has the most incredible graphics, showing the changing top 10 countries for Coronavirus cases and deaths over time since the start of the COVID-19 pandemic.

The graphics are "Made with Flourish" by Johns Hopkins University and are simply stunning – you **must** take a <u>look</u>.

It made me wonder if similar graphics could be made regarding lead poisoning deaths, and how the numbers compare, to put COVID-19 deaths into perspective. Here are some numbers (below, bolded) from 6 results of a quick websearch.

Note that estimates of lead poisoning deaths are likely to rise further as more research is done, and that we may never get to a time where everyone who actually dies due to their lead exposure is recognised and counted as a lead poisoning death, for several reasons.

The foremost cause of underestimation of lead poisoning deaths and lack of accurate death statistics is that blood lead testing is still so rare globally; and doctors are not trained to ask terminal patients about their earlier-in-life lead exposure; or knowledgeable in the wide array of potentially fatal symptoms associated with lead poisoning.

Also note that while COVID-19 deaths have not yet exceeded most estimates of annual global lead poisoning deaths, these annual global lead poisoning deaths have probably occurred every year since the start of the industrial revolution – thus lead poisoning is commonly known as the silent pandemic.

1. In 2013, "WHO [World Health Organisation] estimated **143,000 deaths** per year result from lead poisoning"

Ref: United Press International, Inc, *WHO:* 143,000 deaths per year from lead poisoning, Oct. 18, 2013, <a href="https://www.upi.com/Health">https://www.upi.com/Health</a> News/2013/10/18/WHO-143000-deaths-per-year-from-lead-poisoning/11551382150700/

2. Just two years later, in 2015, the ISEE wrote: "Lead poisoning is pandemic. Globally, there are an estimated **674,000 deaths** annually attributed to lead exposure, including many from cardiovascular diseases, and 600,000 cases of intellectual disability among children.<sup>3</sup>,4"



Ref: International Society for Environmental Epidemiology (ISEE), Commentary, ISEE Call for Action for Global Control of Lead Exposure to Eliminate Lead Poisoning, in Epidemiology: 

r\_Global.22.aspx

3. Based on 2016 figures, according to the WHO & UN Global Alliance to Eliminate Lead in Paint (GAELP): "Lead poisoning is preventable, yet the Institute for Health Metrics and Evaluation has estimated that, based on 2016 data, lead exposure accounted for 540,000 deaths and 13.9 million years lost to disability and death due to long-term effects on health, with the highest burden in developing regions."



Ref: GAELP, Lead Safety Message of

Volcano Art Prize 2018 Entry: International Lead Poisoning Prevention Week 2018, October 2018, https://volcanoartprize.com/portfolio-item/international-lead-poisoning-prevention-week-2018/

- 4. Also in 2016, Dr Perry Gottesfeld, a Member of The LEAD Group's Technical Advisory Board, wrote: "The World Health Organization estimates that 240 million people are overexposed and 99 % of those with blood levels above 20 µg/dl are in the developing world.
  - "•Lead exposures account for **853,000 deaths** annually vs. 852,000 for all other occupational risk factors..."

Ref: Perry Gottesfeld, OCCUPATIONAL KNOWLEDGE INTERNATIONAL, www.okinternational.org, The Environmental and Health Impacts of Lead Battery Recycling, 2016,

https://wedocs.unep.org/bitstream/handle/20.500.11822/13943/1 ECOWAS%20lead%20backgr ound%202016.pdf

5. Commenting on the March 2018 Lanphear et al article in *The Lancet*: "Researchers concluded about 400,000 deaths per year [in the USA alone - 10 times more



than previously thought] can be attributed to lead, a much higher number than previously reported by the <u>Institute for Health Metrics and Evaluation</u>."

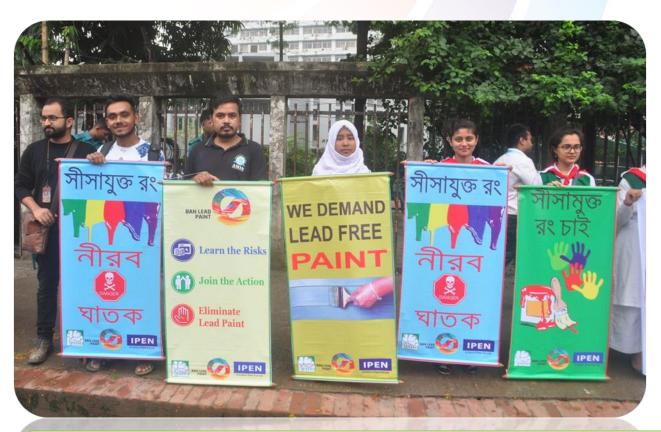
Ref: <u>Alexa Lardieri</u>, Staff Writer, US News. *Study: Lead Exposure Linked to 10 Times More Deaths Than Reported*, March 13, 2018, <a href="https://www.usnews.com/news/health-care-news/articles/2018-03-13/study-lead-exposure-linked-to-10-times-more-deaths-than-reported">https://www.usnews.com/news/health-care-news/articles/2018-03-13/study-lead-exposure-linked-to-10-times-more-deaths-than-reported</a>

6. Also in 2018, Kordas et al pointed out the unequal distribution of lead poisoning and other pollution-related deaths, across wealthy and poor economies: "...of the estimated nine-million annual deaths related to pollution (lead, indoor and outdoor air, water, etc.), 15% of all deaths worldwide, more than 90% occur in [low and middle income countries] LMICs [108].

Ref: Katarzyna Kordas, Julia Ravenscroft, Ying Cao, and Elena V. McLean. *Lead Exposure in Low and Middle-Income Countries: Perspectives and Lessons on Patterns, Injustices, Economics, and Politics,* in Int J Environ Res Public Health. 2018 Nov; 15(11): 2351. Published online 2018 Oct 24, <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6266944/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6266944/</a>



## ILPPWA 2019 report – ESDO Bangladesh









OCTOBER 26-27, 2019

**OBSERVED BY** 

ENVIRONMENT AND SOCIAL DEVELOPMENT ORGANIZATION - ESDO

**BANGLADESH** 







## **Executive Summary**

Significant health exposure of lead especially to children and environment has now become a global concern. Therefore, addressing children's exposure to lead from paint, UN Environment and the World Health Organization (WHO) jointly formed The Global Alliance to Eliminate Lead Paint with a view to minimizing occupational exposures to lead paint. Besides, International Lead Poisoning Prevention Week-ILPPW is an initiative of the Global Alliance. In Bangladesh, ESDO observed the week this year through a human chain in front of the National Press Club and a round table meeting in the headquarter of ESDO. The prime objective of both the human chain and round table meeting was to raise the urge to ban lead in paint in Bangladesh. All our efforts were to sensitize the government to introducing a regulation and law banning this toxic polluter from our country. Media people were there to accelerate the campaign through mass publicity. Young generation of our country formed the human chain where university students, girl guides, and ESDO team took part. On the other hand, the round table meeting was participated by government representatives, academicians, media people, ESDO advisory and technical team and girl guides. Remarkable advancement has been observed in Bangladesh regarding lead use in paints. Last year in 4<sup>th</sup> July, 2018, Statutory Regulatory Order (SRO) has been published by the Bangladesh Standard and Testing Institutions (BSTI) in which it is clearly stated that Maximum lead content in Economy Emulsion Paint, Enamel, Synthetic, Exterior (a)undercoating (b) finishing is **90 ppm**. Since the SRO is in place, Bangladesh should move forward to introducing a law otherwise the execution of the order would be gradually difficult.

### Introduction

International Lead Poisoning Prevention Week is observed every year worldwide to raise awareness and promote action to address the human health effects of lead exposure, especially for children. During the week, governments, academia, industry and civil society organize activities worldwide. The campaign promotes efforts to prevent childhood lead poisoning, and especially actions to eliminate lead in paint. Activities included art competitions, official statements of support, public events, policy debates, workshops and scientific conferences.

In 2019, ESDO observed the week through human chain and roundtable meeting on 26 October and 27 October respectively. Since BSTI already published an SRO on lead use in paint, the prime objective was on urgency of a regulation on ban of lead in paint in Bangladesh. It was discussed with great emphasize that the monitoring of the implementation of SRO is still lacking. Therefore, everyone expressed the importance of monitoring of the mandatory standard implementation. Again, the meeting attendees focused on the usefulness of an immediate law on ban of lead in paint in Bangladesh because otherwise this, the government won't be able to curb the illegal trafficking of leaded paint from our neighbouring countries.



Apart from the round table meeting, ESDO team conducted a human chain on 26th October which took place at two significant locations of Dhaka city viz National Press Club and Teacher Students Center (TSC) of University of Dhaka. The human chain demanded the immediate enforcement of legislation regarding the ban of lead contained paints in order to protect the environment and avoid human health hazards. Fact sheets, posters IEC materials were distributed to passer-by.

Besides, ESDO ran a weeklong social media campaign with a view to disseminating the information of danger of lead poisoning all around the world. The campaign also focused on the emergence of a regulation on ban of lead paint in Bangladesh.

## **Objective**

Two events were organized, had different objective to fulfill:

#### Human Chain:



- Drawing attention of the government for close monitoring of the SRO on lead in paint implementation
- Urging the government for a regulation to Ban Lead in Paint
- Raising awareness about health effects of lead poisoning
- Ultimately promote lead free paints in Bangladesh
- Using social media as an effective tool for information dissemination.
- \* Round Table Meeting:





- To sensitize the government for a regulation to ban lead paint
- To strengthen collaboration with multi stakeholders
- To eliminate lead paint in Bangladesh by promoting a regulation on Ban Lead Paint in Bangladesh

## **Background**

#### Why is Lead an issue?

Exposure to small amounts of lead over a long period of time is called chronic toxicity. Lead is particularly dangerous because once it gets into a person's system; it is distributed throughout the body just like helpful minerals such as iron, calcium, and zinc. And lead can cause harm wherever it comes into contact of the body. Lead exposure is toxic to human and especially harmful for young children and pregnant women. Exposure to lead in the womb or during childhood can have lifelong health impacts, including learning disabilities and disorders in coordination, visual, spatial and language skills. Lead exposure accounts for approximately 9% of the global burden of intellectual disability without known cause. High exposure to lead can result in behavioral and mental disorders. For pregnant women, harmful effects include premature births, smaller babies and miscarriage. {Ref: https://www.google.com/search?q=Why+Lead+is+an+issue&ie=utf-8&oe=utf-8&client=firefox-b-ab}



## Sources of Lead contamination in Bangladesh





## **How Does Lead impact on Health and Environment?**

{Ref: https://www.lead.org.au/lanv1n2/lanv1n2-8.html}



## Global Alliance to Eliminate Lead Paint

The Global Alliance to Eliminate Lead Paint is a cooperative initiative jointly led by the World Health Organization and the United Nations Environment Program to focus and catalyze the efforts to achieve international goals to prevent children's exposure to lead from paints containing lead and to minimize occupational exposures to lead paint. Its broad objective is to promote a phase-out of the manufacture and sale of paints containing lead and eventually to eliminate the risks that such paints pose. Lead is one of ten chemicals of major public health concern. Substitutes for lead paint are cost effective and relatively easy to obtain. Paints without lead additives have been used in many countries for decades



and have proven to be viable, cost-effective alternatives to lead paint. Establishing legal limits on lead in new paint has been shown to be an effective tool to decrease the sale and use of lead paint. Yet there are still many areas of the world where it is legal to sell paint containing lead additives. Working together through the Global Alliance, governments, industry and NGOS are working to protect people around the world from exposure to lead through paint. Global Alliance announces its goal to eliminate lead in paint by 2020.

## Lead free paint movement in Bangladesh

ESDO started working on eliminating lead in paints through creating awareness and policy advocacy since 2008. ESDO's efforts were to minimize and ultimately to eliminate the manufacture, import sale and use of lead decorative paints in Bangladesh. ESDO started working with European Union through the IPEN SWITCH Asia project on Lead Paint Elimination in 2012 and the organization collaborated with Bangladesh Paint Manufacturers' Association (BPMA) in 2013. As a result of the affiliation, major paint manufacturers have phased out lead paint. ESDO published three national reports on lead use in household paints of Bangladesh. The current status of our country is Bangladesh Standards and Testing Institutions (BSTI) prepared a draft standard to fix up the limit of lead paint as 90 ppm. A draft regulatory framework and guideline for complete lead paint elimination was prepared by ESDO and submitted to the department of Environment which is under revision.

## ESDO's observation of ILPPW-2019

ESDO observed the ILPPW-2019 with great enthusiasm like every years by organizing a human chain on 26<sup>th</sup> October in front of the national press club and a round table meeting on 27<sup>th</sup> October at ESDO's head office.

### **Human Chain**

#### i. Location, Date and Time



NATIONAL PRESS CLUB

Date: 26 October, 2019

Time: 10.00 am

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## ii. Program Schedule

Activity	Time (a.m.)
Arrival of ESDO Team Members National Press Club	9.00
Posters, banners, festoons distribution	9.00-10:00
Human chain	10.00-11.00
Photography and leaflets, fact sheet distribution	11.00-11.15

#### iii. Attendee

50 youngsters from Girl Guides association and Daffodil International University and ESDO team members formed the human chain in front of our National Press Club with an urge to immediate ban of lead in paint in Bangladesh. Reporters of different print and electronic media observed the human chain and wrote about it in their respective media.

### iv. Activities

All the team members of ESDO, Girls' Guide and other volunteers from Daffodil International University formed a human chain demanding for an immediate ban of lead paint in Bangladesh by 2020. The participants formed the human chain with festoons, banners, and placards in front of the National Press Club at 10:00 am. Apart from the human chain, Fact sheets and posters were distributed to passer-by. The group of young people again gathered in front of the Teacher Student Centre (TSC) of the University of Dhaka and replicated the human chain. People present on the human chain urged for a phase out of lead paint as a top public health priority.

#### v. Deliverable Materials

Different Information, Education, and Communication materials were distributed after human chain. Besides, poster, sticker, fact sheets were distributed to the passersby and mass people.

#### vi. Outcome

The human chain was an opportunity to raise public awareness regarding the regulation of ban of lead in Bangladesh. It's essential for our society to respond to this global challenge and make the phase out of lead in paint as a top public health priority. It was about the urgency of a regulation on lead poisoning and its detrimental effects on human health due to children exposure and occupational exposure. Informative fact sheet, poster, sticker were reached to mass people through distribution. In addition to that, 'Daily Jugantor', 'Daily Shongbad', 'Daily Bartoman', 'Daily Amar Shongbad' four of the popular newspapers of Bangladesh featured news about the human chain which is a great source



to aware mass people of the country. The news snapshot and link is attached in the Annex 4.

## **A Round Table Meeting**

## i. Location, Date and Time



## ESDO Head Office, Lalmatia, Dhaka

**Time:** 10.00 am

**Date:** 27 October, 2019

## ii. Program Schedule

Time	A official or
Time	Activities
9.30 am	Participants Sign in
	Introduction by
10.00 am	Syed Marghub Murshed,
10.00 am	Former Secretary, Govt. of Bangladesh &
	Chairperson, ESDO
	Opening Remarks
	Prof. Md. Abul Hasem
10.15 am	Former Chairperson and Professor
	Dept. of Chemistry
	Jahangirnagar University, Dhaka.
	Remarks by
10.30 am	Siddika Sultana
	Executive Director



Environment and Social Development Organization (ESDO)

	Presentation by Sayda Mehrabin Shejuti
11.00	
11.00 am	On
	'Ban Lead Paint: Protect Public Health and Environment'
	Discussion Moderated by
	Dr. Shahriar Hossain
11.30 am	Secretary General
	Environment and Social Development Organization (ESDO)
12.00 pm	Open Discussion session
1.00 pm	Closing Remarks by Session Chair
1.30 pm	Lunch

### iii. Attendees

Government representatives, environmental activists, experts, girl guides members, members of ESDO advisory and technical team, reporters from a good number of print and electronic media were present in the round table meeting. The lists of participated guests are attached in Annex-2.

## iv. Open discussion:

The meeting was presided over by Syed Marghub Murshed, Chairperson, ESDO and the open discussion session was moderated by Dr. Shahriar Hossain, Secretary General of ESDO. The distinguished guests took part in the open discussion where they opined about the subject issue.



u n

ESDO- Chairperson- and- former- Secretary- of- the-Government of the People's Republic of Bangladesh, Syed Marghub Murshed said, "The Global Alliance to-Eliminate Lead Paint was formed in 2011 to promote the phase-out-of-the manufacture and sale of paints containing lead and eventually to eliminate the risks that such paints pose. He informed that in Bangladesh-ESDO had been working since 2008 from awareness raising activities to policy advocacy on the issue of Ban-Lead-Paint' and which has been leading the country to have a standard and moving towards a regulation".



Prof. Abul. Hasam. Chairman (Chemical Division),
Bangladesh Standard and Testing Institute said,
"According to the Centers for Disease Control and
Prevention, the most common sources for lead poisoning
in children can be from paint, as well as toysmanufactured with lead in the paint, plastic or metal.
And it is a whole BSTI-team work to publish the SROon restricting lead limit in paints"



Siddika Sultana, Executive Director, ESDO said, "BSTI's role in publishing the SRO is undoubtedly a milestone in the whole Asia whereas a law regarding the ban of lead paint in Bangladesh is a demand of time to the government of Bangladesh now. She focused on inter-governmental cooperation which may eventually lead us to our goal. Yet again, we need to conduct the random market available paint sample testing to for our knowledge on present status of the paints."





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Dr. Shahriar Hossain, Secretary General of ESDO said, "There should be steps to phase out lead, without proper mechanisms for monitoring and regulatory surveillance it-can't be done." He also included that BSTI has the responsibility to standardize but implementation should be done by Department of Environment (DoE). He urged that we want regulation to prevent illegal trafficking of obsolete lead containing paints from Nepal, India etc.



Md. Mokhlesur Rahman, former Additional IGP, Bangladesh Police, Technical Adviser, ESDO said, "Lead has a very bad effect on new born baby. So we should create more public awareness. Now we should urge to the Government for a complete ban of this toxic metal."



Ishtian Ahmad, CCF (Rtd.), Former Country Director, IUCN, and Technical Adviser, ESDO said, "Import control of leaded pain should be given priority, capacity of regulatory body should be increased and boosted up to have the regulation in place."





Dr. Mahfuza Parveen, Assistant Professor, Department of Environmental Science and Disaster Management, Daffodil International University said, "We are discarding lead containing product in an inappropriate manner, and in long run lead is entering into soil and water and ultimately in the food chain." She also urged that school level awareness

should be done to aware people from root level. ¶



## v. Power point presentation



Sayda Mehrabin Shejuti, Assistant Program Officer, ESDO made a presentation on 'Ban Lead Paint: Protect Public Health and Environment'. Through a graph she presented the Countries with legally-binding controls on lead paint, as of June 2019 (WHO, UNEP). She added that through ESDO's assiduous policy advocacy, Bangladesh Standard and Testing Institutions (BSTI) have already published an SRO which is Maximum lead content in Economy Emulsion Paint, Enamel, Synthetic, Exterior (a)undercoating (b) finishing is 90 ppm. She informed that Chemical Control Order and Gazette have already published in the United States, India, Nepal, Philippines, Sri

Lanka, Thailand and China. Shejuti presented the environmental and human health hazards of lead. She showed that \$857 billion is spent in low and middle-income countries from children's lost IQ because of Lead Poisoning. She talked about some other uses of lead in our countries among which lead batteries and leaded toys are significant. She also informed that lead is used in toy jewelry which poses serious health issues, especially for young, growing children. So the importance of a regulation to ban lead in paint in Bangladesh was emphasized in the presentation.

In the end she added that as we are still striving for a regulation on Ban of Lead in paint so, our combined effort will put a drive into this.

#### vi. Deliverable Materials

Fact sheets were developed and distributed in the meeting.

#### vii. Outcomes:

Statutory Regulatory Order (SRO) on restricting lead content in paint to 90 ppm has been published by BSTI in line with ESDO's tenacious policy advocacy. ESDO had been working since 2008 from



awareness raising activities to policy advocacy on the issue of 'Ban Lead Paint' in Bangladesh. ESDO's goal is to eliminate lead paint in Bangladesh by 2020 by promoting the establishment of a law to Ban Lead Paint in Bangladesh. The news of this meeting was also published in some widely used electronic and print media of Bangladesh.

## **News coverage of Round Table Meeting**

Name of Newspaper	Title of News	Date	News Link
Dhaka Tribune	Ban lead-based paints for healthy children	28 October, 2019	https://www.dhakatr ibune.com/health/20 19/10/28/ban-lead- based-paints-for- healthy-children
The Daily Sun	Ban lead paint: Experts	28 October, 2019	https://www.daily- sun.com/printversio n/details/434449/Ba n-lead-paint:- Experts
The Daily Manabzamin	সীসাযুক্ত রঙ নিষিদ্ধ করণের আহবান বিশেষজ্ঞদের শিশুদের স্বাস্থ্য সুরক্ষার জন্য আইন প্রণয়ন করুন	13 November, 2019	https://mzamin.com/ article.php?mzamin =196506
Channel i (Video News Coverage)	রঙে বিষাক্ত সীসার ব্যবহার	27 October, 2019	https://www.youtube .com/watch?v=UI5x 1SjacPU&feature=y outu.be&fbclid=IwA R37xg46641d19kUI UJ3b3EFU3C23isE Q13wPHLQCxafyvI Ee1pK7Q9wVN8

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## Social Media Campaign

ESDO continued social media campaign round the week of ILPPW 2019 that is from 20 to 27 October 2019. Different messages regarding the danger of lead poisoning were posted in ESDO Facebook page and the updates of the events organized in Bangladesh by ESDO were also circulated in Facebook and twitter. Some screen shots are attached in the Annex-5.



Fig: Facebook post from ESDO facebook page during round table meeting.

## **Conclusion**

International Lead Poisoning Prevention Week of Action is an effort to raise awareness on the subject issue globally. Ban of lead paint in Bangladesh has become a timely step considering the environment and public health issue in the country. ESDO is committed to work hard until ban of lead in paint in Bangladesh is established as law.



## Why should I buy testing kits from The LEAD Group? Who are The LEAD Group?

Q: Why should I buy testing kits from The LEAD Group?

A: LEAD Group DIY-sampling and lab analysis test kits enable you to collect samples and send them to a NATA-accredited lab for accurate analysis. The LEAD Group receives the results from the lab and tells you what they mean – including what to do to make your family, pets, veggies and chooks lead-safe!

Q: Who are The LEAD Group?



A: The Lead Education and Abatement Design (LEAD) Group Incorporated is a registered health promotion charity with an environmental protection fund (the Lead Education and Abatement Fund or <u>LEAF</u>) which aims to make the world lead-safe by 2041!

The LEAD Group Inc charity was founded in 1990 by three families in inner Sydney who set about building a Technical Advisory Board of professors, doctors and other experts on all aspects of lead, and advocating for the phase-out of leaded petrol

(achieved 2002), an end to the addition of lead to paints (achieved for residential paint in



Kozaitis).

1997 and all other paints in 2010), more blood lead testing (local blood lead studies were achieved in 1992 and a national child study in 1996), reduced blood lead "action" levels (achieved in 1993 and made even more stringent in 2015 and for lead workers in 2017), and regulatory protection, for example, for renters and buyers, from ignorance about potentially lead-contaminated homes (not yet achieved) accompanied by a huge increase in environmental testing for lead (achieved since 2007 when we started selling LEAD Group Kits). See the long list of Our Team, which is headed by Lead Scientist, Lead Advisor and LEAD Group co-Founder, Elizabeth O'Brien (pictured, photo by Peter





Q: How many LEAD Group Kits have been sold to date?

A: After developing excellent individualised advice based on test results organised by expensive consultants or hygienists who had never been trained to sample appropriately to protect children, The LEAD Group has sold more than 1,000 LEAD Group Kits over the last 13 years and helped over 37,000 callers with free advice in 117,000 calls since 1990. Most commonly the Comprehensive Kit is purchased, which allows you to understand lead results on 8 samples of any combination of sample types that you choose: water samples, paint chips, dust wipes, soil, ceiling dust, vacuum dust, eggs, toys, ceramicware, jewellery, etc.

Q: How have people been helped by LEAD Group Kits?

A: Many people have been able to reduce their family blood lead levels by testing with a LEAD Group Kit. When people buy a Kit and test samples before they begin a renovation, they can achieve complete prevention of lead poisoning and lead contamination from that renovation, and also can follow the advice that comes with the results to do lead abatement like covering over lead-contaminated soil or removing lead-contaminated carpets and replacing them with wet-cleanable hard flooring. Tenants have used the Kit results to be able to leave a lead-contaminated home before the lease is up, or, in better circumstances, to convince the owner to safely clean up lead issues. Poultry-keepers have been helped to reduce their egg lead levels. Toy and Ceramics importers have been able to determine whether toys or dishes comply with the heavy metals levels in the Mandatory Toy Standard and Ceramicware Standard before importing in bulk. Ceiling dust removal contractors, builders and paint contractors have been able to convince home-owners of the need to carry out lead-safe work. People who have new taps, pumps or plumbing have been able to determine whether they need to replace any of the plumbing system in order to achieve non-detectable levels of lead in their drinking water. A couple of unusual sources of lead exposure were revealed by LEAD Group Kits in the articles:



"Why I tested my chicken broth for lead using a LEAD Group Water Kit" and "Deleading with healthy lifestyle interventions: Lead detox with saunas, lemon, garlic, greens, etc after eradicating potential current lead exposure".



Q: Where can I buy LEAD Group Kits?

A: Currently, at

<a href="https://leadsafeworld.com/shop/">https://leadsafeworld.com/shop/</a> but later this year (2020) at
 <a href="https://leadtestresults.info">https://leadtestresults.info</a> - where you'll be able to search a database of thousands of de-identified Kit results from all over Australia.

And read about the Kits in the May 2020 issue of LEAD Action News: "Lockdown, DIY and Lead".



Q: Where can I see some films on how to collect some sample types and photos about LEAD Group Kits?

A: at The LEAD Group's film and photo competition Volcano Art Prize site, for example:

http://volcanoartprize.com/portfolioitem/the-lead-group-kits-dust-wipe-inaction/ and

https://volcanoartprize.com/portfolio-item/how-to-collect-a-dust-wipe-sample-from-carpet/

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## Intertek Recall News: Jewellery with 2.8% lead content, made in China, recalled in Sweden

From: Intertek全國公證 Taiwan

Sent: Friday, January 10, 2020 1:41 PM

To: The LEAD Group Inc

Subject: Intertek全國公證 消費性產品召回(Recall)通報





Dec 2019

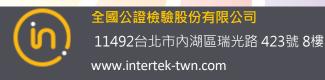
## 消費性產品召回(Recall)通報

2019/11/30~2019/12/31期間·消費品召回案例包含珠寶、紋身墨水、玩具及化妝品·節錄如下:

珠寶 瑞典 中國 金屬含有0.27%的鎘及2.8%的鉛 REACH	類別	產品照片	通報國	原產國	召回原因	違反法規
	珠寶	00	瑞典	中國	金屬含有0.27%的鎘及2.8%的鉛	REACH

LEAD Action News Volume 20 Number 4





Translation of the Chinese ring (see photo above) recall notice, by Dr Hugh Xin Xi Zhu, for The LEAD Group Inc, Australia

The first item (above) in Intertek's Recall News: Jewelry/Jewellery contains 2.8% Lead, which exceeds the legal level [see REACH Regulation No 836/2012 extracts in the following article]. It was sold in Sweden. The product was made China. It has been notified to the public and recalled in Sweden.



## REACH EU Regulation No. 1907/2006 re: Lead in Jewellery & other products infants mouthe

Extracts from the Official Journal of the European Union (OJEU), 19th September 2012, at <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0836">https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1582340438535&uri=CELEX:32015R0628</a>

In summary, the following extracts from a 2012 amendment and a 2015 amendment to the European Union Regulation No 1907/2006 show that jewellery put on the market for the first time since 9<sup>th</sup> October 2013 and other consumer articles which are small enough for young children to mouthe put on the market for the first time since 1<sup>st</sup> June 2016 in Europe (with a couple of exceptions) must not contain more than 0.05% lead [equivalent to 500 parts per million or ppm].

COMMISSION REGULATION (EU) No 836/2012 of 18 September 2012

amending Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards lead

THE EUROPEAN COMMISSION, Having regard to the Treaty on the Functioning of the European Union

### Whereas:

...On 15 April 2010 France submitted to the Agency a dossier pursuant to Article 69(4) of Regulation (EC) No 1907/2006, in order to initiate a restriction process in accordance with Articles 69 to 73 of that Regulation. In that dossier, it was demonstrated that due to their mouthing behaviour, children, especially those under 36 months, can be repeatedly exposed to lead released from jewellery articles. Such repeated exposure to lead can result in severe and irreversible neurobehavioural and neurodevelopmental effects, to which children are particularly sensitive given that their central nervous system is still under development. The dossier demonstrates that action on a Union-wide basis is necessary, beyond any measures already in place, in order to avoid as much as possible the exposure to lead and its compounds in jewellery articles. Accordingly, the dossier proposes a prohibition of placing on the market and the use of lead and its compounds in jewellery articles if the lead migration rate is greater than  $0,09~\mu g/cm^2/h$  [0.09 micrograms of lead per square centimetre of product surface per hour].

In its opinion of 10 March 2011, the Committee for Risk Assessment (hereinafter 'RAC') considered that the most appropriate Union-wide measure to address the identified risks in terms of the effectiveness in



reducing the risks is the prohibition of the placing on the market and use of lead and its compounds in metallic and non-metallic parts of jewellery articles, if the lead concentration is equal to or greater than 0,05% [0.05%] by weight of the individual part, unless it can be demonstrated that the rate of lead released does not exceed the limit of 0,05  $\mu$ g/cm²/h (0,05  $\mu$ g/g/h [0.05 micrograms of lead per gram of product per hour])....

In view of the current non-availability of a migration testing method mimicking mouthing conditions, SEAC considered that the restriction should be based on the content of lead in any individual part of jewellery articles, and not on the migration rate of lead released from such articles. In addition, SEAC

recommended exemptions to be provided for crystal glass, vitreous enamels, internal components of watch timepieces as well as non-synthetic or reconstructed precious and semiprecious stones....A restriction on the placing on the market of second-hand and antique jewellery would have a significant socioeconomic impact, as such items would lose their marketable value in the Union, and would pose difficulties for enforcement. Therefore, jewellery articles placed on the market for the first time up to 12 months after the entry into force of the restriction as well as imported antique jewellery articles should be exempted from the restriction.



#### HAS ADOPTED THIS REGULATION:

### Article 1

Annex XVII to Regulation (EC) No 1907/2006 is amended in accordance with the Annex to this Regulation.



### Article 2

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

#### **ANNEX**

In Annex XVII to Regulation (EC) No 1907/2006, the following entry 63 is added:

63. Lead CAS No 7439-92-1; EC No 231-100-4 and its compounds:

1. Shall not be placed on the market or used in any individual part of jewellery articles if the



concentration of lead (expressed as metal) in such a part is equal to or greater than 0,05% [0.05%] by weight.

- 2. For the purposes of paragraph 1:
  - (i) "jewellery articles" shall include jewellery and imitation jewellery articles and hair accessories, including:
    - (a) bracelets, necklaces and rings;
    - (b) piercing jewellery;
    - (c) wrist watches and wrist-wear;
    - (d) brooches and cufflinks;
  - (ii) "any individual part" shall include the materials from which the jewellery is made, as well as the individual components of the jewellery articles.
- 3. Paragraph 1 shall also apply to individual parts when placed on the market or used for jewellery-making.
- 4. By way of derogation, paragraph 1 shall not apply to:
  - (a) crystal glass as defined in Annex I (categories 1, 2, 3 and 4) to Council Directive 69/493/EEC;
  - (b) internal components of watch timepieces inaccessible to consumers;
  - (c) non-synthetic or reconstructed precious and semiprecious stones (CN code 7103, as established by Regulation (EEC) No 2658/87), unless they have been treated with lead or its compounds or mixtures containing these substances;
  - (d) enamels, defined as vitrifiable mixtures resulting from the fusion, vitrification or sintering of minerals melted at a temperature of at least 500 °C.
- 5. By way of derogation, paragraph 1 shall not apply to jewellery articles placed on the market for the first time before 9 October 2013 and jewellery articles produced before 10 December 1961.
- 6. By 9 October 2017, the Commission shall re-evaluate this entry in the light of new scientific information, including the availability of alternatives and the migration of lead from the articles referred to in paragraph 1 and, if appropriate, modify this entry accordingly.

23.4.2015	EN	Official Journal of the European Union	L 104/2

## **COMMISSION REGULATION (EU) 2015/628**

## of 22 April 2015



## amending Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals ('REACH') as regards lead and its compounds

### THE EUROPEAN COMMISSION.

Having regard to the Treaty on the Functioning of the European Union,

#### Whereas:

On 21 December 2012, Sweden submitted to the European Chemicals Agency (hereinafter 'the Agency') a dossier pursuant to Article 69(4) of Regulation (EC) No 1907/2006 (the Annex XV dossier), demonstrating that due to their mouthing behaviour, children, especially those under 36 months, may be repeatedly exposed to lead released from consumer articles containing lead or lead compounds. Lead and lead compounds are present in consumer articles as intentionally added metallic lead, as an impurity or additive of metal alloys (particularly in brass), as pigments, and as a stabiliser in polymers (particularly in PVC).

... On the basis of the established derived minimal effect level of lead, the mouthing behaviour of children and studies on lead migration from metallic parts of jewellery, a limit content for lead should be set which will apply to metallic and non-metallic parts of articles unless it can be shown that the rate of lead release does not exceed a certain threshold. For coated articles, the coating should be sufficient to ensure that this rate is not exceeded for a period of at least two years of normal use of the article.

Exemptions from this Regulation should be made for certain articles in relation to which the expected migration level is low, such as crystal glass, enamels and precious and semi-precious stones, or acceptable provided that a certain content limit is not exceeded, which may be the case for brass alloys, and for specified articles whose small size means that exposure to lead is minimal, namely tips of writing instruments.

... Keys, locks, padlocks and musical instruments can potentially be mouthed by children and therefore may pose a risk to children if they contain lead. However, those articles should be exceptionally exempted as there seems to be a lack of suitable alternatives to lead in the manufacture of those articles, and the possible adverse socioeconomic impact of applying the restriction to them could be significant. Similarly, the impact of applying the restriction to religious articles and certain batteries has not been fully assessed and it is therefore appropriate exceptionally to exempt them from its scope until a detailed assessment can be performed. Therefore, the new paragraphs in this entry should be reviewed after an appropriate period following their date of application, as well as the requirements on coating integrity. Articles already covered by specific Union legislation regulating lead content or migration should, for reasons of consistency, be exempted. Economic operators should be allowed a transitional period to adapt their manufacturing to the restriction laid down by this Regulation and to dispose of their stock not yet placed on the market. Furthermore, the restriction should not apply to second hand articles which were placed on the market for the first time before the end of that transitional period as that would give rise to considerable enforcement difficulties....HAS ADOPTED THIS REGULATION:

## Article 1

Annex XVII to Regulation (EC) No 1907/2006 is amended in accordance with the Annex to this Regulation.



### Article 2

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

#### **ANNEX**

In Annex XVII to Regulation (EC) No 1907/2006, column 2 of entry 63 is amended as follows:

(1)paragraph 6 is replaced by the following:

66. By 9 October 2017, the Commission shall re-evaluate paragraphs 1 to 5 of this entry in the light of new scientific information, including the availability of alternatives and the migration of lead from the articles referred to in paragraph 1 and, if appropriate, modify this entry accordingly.'

(2)the following paragraphs 7 to 10 are added:

'7. Shall not be placed on the market or used in articles supplied to the general public, if the concentration of lead (expressed as metal) in those articles or accessible parts thereof is equal to or greater than 0,05 % [0.05%] by weight, and those articles or accessible parts thereof may, during normal or reasonably foreseeable conditions of use, be placed in the mouth by children.

That limit shall not apply where it can be demonstrated that the rate of lead release from such an article or any such accessible part of an article, whether coated or uncoated, does not exceed  $0.05 \, \mu g/cm^2$  per hour (equivalent to  $0.05 \, \mu g/g/h$  [0.05 micrograms of lead per gram of product per hour]), and, for coated articles, that the coating is sufficient to ensure that this release rate is not exceeded for a period of at least two years of normal or reasonably foreseeable conditions of use of the article.

For the purposes of this paragraph, it is considered that an article or accessible part of an article may be placed in the mouth by children if it is smaller than 5 cm in one dimension or has a detachable or protruding part of that size.

- 8. By way of derogation, paragraph 7 shall not apply to:
  - (a) jewellery articles covered by paragraph 1;
  - (b) crystal glass as defined in Annex I (categories 1, 2, 3 and 4) to Directive 69/493/EEC;
  - (c) non-synthetic or reconstructed precious and semi-precious stones (CN code 7103 as established by Regulation (EEC) No 2658/87) unless they have been treated with lead or its compounds or mixtures containing these substances;
  - (d) enamels, defined as vitrifiable mixtures resulting from the fusion, vitrification or sintering of mineral melted at a temperature of at least 500°C;



- (e) keys and locks, including padlocks;
- (f) musical instruments;
- (g) articles and parts of articles comprising brass alloys, if the concentration of lead (expressed as metal) in the brass alloy does not exceed 0,5 % [0.5%] by weight;
- (h) the tips of writing instruments;
- (i) religious articles;
- (j) portable zinc-carbon batteries and button cell batteries;
- (k) articles within the scope of:
  - (i) Directive 94/62/EC;
  - (ii) Regulation (EC) No 1935/2004;
  - (iii) Directive 2009/48/EC of the European Parliament and of the Council [re: toys];
  - (iv) Directive 2011/65/EU of the European Parliament and of the Council [re: electrical and electronic equipment]
- 9. By 1 July 2019, the Commission shall re-evaluate paragraphs 7 and 8(e), (f), (i) and (j) of this entry in the light of new scientific information, including the availability of alternatives and the migration of lead from the articles referred to in paragraph 7, including the requirement on coating integrity, and, if appropriate, modify this entry accordingly.
- 10. By way of derogation paragraph 7 shall not apply to articles placed on the market for the first time before 1 June 2016.



## Repairing leadlight windows is a job for professionals, not DIYers!

On Facebook in The Lead (Pb) Group Pearse Stokes shared a link and made the following comments. Visual Storyteller · January 14, 2020

Australia, 2020. DIY advice - how to restore antique leaded windows "Stained Glass". ["Restore Leadlight Windows" in *Australian Handyman Magazine* online (undated) at <a href="https://www.handyman.net.au/restore-leadlight-windows?fbclid=IwAR1YohiyGlG1RI6q1JIFg\_x85pR8rikLzixD5JN-cq4MHGjOIxe1JufyYOo">https://www.handyman.net.au/restore-leadlight-windows?fbclid=IwAR1YohiyGlG1RI6q1JIFg\_x85pR8rikLzixD5JN-cq4MHGjOIxe1JufyYOo</a> - Treat your precious stained glass panels with TLC to keep them in tiptop shape and shining bright.]

AKA "How to poison yourself and your family, your pets, and destroy your home's value, without knowing a thing". Ignorance is not bliss. Do not try this at home.



2012 Volcano Art Prize (VAP) Entry. Title: **Hidden**. Lead Safety Message: Leadlighting can be repaired lead-safely by an experienced professional in a well-equipped workshop. There are hidden dangers for DIY lead light repairers. Artist/Photographer: **Rose Lee**. Description of Work: Digital image. <a href="https://volcanoartprize.com/portfolio-item/hidden/">https://volcanoartprize.com/portfolio-item/hidden/</a>



# Dr Marc Grunseit's comments on Australian Handyman Magazine's Reader Project: Restore Leadlight Windows

I have two things to say about the Article on restoring leadlights yourself at home.

The first is "don't". Old leadlights are generally covered in oxidised lead dust and thus the most dangerous sort of lead to handle. They need to be carefully cleaned in a manner which protects the panel from damage and simultaneously protects the environment and user. Handling lead should only be done in a specialised workshop dedicated to that purpose. It should only be done by people who know how to do it without poisoning themselves and spreading the toxic lead dust onto their clothes, their skin and into their lungs and gut. It should never be done at home where anybody, including children or pregnant women may be contaminated.

The second calls to mind a Monty Python sketch about how to play the flute. The instructions were to blow in one end and move your fingers over the holes. **Magazine instructions on how to perform leadlight repairs to people who have never done it before are about as useful.** There are many little important pieces of information that only expert tuition and experience can inform.

I am generally a great fan of DIY but there are just some things that are best left to professionals and this is one of them.

2013 Volcano Art Prize (VAP) Entry. Title: Lead in the Grass. Lead-Safety
Message: Leadlighting can be made lead-safely in a properly equipped workshop. Artist/Photographer: Prof Stuart Hill. Description of Work: Digital image.

http://volcanoartprize.com/portfolioitem/lead-in-the-grass/





## **Boolaroo Lead Mitigation Grants**

[URL: <a href="https://www.lakemac.com.au/Our-Council/Grants-and-funding-assistance/Lead-Mitigation-Grants">https://www.lakemac.com.au/Our-Council/Grants-and-funding-assistance/Lead-Mitigation-Grants</a> - accessed 27th June 2020 – reprinted from Lake Macquarie Council <a href="https://www.lakemac.com.au/Our-Council/Grants-and-funding-assistance/Lead-Mitigation-Grants">https://www.lakemac.com.au/Our-Council/Grants-and-funding-assistance/Lead-Mitigation-Grants</a> - accessed 27th June 2020 – reprinted from Lake Macquarie Council <a href="https://www.lakemac.com.au/Our-Council/Grants-and-funding-assistance/Lead-Mitigation-Grants">https://www.lakemac.com.au/Our-Council/Grants-and-funding-assistance/Lead-Mitigation-Grants</a> - accessed 27th June 2020 – reprinted from Lake Macquarie Council <a href="https://www.lakemac.com.au/Our-Council/Grants-and-funding-assistance/Lead-Mitigation-Grants">https://www.lakemac.com.au/Our-Council/Grants-and-funding-assistance/Lead-Mitigation-Grants</a> - accessed 27th June 2020 – reprinted from Lake Macquarie Council <a href="https://www.lakemac.com.au/Our-Council/Grants-and-funding-assistance/Lead-Mitigation-Grants">https://www.lakemac.com.au/Our-Council/Grants-and-funding-assistance/Lead-Mitigation-Grants</a> - accessed 27th June 2020 – reprinted from Lake Macquarie Council <a href="https://www.lakemac.com.au/Our-Council/Grants-and-funding-assistance/Lead-Mitigation-Grants-and-funding-assistance/Lead-Mitigation-Grants-and-funding-assistance/Lead-Mitigation-Grants-and-funding-assistance/Lead-Mitigation-Grants-and-funding-assistance/Lead-Mitigation-Grants-and-funding-assistance/Lead-Mitigation-Grants-and-funding-assistance/Lead-Mitigation-Grants-and-funding-assistance/Lead-Mitigation-Grants-and-funding-assistance/Lead-Mitigation-Grants-and-funding-assistance/Lead-Mitigation-Grants-and-funding-assistance/Lead-Mitigation-Grants-and-funding-assistance/Lead-Mitigation-Grants-and-funding-assistance/Lead-Mitigation-Grants-and-funding-assistance/Lead-Mitigation-Grants-and-funding-assistanc

The Lead Mitigation Grant Program provides funding to eligible North Lake Macquarie [in New South Wales, Australia] residents who have been adversely impacted by lead contamination resulting from the former Pasminco Cockle Creek Smelter.

The Pasminco smelter, in Boolaroo, operated for more than a century. During this time, airborne pollution resulted in soil contamination in surrounding areas, including lead and other heavy metals. Since the smelter closed in 2003, some remediation work has occurred; however, some soil in the area remains contaminated or potentially contaminated.

To help facilitate improvement of the soil and support the community, the NSW Government has provided \$100,000 a year for four years to assist with managing contaminated soil.

Here's how to apply:

## Review our guidelines

Take a moment to familiarise yourself with the <u>grant guidelines(PDF, 1MB)</u> to ensure you are eligible. The guidelines provide clear information about what activities will be eligible for funding and how applications will be prioritised.

## **Apply**

The grants are offered four times a year. Round Two 2019-2020 is now open. Submissions will close Friday 26 June 2020. [Editor's note: As Round One closed in late March 2020, it is possible that Round Three will close in late September 2020, and so on for future rounds possibly closing three-monthly.]

### Apply now

Press left and right keys to move between tabs. Press down to focus tab content.

## Need help with your application?

Contact Council's Sustainability Engagement Officer on 4921 0333 to discuss.



## Lead Free & Lead Safe Drinking Bubblers Available in Australia from Galvin Engineering

By Chris Galvin, Galvin Engineering (GE), Perth, Western Australia, June 2020

The World Health Organisation (WHO) states that lead is a cumulative toxicant that can result in adverse health effects. Lead is considered particularly harmful to young children and it is estimated to have contributed to 540,000 deaths worldwide in 2016. There is no known level of lead exposure that is considered safe.

Whilst there is no clear evidence of the harmful effects on human health from the consumption of metals in drinking water, the increased concern amongst the health community and the public surrounding the effect on drinking water from lead in plumbing materials, is leading to calls for regulations and standards to be changed to ensure lead ingestion is reduced or eliminated.

In Australia over the last few years, we have had several high-profile cases of lead contamination being found in our drinking water. For example, the opening of the \$1.2 billion Perth Children's Hospital (PCH) was delayed for 2 ½ years until March 2018, with one of the reasons cited for the delay being elevated lead levels in the water. The products deemed to be at fault at PCH were replaced with lead free alternatives. In 2018, Geelong Council in Victoria closed down the drinking fountains in several parks over concerns around high levels of lead being found in the water. This resulted in the Victorian School Building Authority (VSBA) changing its Building Quality Standards Handbook (May 2019) to only allow the use of lead-free or lead-safe tapware and piping systems in schools.

At Galvin Engineering (GE), our purpose is to provide Water Solutions for a Healthier Environment. With anxiety in the community around elevated lead levels in water increasing, we have responded to these concerns by designing and making premium quality taps in new lead free or low lead materials using special manufacturing techniques. This has resulted in the release of the innovative GalvinClear $\mathbb{R}$  Lead Safe $^{\text{TM}}$  product range.





Environmental.

In 2019, GE commissioned a study to sample and accurately measure what levels of lead may be leached from our drinking bubblers manufactured from these different materials. Professor Environmental Engineering Anas Ghadouani (BSc MSc PhD) and his faculty team at the University of Western Australia (UWA) was engaged to undertake comprehensive testing. Water samples were analysed at an independent NATA approved laboratory in Perth, ALS

Three GE drinking bubbler models were tested. The bubblers were manufactured in our ISO9001 and ISO14001 endorsed factory using strict quality control procedures in a controlled clean environment. After manufacture, each bubbler was washed in a special solution to remove any residual lead left inside the product.

One bubbler was manufactured using traditional high quality standard DZR brass containing less than 2.5% lead. Two bubblers were produced using our new GalvinClear® Lead Safe™ materials. The first was made from a premium grade leadfree 316 stainless steel. The second was produced using a special low lead DZR brass that



contains less than 0.2% lead content. This alloy is approved to the European's 4MS Common Approach and complies to the strict requirement of the USA's Safe Drinking Water Act.

The final results from four separate rounds of tests during 2019 were:



- All styles of GE bubblers are delivering water that is many times under the maximum allowable lead level of <0.01mg/L as set in the Australian Drinking Water Guidelines (ADWG) and are therefore considered safe for drinking water.
- ➤ The water extracts from the GE bubblers manufactured from standard DZR brass showed very low lead levels in the water that were five times under the maximum limit set out in the ADWG.
- The water extracts taken from the GE bubblers manufactured from 316 stainless steel, showed no detectable levels of lead in the water
- > The water extracts from the GE bubblers manufactured from low lead DZR brass, showed no detectable levels of lead in the water

Health experts agree that any form of lead ingestion should be reduced or eliminated. As this study confirms lead exposure in drinking water is preventable, and drinking water supplied via GalvinClear® Lead Safe™ bubblers contains no detectable levels of lead. Indeed, all of our drinking bubbler models significantly exceed the requirements set by the WHO and the ADWG.



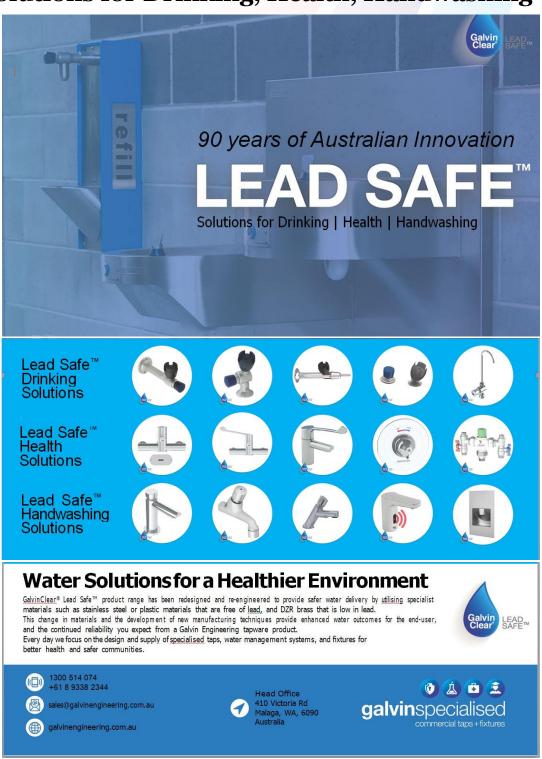
Photo: Lead Safe drinking bubblers by Galvin Engineering, at Perth Optus Stadium.

GalvinClear® Lead Safe™ drinking bubblers are a safer and healthier choice for the community, especially for areas of greatest risk such as for schools and hospitals.

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## 90 years of Australian Innovation – LEAD SAFE Solutions for Drinking, Health, Handwashing





## Non-government Websites for Lead Information in the United Kingdom

13th February 2020

To Elizabeth,

web sites in the UK that you might be interested in include:

**Test for Lead** – by Heritage Testing

Heritage Testing - Hesaan Sheridan's company

<u>Lead Survey</u> – used to host the Lead Paint Safety Association (LiPSA), but this seems to have been abandoned

Lead Containing Material Association

Lead in the Water – by Dr Simon Reddy

I also just discovered Professor Mark Taylor's <u>360 Dust Analysis</u> project which also involves Northumbria University in the UK. This looks an exciting project which could strengthen our calls for more awareness of the need to manage toxics in the home.

And of course there are many articles about lead in the UK on the <u>Lead Safe World website</u> by The LEAD Group, including a whole issue of *LEAD Action News (LAN)* at <u>2017 June – LANv17n4 – Lead Safety in the United Kingdom!</u>

I also found the Association for Project Safety that have a good <u>article</u> on lead paint and dust in building projects. This acknowledges the lack of awareness in the industry in the UK and the inadequacy of current legislation.

Best	regards,

Lead Safe World UK



### Health and Environmental Investigations into Toxic Heavy Metals in Rosebery – the Need for Health Advocacy

By Kay Seltitzas, Resident of Rosebery, Tasmania, Australia, when she made this speech on 19<sup>th</sup> January, 2010 at a Public Forum in Rosebery Memorial Hall. Photos supplied by Isla MacGregor, Toxic Heavy Metals Taskforce Tasmania (THMTT). The Public Forum was promoted by The LEAD Group, at

https://www.lead.org.au/mr/Medrel 20100109 Toxic Heavy Metals Taskforce Tasmania.pdf and by the Tasmanian Times newspaper, at https://tasmaniantimes.com/2010/01/health-and-environmental-investigations-into-toxic-heavy-metals-in-rosebery/

As you all will now know, several residents from Rosebery have been diagnosed with heavy metal poisoning particularly arsenic, lead, cadmium and other heavy metals.

I was one of the five people who were involved in the Government's Investigations into toxic heavy

metal contamination in Rosebery last year.

We experienced many difficulties during this investigation.

At the beginning of the investigation we made several requests to the DHHS [Tasmanian Department of Health and Human Services] for them to appoint an Advocate for us but our requests were ignored.

The DHHS and EPA [Tasmanian Environment Protection Authority] Project Team members did not listen to us, did not consult with us, and did not treat us with respect.

They offered no assistance or support to us or other residents to obtain specialist medical, dental or optical assessments relating to heavy metals. **Photo:** Kay and Marsha outside DHHS office.

From the onset, the combined



[Tasmanian] Health Department and EPA Project Team Investigation (which handed down its Final



Report in April 2009) seemed to be focused on 'measurements' of various heavy metals rather than having a close look at the medical problems of the Rosebery residents. This attitude was very disappointing and frustrating for us.

The results we received from our biological and environmental samples came back from the Government's own laboratories showing very high levels of arsenic, lead, cadmium, nickel and other heavy metals. The DHHS and EPA ignored these results.

In the early stages of the investigation other residents who were also very ill with heavy metal poisoning attempted to be included in the investigation, but without any reason given, they were rejected by the DHHS. The DHHS, to this day, has failed to provide any assistance to these very ill residents.



Photo: Rosebery residents rally, Hobart, Tasmania, July 2009

Some of the key symptoms and health problems that many of us have experienced include:

Nausea
Vomiting
Diarrhea
Headaches
Metallic taste in mouth
Numbness in feet and hands
Arthritis
Osteoporosis
Heart and circulation problems
Depression
Insomnia
Lack of concentration and inability to
control anger

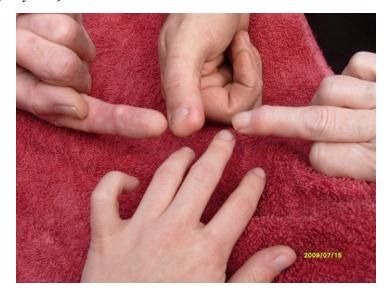




Photo: Rosebery Residents lumps and curling fingers

Our Taskforce has already written to the Director of Health, Dr Roscoe Taylor, [as at January 2017 Dr Roscoe Taylor was the medical director of Queensland Health's Communicable Diseases & Infection Management Unit] requesting that he appoint a Health Advocate for Rosebery residents. He has ignored our request. If you are concerned about any health issues and feel unable to cope with the Health System on your own, then you can help by asking your Doctor and the DHHS to appoint a dedicated Health Advocate for people in need of support in Rosebery.

A HEALTH ADVOCATE IS ESSENTIAL TO MANY OF US WITH ILLNESSES ASSOCIATED WITH HEAVY METAL CONTAMINATION, AS IT IS NOT ONLY VERY DIFFICULT TO BE OBJECTIVE ABOUT OUR OWN HEALTH BUT WE OFTEN DO NOT FEEL WELL ENOUGH TO ADVOCATE STRONGLY ENOUGH TO AVAIL OURSELVES OF ALL THE RELEVANT INFORMATION THAT WE SHOULD KNOW ABOUT SO WE ARE ABLE TO MAKE PROPERLY INFORMED DECISIONS AND TO BE HEARD.

A Health Advocate can help you to understand what your health rights and responsibilities are as a patient in the health system. Many of our health rights were ignored or abused during our participation with the DHHS investigation.

The Tasmanian Office of the Health Complaints Commissioner produces a Booklet titled the "Tasmanian Charter of Health Rights and Responsibilities" [HCCT, 2006] and in this it states:

### "RIGHT 1

## ACTIVE PARTICIPATION IN HEALTH CARE The Rights of the Health Service Consumer

The health service consumer has the right to take an active role in his/her own health care. This role includes making decisions about his/her own health care and being responsible for those decisions.

- The health service consumer has the right to choose a health service provider subject to several conditions including the treatment required and whether the consumer is a public or private patient.
- The right to be provided with information enables the consumer to make informed decisions about his/her own health care. This information might include:

diagnosis, the possible nature of the illness or disease;

test results and their implications;

the approach to proposed treatment or further investigation as well as

- a) what that entails:
- b) the expected benefits;
- c) any likely side effects that may occur;
- d) any recognised risks associated with that

investigation and/or treatment;

other options for investigation and/or treatment;

the likely consequences of any treatment option available;

likely consequences of not having any particular



treatment or procedure;
an estimate of the costs of any particular treatment or
procedure or other health service fees;
and advice regarding additional services, facilities and support
groups

This information should be presented in a way to best ensure the consumer's understanding. The information should be simple and straightforward. If necessary diagrams, models or other visual aids should be used. Those with physical or intellectual limitations such as visual, auditory or verbal difficulties and those who have other difficulties with language or communication have the right to be offered alternative means of information dissemination. These alternatives may include, among others, interpreters and/or translation services, large print or audio tapes. In these cases and where a health service consumer has limited capacity, information can be provided to a guardian or person authorised by the consumer.

- The right to feel comfortable and at ease and be encouraged to take an active role in his/her own health care in being consulted about options and by participating in decisions.
- The right to take notes, ask questions and expect honest, comprehensive and direct answers in order to clarify information provided by health service providers.
- The right to take sufficient time to absorb and consider information, seek advice and additional information from other sources, and discuss issues with family, friends and supporters.

It may not always be possible to fully exercise this right particularly in emergency situations where there is often little time to consult and consider.

- The right to not only be informed by the provider about his/her condition and options, but to offer suggestions and feedback and discuss these with the provider.
- The right to choose any treatment option available and have the provider respect that decision, even if they prefer a different option.



Photo: Wonita leg rash after yardwork in Rosebery



It is important to note that the provider is not required to provide any treatment with which he/she does not agree and has the right to withdraw from the provision of treatment.

• The right to grant, withhold or withdraw consent for treatment or performance of a procedure at any time."

The Health Rights Charter also includes information on other rights: Right 2 concerns

Individualised Service that is free from Discrimination; Right 3 concerns Confidentiality,
Privacy and Security; Right 4 concerns Access to Complaints Mechanisms and Right 5 concerns

The Right of Carers.

Our Taskforce has written to the Director of Health requesting that he establish an independent Population Based Health and Environmental Survey that will also include an Animal and Vegetable Testing Program. Our Taskforce has also told the Director of Health that we have no confidence in himself or his Deputy Director Dr Chrissie Pickin to establish an effective new health investigation in Rosebery given the failure of the previous investigation.

Our Taskforce want the Government to appoint a well qualified physician with experience in neurology and a clinical toxicologist with recent "hands on experience" in the examination of patients with diagnosed heavy metal poisoning particularly arsenic, lead and cadmium.

The past eighteen months have been difficult for many people in Rosebery whether or not they are healthy or suffering from different health issues than those associated with heavy metal poisoning.

It is important in our remote and under resourced community to care for those who are in need of support. This is the time for the people of Rosebery to pull together and make sure that the Government does the right thing by setting up a proper population based health survey in Rosebery and providing residents with a much needed Health Advocate.

### **REFERENCE:**

HCCT (Health Complaints Commissioner Tasmania), July 2006, *Tasmanian Charter of Health Rights and Responsibilities* 

http://www.healthcomplaints.tas.gov.au/ data/assets/pdf file/0004/145318/CHARTER July 20 06.pdf

### **RELATED PUBLICATION:**

Tasmanian Times Editor, 13<sup>th</sup> March 2011, Rosebery: Ross Whitney speaks out. Ross Whitney is a former West Coast miner and resident of Rosebery. Ross has been diagnosed with heavy metal poisoning. This is Ross Whitney's story as told to Isla MacGregor on 9th August 2010, <a href="https://tasmaniantimes.com/2011/03/rosebery-my-terrible-experience/">https://tasmaniantimes.com/2011/03/rosebery-my-terrible-experience/</a>



## Why It's Crucial to Clean Lead Dust Before Demolishing A Building

[Reprinted from <a href="https://www.leadsafelist.com/crucial-clean-lead-dust-demolishing-building/">https://www.leadsafelist.com/crucial-clean-lead-dust-demolishing-building/</a> undated but website is © 2018. Accessed 16 August 2019. Publisher (Barrett Concepts)]

Demolishing buildings can be an environmentally damaging experience, particularly if it has serious contaminants. One of the most serious, yet least discussed, is the problem that occurs when demolishing buildings with lead paint dust. It is vital to clean these buildings properly before demolishing them.

### Lead Can Be Airborne

It might be hard for some people to imagine, but lead paint can turn into dust and go airborne. Though this item is no longer used in homes and buildings, a large number built before the 1980s still have lead-based paint. When this item flakes and goes airborne, the risk of exposure and various health problems (including cognitive degradation) are possible.

### This Paint Can Go Airborne After Demolition

While lead paint dust in a home or building is dangerous enough, what happens when that building is demolished? In a day when most buildings with lead paint have either been treated or are decrepit, this problem is very important to consider. Demolishing a building with lead paint dust could cause it to spread over an entire neighborhood and damage the health of an entire population.

#### Cleaning Up Is Possible

Before demolishing a building that may have lead paint, it is important to take steps to remove it. Start by using a HEPA vacuum to suck up all paint dust that could be lead-based. A whole cleaning crew is likely to be necessary for this procedure, as it can require wiping down all the surfaces, removing extensive portions of the building, and much more.

By following these steps, you can protect your project and your neighborhood from serious lead paint dust dangers.



Failure to do so could expose a whole new generation to serious mental and physical health problems that would have been easily avoided.

ECOBOND<sup>TM</sup> is the nation's leader in developing and distributing products that improve the protection of human health and safety from the hazards of lead in the home, workplace, and the environment. With over 15 years in patented and proven success, the ECOBOND<sup>TM</sup> family of products have been extensively used in successfully treating lead hazards in over 11,000,000 tons of material while serving over 100,000 customers in the United States and Internationally. Third party independently documented test results utilizing US EPA method confirming the effectiveness of ECOBOND® LBP in protecting human health.

To learn more visit www.EcobondPaint.com



### **Q&A Managing lead-painted timber doors etc**

### Question

Sent: Sunday, February 23, 2020 7:44 PM

To: The LEAD Group Inc

Subject: Lead on timber doors

From: Vanessa

Subject: Lead on timber doors Address: ACT 2602, Australia

Hi, I have an older house and some of the doors have obviously had lead paint at some point which has been removed and painted over with a non-lead based paint. The 3M LeadCheck test kit shows no pink colour on the new paint, but pink on the timber underneath the paint (where it is peeling). As there is clearly only one



layer of paint which is not lead, how come it is turning pink on the timber underneath? Is it possibly still contaminated?

Also, do you know if acid dipping a door painted with lead paint will safely remove the lead?

Thank you

Vanessa

This e-mail was sent from a contact form on LeadSafeWorld by The LEAD Group Inc. (http://www.leadsafeworld.com)

#### **Answer**

From: The LEAD Group

Sent: Monday, February 24, 2020 1:07 PM

To: Vanessa

Subject: Re: Lead on timber doors

Hi Vanessa,

Thanks for your email enquiry.

Coincidentally, your questions have been answered in an article that will be published in an upcoming issue of The LEAD Group's e-newsletter, *LEAD Action News*, in which the author of the article has written:

The author's experience includes the following re: Door Dipping



It has been discovered that door dipping in caustic baths leaves lead exposed. This has been shown by use of a LeadCheck swab when doors were returned from the strippers and also noted by the EPA. It is also possible that the lead comes from doors other than your own because one batch of caustic is used for many doors. It was also found that waxing does not provide sufficient protection - a surface level of 428  $\mu$ g/ft² lead [428 micrograms of lead per square foot of surface, equivalent to 4607  $\mu$ g/m² – over **40 times** the US Housing and Urban Development (HUD) 2017 limit for floors of 10  $\mu$ g/ft² or 108  $\mu$ g/m²] was found using a 'Ghost Wipe' and laboratory analysis after two coats of wax.

It was also found that water-based varnish was not as effective as polyurethane varnish - where brushes need to be cleaned with white spirit.

Even after three coats of water-based varnish LeadCheck still showed positive for lead. After two coats of polyurethane varnish the LeadCheck reagent did not turn pink.

[end of extract of upcoming LEAD Action News article]

To my knowledge, any chemical stripping method can take lead from the paint into the wood grain and for this reason, some US lead poisoning prevention advocates (like Dennis Livingstone) recommend building a whole "plastic room" in the yard and using HEPA vac extraction dry-sanding to completely strip lead paint (and the topmost fine layer of wood which may have lead in it just from the paint having been on it for decades) from removable wood-work such as windows, skirtings, frames and doors.

In case buying or building a completely contained "plastic room" and then having to put on a "space suit" to work in it sounds too hard to you (as it does to me!), I asked Mirka Ltd, Finland in August 2019 by email if Mirka's "dust-free" sanding and polishing tools portfolio (which consists of electric and pneumatic sanders, polishing machines, dust extractors, equipment, and tools for sanding walls and ceilings) has been tested and found to be lead-safe. I received no reply so in January 2020, in the most recent issue of *LEAD Action News*, I asked our readership for feedback, (at <a href="https://lead.org.au/lanv20n2/LANv20n2-34.pdf">https://lead.org.au/lanv20n2/LANv20n2-34.pdf</a>) on the Mirka DEROS "Dust-free sanding perfection" orbital paint dry-sander, but to date I've received no feedback so perhaps you'll be the person to provide feedback???

The Mirka DEROS is distributed in Australia by Tenaru ("Find a store" at <a href="https://tenaru.net.au/sikkens/contact/">https://tenaru.net.au/sikkens/contact/</a> produces 7 results close to postcode 2602 such as Paint Place, Bunnings, Inspiration - but notes that you'd need to phone ahead to be sure the store stocks the Mirka DEROS orbital sander and also a HEPA filter which can be fitted to it).

I came across the Mirka DEROS by way of an advertisement in the Aussie Painting Contractor e-magazine at <a href="https://aussiepaintersnetwork.com.au/aussie-painting-contractor/">https://aussiepaintersnetwork.com.au/aussie-painting-contractor/</a>; which LINKS to a VIDEO demonstrating use of the orbital sander AT <a href="https://www.youtube.com/watch?v=1c7kvmrmQRg">https://www.youtube.com/watch?v=1c7kvmrmQRg</a>

Just today, inspired by your email, I have contacted Mirka Australia to ask them if they would use a LEAD Group Kit to collect a sample of the paint to be sanded, soil samples and dust wipe samples from horizontal surfaces nearby the residential lead paint job, then use the Mirka DEROS sander to sand off the paint and collect more soil and dust wipe samples from the same locations. They were interested so I will email them the proposal after sending this.

LEAD Group Kits involve posting the samples to a NATA-accredited lab in Sydney and then receiving



the quantified lead results with Comments and Interpretation so that you can know whether the home is safe for children and pets after the paint has been managed, or it needs further soil lead abatement or wet-cleaning of hard surfaces, removal of ceiling dust etc.

By collecting samples of soil and dust prior to the paint job, you guarantee that the paint contractor or DIY-renovator has not caused existing lead contamination. By testing paint at the lab prior to the work starting, you can be sure anyone being paid to work on the paint can notify the correct OHS government department if the paint contains more than 1% lead. This lead risk work notification is mandatory prior to a contractor starting the job but if you only have a colour change Kit pink result, you have to assume there's more than 1% lead in the paint, and notify the job despite the fact that there may be only 0.5% lead in the paint (which is the level at which the colour change Kits usually change colour from yellow to pink).

Please let me know how you go with all this info and please consider photographing the colour change Kit pink tip next to the bare door wood that turned it pink, for an entry for Volcano Art Prize

(see below).



Cheers
Yours Sincerely
Elizabeth O'Brien,
Lead Scientist and Lead Adviser
The LEAD Group Inc. (environmental health charity)
Editor, LEAD Action News

### www.lead.org.au www.leadsafeworld.com

LEAD Action News is published at both the above websites and archived at the National Library of Australia (NLA) and is free to all. See <a href="http://www.lead.org.au/nl.html">http://www.leadsafeworld.com/media-page/</a>; <a href="http://www.leadsafeworld.com/media-page/">https://nla.gov.au/nla.obj-311797282</a>

This online-only quarterly newsletter is often illustrated with Lead-Safety entries from our Volcano Art Prize website: www.volcanoartprize.com

Purchase LEAD Group Kits at www.leadsafeworld.com/shop

"We provide lead knowledge today to guide your actions towards a lead-safe tomorrow"

Check out our Volcano Art Prize (VAP) and enter your photos, artworks or short films to win the great prizes including cash prizes! Photos or film taken while collecting samples for a LEAD Group Kit make excellent entries. Go to: <a href="https://www.volcanoartprize.com">www.volcanoartprize.com</a> The deadline for VAP 2020 entries is midnight at the end of the day on Monday 27th July 2020.

7

2013 Volcano Art Prize (VAP) Entry. Title: **Red Means Lead!!** Lead-Safety Message: Lead Paint deteriorating off old homes poses great health risks to families and the general community. Artist/Photographer: **Nigel Gorman, Aussie Painters Network.** Description of Work: The

bright red of the lead test kit confirms the poison in not just the paint but also deep in the exposed timber of the old Queensland home. <a href="https://volcanoartprize.com/portfolio-item/red-means-lead/">https://volcanoartprize.com/portfolio-item/red-means-lead/</a>



## Dr Monigatti ACC Toxicology Panel Denial of Arndt Vs ACC Case for Occupational Cancer Compensation

### TOXICOLOGY PANEL

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#### Panel Members:

Prof. Des Gorman (Chair)
BSc, MBChB, MD (Auckland), FAFOEM, PhD (Sydney)
Dr Michael Beasley
MBChB, DCOMH, MSC
Dr Bill Glass
ONZM MBChB (NZ), DPH (Lond.), DIH (Eng.),
FAFOEM, FAFOEM (Hon.), FFOM, FFOM (1)
Dr John Monigati

Dr John Monigatti BSc, MBChB, MRCP, MFOM, FAFOEM Dr Ralf Schnabel

PhD, MNZPsS, MI, MNZCCP, DipClinPsych

Private Bag 300-991, Albany, Auckland 0752

16th January 2020 Mr Sebastian Bisley Partner Buddle Finlay PO Box 2694 WELLINGTON 6140

Dear Mr Bisley

### Arndt v ACC (BUD-LIVE.FID855866)

On 3rd December, 2019 ACC's Toxicology Panel reconvened to give further consideration to Mr Brian Arndt's claim for occupational cancer. Specifically, the Panel reviewed some answers by Ms O'Brien, an Australian scientist, to Mr Arndt's questions about his exposure to the lead scavengers ethylene dibromide (1,2 dibromoethane) and ethylene dichloride (1,2 dichloroethane), and other substances including benzene during his time at the Marsden Point Refinery between 1966 and 1974. Mr Arndt implicates this exposure as the cause of his prostate, breast and skin cancer.

The Panel noted that there had been two cancer studies on workers exposed to ethylene dibromide with neither reporting a statistically significant increase in cancer mortality – however, these studies were considered inadequate due to confounding factors. Several animal studies have indicated that long-term exposure to ethylene dibromide increases the incidences of a variety of tumours in rats and mice in both sexes by inhalation, gavage (being placed in the stomach) and



on application to the skin. The International Agency for Research on Cancer (IARC) found sufficient evidence for the carcinogenicity of 1,2-dibromoethane in experimental animals but inadequate evidence for carcinogenicity in humans. Their overall evaluation was that it is probably carcinogenic to humans.

The Environmental Protection Agency (EPA) uses mathematical models, based on animal studies, to estimate the probability of a person developing cancer from breathing air containing a specified concentration of a chemical. The EPA estimates that if an individual were to continuously breathe air containing ethylene dibromide at an average of 0.5 µg/m 3 over his or her entire lifetime, that person would have no more than a one-in-10,000 chance of developing cancer as a direct result of breathing air containing this chemical. The Panel observed that Mr Arndt's exposure to ethylene dibromide during his eight years at Marsden Point would have been a tiny fraction of that.

In regard to ethylene dichloride, the Panel noted that epidemiological occupational studies have not been able to link exposure to ethylene dichloride specifically with excess cancer incidence. An increased incidence of colon and rectal cancer in men over 55 years of age exposed to ethylene dichloride in the drinking water has been reported but the study population was concomitantly exposed to other chemicals. Following treatment by gavage or topical application, increases in incidence of several tumour types including gastric, breast, lung and liver have been reported in rats and mice. As with ethylene dibromide, the International Agency for Research on Cancer (IARC) had found inadequate evidence for carcinogenicity of 1,2 dichloroethane in humans but sufficient evidence for carcinogenicity in experimental animals. Their overall evaluation was that ethylene dichloride was possibly carcinogenic to humans, whereas EPA classified it as a probable human carcinogen.

EPA estimated that continuously breathing air containing ethylene dichloride at an average of 4.0 mg/m 3 over an entire lifetime would result in not greater than a one-in-10,000 increased chance of developing cancer. Again, the Panel noted that this level would far exceed anything Mr Arndt might have been exposed to at the oil refinery.

The Panel noted that benzene is a well-established cause of cancer and that the IARC has classified it as Goup I (carcinogenic to humans). Benzene is known to cause acute myeloid leukaemia and there is limited evidence for causation of acute and chronic lymphocytic leukaemia, non-Hodgkin's lymphoma and multiple myeloma. It is not a recognised cause of prostate, breast or skin cancer.

Having considered Ms O'Brien's evidence the consensus of the Panel was that any distant occupational exposure Mr Arndt may have had to ethylene dibromide, ethylene dichloride, benzene or other substances was less likely than not to have caused his skin or other cancers.

	Monig	

Convenor



## Bill Lawrence's Recollection of Organic Lead Handling Practices at the New Zealand Refining Company, 1964-2000

June 04 2013
Bill Lawrence
Employee/Operator at NZRC from 21st of July 1964 to July 2000

To whom it may concern;

The New Zealand Refining Company Operators were expected to rotate among all operating activities/positions including white oil blending. Tetra Ethyl and/or Tetra Methyl lead (TEL/TML) was imported (TEL in the initial stages) into New Zealand from OCTEL, Ellesmere Port England and added to gasoline to extend the octane rating. White oil blending involved making gasoline to a recipe that included TEL/TML until the government excluded this compound in the early 1980's.

Medical monitoring was performed for operators who worked with the TEL drum handling system.

In the 1960's TEL/TML was imported in steel 205 litre drums typically unloaded at the Harbour board wharf at Marsden Point and trucked to the site by general carriers.

TEL/TML for blending was stored (at NZRC in secure compound) in the white oil area in horizontal storage vessels that were positioned in bunds. The vessels formed an enclosed system, which were vented through kerosene scrubbers. The lead was educted into the gasoline blends

To get the contents of the drums into the storage vessel from where it was used in a blend required a process of:

- Operating steam ejectors to draw a vacuum on the storage vessel
- Rolling the drums onto rollers so as the bung was in the vertical



- Removing the bung and inserting a pickup tube (the drum was then open to the atmosphere)
- Opening the valve on the pickup stick to allow the TEL/TML to be sucked out of the drum
- When the drum was empty, (visible check) remove the pickup stick and place it in the holder
- Close the bung and remove the empty drum to storage
- Replace the drum and repeat the process.

Protective white (so you could see yellow lead contamination) clothing was worn by the operators as well as forced air respirators. The pickup sticks were contaminated with liquid lead and were handled by the operators. The drums were extremely heavy due to the material contained.

Educting lead was heavy physical work and operators were reliant on a single barrier of Personal Protective Equipment which was fallible. Occasionally, pressure to meet shipping/blending requirements created stress on the operating staff. Anecdotally, in later years I have heard of the practise by some operators of removing the exhaust valves from the pressure respirator to make it easier to breathe during the heavy work.

A reported incident involved a ships officer who was seriously contaminated with lead when he was below decks reviewing drums (general cargo) damaged during a storm off our coast, he was landed at Wellington.

In the 1970's a complete new system (owned and installed by OCTEL but operated by NZRC) was built on site. A purpose built OCTEL tank ship then delivered TML/TEL direct into the storage tanks from where it was educted into blends. This facility was removed by OCTEL during the early 1980's when Government changed the specification of gasoline to exclude the addition of lead to meet WHO standards

Bill Lawrence Safety Adviser to the New Zealand Refining Company (1993-2000) Retired



## Eliminating lead paint matters! WHO & UN Lead Paint Alliance newsletter, June 2020





Global Alliance to Eliminate Lead Paint

[The June 2020 issue of the Lead Paint Alliance newsletter is online at

https://chemicalswithoutconcern.org/library/eliminating-lead-paint-matters



### Introduction

In these challenging times, the Global Alliance to Eliminate Lead Paint continues to work on achieving the phase-out of the manufacture, sale and import of paints containing lead through the establishment of laws. This is a long-term goal to prevent the exposure of many future generations of children to lead in paint that would have been used in homes, schools and playgrounds in countries without lead paint laws in place to stop the addition of lead. As we rebuild and recover from the pandemic, eliminating lead paint is an achievable goal that will help protect public health. Your tireless efforts to help with this goal are much appreciated!

New opportunity for those working to address lead in paint! In collaboration with different stakeholders, the Secretariat of the Strategic Approach to Chemicals Management (SAICM) is launching a new Community of Practice (CoP) on Lead in Paint to bring representatives from different sectors together and to create a learning network around issues related to the



elimination of Lead Paint. This COP will be used to support the substantial amount of work already being done in this area by a number of organisations.

The first session will be held on **9 July at 12 – 13:30 Greenwich Mean Time** and will discuss "Steps toward adoption of national lead paint laws." The SAICM Secretariat invites you to register to join the Community of Practice on Lead in Paint so that you can participate in online discussions facilitated by experts. By signing up, you will receive invitations to the upcoming discussions and their summary digests upon conclusion. Register here to join the Lead in Paint CoP.

In this newsletter, we are proud to share updates about global efforts to address lead paint, including new resources to support your national efforts; progress towards laws; updates from our advisors, and lead paint in the news. You can also learn more about how you can continue to take action to make a difference.

Wishing you all a safe world without added lead!

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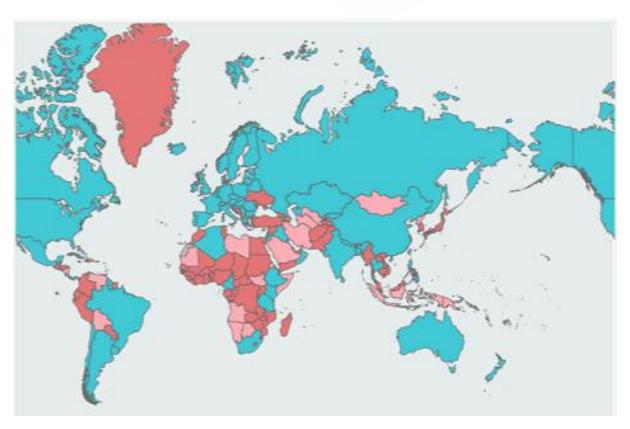


## Global Efforts to Address Lead Paint. WHO & UN Lead Paint Alliance newsletter, June 2020

[The June 2020 issue of the Lead Paint Alliance newsletter is online at

https://chemicalswithoutconcern.org/library/eliminating-lead-paint-matters ]

In our ongoing effort to support global actions to address lead paint, the Alliance has recently developed the following resources:



• The new Chemicals without Concern knowledge management platform aims to foster knowledge exchange on the SAICM emerging policy issues (EPIs) and their linkages with the 2030 Sustainable Development Agenda. Lead in Paint is highlighted as an area of work, and many resources on the adoption of legal limits on lead paint and awareness-raising can be found here. One of the new tools featured on the website is a new interactive map visualisation of the status of lead paint laws.



UNEP has posted an updated list of Frequently Asked Questions (FAQs) providing answers
to common questions, including about the Lead Paint Alliance, why lead is used in paint,
alternatives to lead in paint, costs of reformulation and paint testing. In order to ensure
that we have answered your questions, UNEP welcomes feedback on the FAQs via the
email provided on the FAQ page by 3 July.

### **Progress Towards Laws**

## Momentum toward lead paint laws continues. We are proud to share these updates:

- The Lead Paint Alliance provided comments on several draft lead paint laws since
  the last newsletter: Ecuador's draft standards during the public comment period in
  December 2019, Peru's draft lead paint law in February 2020, and Mexico's draft
  labelling standard during a public comment period from January to March 2020.
- In April 2020, **Colombia** organized a second multi-stakeholders meeting to discuss the way forward regarding the adoption of a lead paint law.
- In March and April 2020, **Peru's** Lead Paint Working Group met and finalized a draft lead paint law, which is ready to be presented to the Congress.
- China recently strengthened its national standards that reduce the lead limit for
  woodenware and architectural paints to 90 ppm total lead and lower the standard
  for vehicle and industrial protective coatings to 1000 ppm total lead as part of the
  SAICM GEF project lead in paint component, building on the work done by the Lead
  Paint Alliance.





In March 2020, WHO and UNEP jointly organized two regional webinars for the paint industry in the UNEP Central and Eastern European region to address industry questions about reformulating paint, including about the need to set a low limit for lead in paint. The draft technical guidelines on paint reformulation prepared by the National Cleaner Production Center (NCPC) Serbia were presented. The session was well attended by approximately 30 participants, including representatives from government ministries and chemical safety agencies, the Eurasian Economic Commission, and paint producers within the region. Presentations and information on the webinar can be found here.

### **Lead Paint in the News**

Pittsburgh-based PPG says it has met its 2016 pledge to eliminate lead from all products by 2020, reports the local NPR news station.

### **Advisory Council**

The Alliance is pleased to share the following updates from our Advisory Council.

• In Thailand, several action plans for lead in paint elimination have been advanced through health surveillance, research, and legislative measures. Activities include (1) establishment of national health surveillance for blood lead levels (BLL) among children under 5 years old; (2) research and development on state-of-the-art analytical techniques for BLL measurement in workers and people in the community; (3) manuals for health surveillance, prevention, and control of occupational and environmental diseases among children and workers; and (4) establishment of an industrial standard for lead in paint (100 ppm) for risk reduction and further lead elimination.



• In November 2019, the East African Community (EAC, comprising Tanzania, Kenya, Uganda, Rwanda, Burundi and South Sudan) adopted revised East African Standards on certain paints, varnishes and related products, setting the legal limit on lead content to a maximum of 90 ppm total lead. These standards will be adopted across the EAC region.

### **Partners Corner**

As of June 2020, a total of 20 governments, 47 non-government organizations, 4 intergovernmental organizations, 7 academic organizations or institutions, and 22 industry or trade associations have joined as partners of the Lead Paint Alliance. A warm welcome and congratulations are extended to the new partners who have joined in the second half of 2020!

### New members include:

- **Civil society**: Chemicals Safety Agency (Ukraine), Gamarjoba (Georgia), Peshaf (Tajikistan), and the Foundation to Support Civil Initiatives (Tajikistan);
- Industry: VES.SA (Romania);
- Academia: University of Pennsylvania, Center of Excellence in Environmental Toxicology (United States).

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# What Can You Do? Take Action! WHO & UN Lead Paint Alliance newsletter, June 2020 CALL FOR

The Lead Paint Alliance is seeking good quality photographs connected to the elimination of lead paint for use in its publications, and readers are invited to submit suitable photographs to noleadinpaint@who.int and lead-



cadmiumchemicals@un.org. If you are planning an event and will be taking photographs showing peoples' faces, please note the need to obtain those peoples' consent for their likeness to be published. This needs to be done at the time the picture is taken so must be planned for. The general requirements for providing photographs are as follows:

- The copyright owner must give permission to WHO and UNEP to use the picture
- Any person who is depicted in a photograph and who is recognisable must give informed consent to the use of their image in the form of a signed declaration of consent.
- The depiction of children is especially sensitive and written consent for use of a child's image must be given by the parent or legal guardian.
- No payment will be provided for photographs but the photographer will be acknowledged in the publication in which the picture is used.

For further information together with template consent forms please send an email to noleadinpaint@who.int.

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## Is the WHO & UN recommended lead limit of 90ppm in new paint something APMF could get behind?

This article is based on an Email from The LEAD Group to the Australian Paint Manufacturers Federation (APMF), 17<sup>th</sup> December 2019

Hi Bernard,

Is the WHO & UN lead limit of **90 ppm** (parts per million) something APMF could get behind? Since its formal launch in 2011, the Global Alliance to Eliminate Lead in Paint (GAELP), run by the World Health Organisation (WHO) and United Nations (UN), and more recently shortened to "Lead Paint Alliance" has advocated for every country to legislate to limit total lead in paint to **90 ppm**.

**90 ppm** total lead is the concentration limit recommended by the "Model Law and Guidance for Regulating Lead Paint". It is the lowest, most protective regulatory limit for lead paints that has been set in countries.

Above: GAELP recommendation for 90 ppm total lead limit in paint, from <a href="https://wedocs.unep.org/bitstream/handle/20.500.11822/30110/2019">https://wedocs.unep.org/bitstream/handle/20.500.11822/30110/2019</a> Global Update.pdf?sequenc e=1&isAllowed=y

The Lead Alert: Six Step Guide to Painting Your Home booklet on the Australian federal Environment department website at <a href="http://www.environment.gov.au/protection/publications/lead-alert-six-step-guide-painting-your-home">http://www.environment.gov.au/protection/publications/lead-alert-six-step-guide-painting-your-home</a> (in which contact details for both APMF and The LEAD Group are listed on page 30 and in which LEAD Group Kits that can be used to collect old paint chips, dust, soil, etc samples and have them analysed for lead at a lab are mentioned several times) gives a dotted history of the issue so I've copied the relevant text from page 5 of the booklet, and added in the relevant conversion [in square brackets] to parts per million (ppm):

Paints containing as much as 50 per cent [500,000 ppm] lead were used on the inside and outside of homes built before 1950. Until the late 1960s, paint with more than 1 per cent [10,000 ppm] lead was still being used.

As a rule of thumb, the lead content of paint was limited to 1 per cent [10,000 ppm] by 1970. However, homes built after 1970 might still contain paint with more than 1 per cent [>10,000 ppm] lead, particularly if old paint, industrial paints, or marine paints have been



used.

In 1992, a 0.25 per cent [2,500 ppm] limit on the maximum allowable amount of lead in house paint was recommended. This has been reduced to **0.1 per cent [1,000 ppm] since December 1997**.

Some industrial coatings and specialised paints used today contain lead. These products must be labelled if they contain more than 0.1 per cent [>1,000 ppm]—so you need to read the label.

Domestic paints are available that also comply with the safety of toys standard (Australian Standard 8124.3), which limits leachable lead to 90mg/kg [90 ppm].

[end of text copied from p 5 of the 6 Step Guide booklet]

So you can see from the above that the only Australian paints that might comply with the World Health Organization's & United Nations Lead Paint Alliance's proposed global total lead paint limit of **90 ppm** are paints that comply easily with the less stringent soluble lead paint limit of **90 ppm** in the Australian/New Zealand Mandatory Toy Standard ASNZS8124.3 (which also limits 7 other metals in toy paints).

You are correct in one sense that "adding lead to paint was already banned in Australia [in 1997]" because it is my understanding that in the early 1990s when the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) No. 12 - Appendix P - Uniform Paint Standard pp 252 - 256 (1994) was being modified in regards to lead paint, the APMF argued that, due to the high level of lead contamination in raw ingredients in paints, especially zinc-based paints, that all paint manufacturers would have to reformulate their paints without lead compounds, in order to comply with the new lead limits. When the June 1994 SUSDP became Effective (by law) on 1<sup>st</sup> December 1997, it allowed up to 0.1% [1,000 ppm] lead in all paints (with the exception of industrial paints) or 0.2% [2,000 ppm] lead in zinc-based paints (because zinc ore is naturally contaminated with lead).

Regarding your question about regulations: the SUSDP (which later became the Standard for the Uniform Scheduling of Medicines and Poisons or SUSMP) is incorporated into state and territory Poisons Regulations. As for lead legislation in Industrial paints, I published an article about that in October 2017, at <a href="https://www.lead.org.au/lanv18n2/lanv18n2-5.html">https://www.lead.org.au/lanv18n2/lanv18n2-5.html</a>. The article was a history of The LEAD Group's successful advocacy for Australia to become the first country in the world to ban the addition of 15 lead compounds to non-residential paint, that is, (nearly) all paints and inks (with the exception of artists' paints) by limiting each lead compound, from 1st January 2010, to 0.1% [1,000 ppm]. But I think you'll find the article also provides an excellent history of The LEAD Group's collaboration with APMF. In the USA, paint raw ingredients or the raw ingredients in newer formulations of residential paint must be lower in natural lead-contamination levels than in Australia, because in the US the residential paint lead level was made more stringent at 0.06% [600 ppm] lead, a long time ago (in 1978). This US

lead in house paint limit was further reduced to 0.009% [90 ppm] lead (effective August 2009),



making the USA the first country to achieve the Lead Paint Alliance recommended limit of **90 ppm** in residential paint.

And if you have a look at the latest United Nations Environment – GAELP or Global Alliance to Eliminate Lead Paint (of which both our organisations are members) report "Update on the Global Status of Legal Limits on Lead in Paint September 2019" at

https://wedocs.unep.org/bitstream/handle/20.500.11822/30110/2019 Global Update.pdf?sequenc e=1&isAllowed=y you'll see in Table 2 and Figure 2 that 37% of countries which have a legal limit on lead in paint now have a limit of 90 ppm on lead in paint. As far as I can work out, they actually mean lead in residential (house) paint, as it does not appear that any other country has created legislation to limit the lead content of non-residential paint (eg marine, line-marking, industrial, aviation, vehicle, cranes and mining machinery paint, etc) since Australia achieved the 1997 residential paint limit of 1,000 ppm lead in all paints and inks sold and used in Australia, by 2010.

It seems that if we wanted to join with the US and a dozen other countries such as Bangladesh, Cameroon, Ethiopia and India, in limiting lead in residential paint to **90 ppm**, all we would have to do is contact the Advisory Committee on Chemicals Scheduling ("ACCS") to ask them to advise the Secretary of the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) to change the paint lead limit, in the next version from the December 2019 version of the SUSMP (at <a href="https://www.legislation.gov.au/Details/F2019L00032/Download">https://www.legislation.gov.au/Details/F2019L00032/Download</a>) in:

### SECTION SEVEN/Appendix I PAINT OR TINTERS

### 7.1 General Requirements

(2) A person must not manufacture, sell, supply or use a paint or tinter containing more than **0.1%** Lead (the proportion of Lead for the purposes of this section is calculated as a percentage of the element present in the non-volatile content of the paint).

### from **0.1%** [1,000 ppm] to **0.009%** [90 ppm].

Note that China is on the list in Table 2 of the Lead Paint Alliance "Update on the Global Status of Legal Limits on Lead in Paint September 2019" - although China has only limited soluble lead (otherwise known as leachable lead, that is, not total lead present in the non-volatile content of the paint) in paint to **90 ppm** so all of the Australian paints manufactured to comply with our Toy Standard would already meet that less stringent requirement in China.

I sincerely hope you can take this issue to the earliest possible meeting of APMF members or the board (if that is required of you) so that Australia can be one of the first (at most) twenty countries to reach the **90 ppm** GAELP recommended lead limit in house paint.

Elizabeth O'Brien, The LEAD Group Inc, Australia



Editor's Note: as at 28<sup>th</sup> June 2020. The Lead Paint Alliance newsletter of June 2020 states that the situation noted in the above email regarding China's lead paint rule has changed, specifically:

"China recently strengthened its national standards that reduce the lead limit for woodenware and architectural paints to **90 ppm** total lead and lower the standard for vehicle and industrial protective coatings to **1000 ppm** total lead..."

So it is possible that China has become the second country, after Australia, to limit lead in non-residential paints (in China's case vehicle and industrial protective coatings) to **1000 ppm** total lead.

As to whether Australia can still be in the first 20 countries to limit lead in residential or architectural paint to **90 ppm** lead, will be known when GAELP produces its annual report on the subject, presumably in September 2020.

Let's get cracking to limit lead in Australian residential paint to 90 ppm before September 2020!!



2018 **Volcano Art Prize** Entry: Title: **Australia first to ban lead in all paint.** Lead-safety Message: "Test paint for lead before renovating. Never create lead paint dust or lead fumes." Artist: Hugh O'Brien. <a href="https://volcanoartprize.com/portfolio-item/australia-first-to-ban-lead-in-all-paint/">https://volcanoartprize.com/portfolio-item/australia-first-to-ban-lead-in-all-paint/</a>



### Is the work of Lead Safe Mama "Fear Mongering"?





[URL: <a href="https://tamararubin.com/2020/05/i-dont-do-what-i-do-to-spread-fear-i-do-what-i-do-to-educate-so-you-can-make-informed-choices-for-your-family/">https://tamararubin.com/2020/05/i-dont-do-what-i-do-to-spread-fear-i-do-what-i-do-to-educate-so-you-can-make-informed-choices-for-your-family/</a>]

### MAY 31, 2020 - 2 COMMENTS

I don't do what I do to instill fear. I do what I do to educate, so YOU can make informed choices for your family.





### Is what I report on this blog "fear-mongering"?

Yesterday an article was shared with me that mentioned me and my advocacy work. This blog post here, today – on my website, is by way of a rebuttal – addressing not only a few misconceptions articulated in that particular piece, but also comments and critical reactions to my work that have appeared (and reappeared) over the years.

### How to report an EPA RRP Lead Paint Renovation and Repair Violation in Progress.

### by Lead Safe Mama

### Play Video

While, as I said, this post was not written only in response to that piece from yesterday, in the piece the author contends that it is relatively useless to simply know whether or not something contains Lead. The allegation sounds reasonable enough at first glance: that simply *knowing* that any particular example of a consumer good – even a plate, mug, bowl or other dishware – "merely" *contains* Lead serves no function; that only if something has *confirmed currently leachable / bioavailable* Lead is that information of any value.

I emphatically disagree.

I actually believe the opposite. Simply knowing if something has Lead (or Mercury, or Arsenic, etc.) puts consumers in a position of power in making choices for their family and for the health of our environment.

## Consumers have a right to know what they are buying — particularly if the items include neurotoxic elements.

I think all consumers have a right to know if the products they buy for their home (or use every day) "merely" contain Lead (or Mercury, Arsenic, Cadmium, Antimony or any other toxic heavy metals)! Moreover, leach-testing on every single item ever made would obviously be wildly cost-prohibitive, and as a practical matter would also be impossible – but knowing if a manufactured consumer item contains (or is likely to contain) Lead or other highly neurotoxic metals (using high-precision XRF technology) is a very important piece of information that families can use to make informed choices for their household.

The fact of the matter is that if we *had advance knowledge* that something contained **20,000** or **50,0000** — or even "only" **10,000 ppm Lead**, most of us would likely *choose* to not purchase (or otherwise acquire) that particular item for use in our home. This is especially true if the item in question is something intended for *food use*, in our kitchens or dining rooms. That we (as humans) are likely to choose non-toxic options (over items with heavy metals) is even more likely when you consider how many *non*-toxic / Lead-*free* options are



out there [and surprisingly, that in most cases the Lead-free options are also often the least-expensive options!]

Giving people *access to information* regarding the historic (or current) use of toxicants in the manufacture of particular consumer goods does not, by default, automatically incite or encourage *fear*. I do acknowledge that *some* people are fearful – over many things. Some people are ignorant, misinformed, confused or overwhelmed; others have been traumatized, and may have developed [diagnosed or un-diagnosed] *OCD* over their fear of the toxicants in our world. That does not – *must not* – trump the importance of disclosing toxicants [*still*] widely used in the manufacturing of consumer products (or prevalent in family heirlooms we may use daily.)

### Few people are doing this work

Given *no public agency* is looking at many categories of these currently -manufactured products commonly found in our homes [not to mention, *vintage* products] I contend the work I do *is* of value — because it provides specific information to families that no one else is providing (again – so they can make their own *informed choices*, *based on scientifically replicable accurate data*).

I am very careful with language in all of my posts and work hard at *not* indulging in sensational posts or click-bait headlines, nor any needlessly alarming, or exaggerated statements on my blog. It is very important to me that the information I share is simple, factual and consistently science-based (and that all consumer goods test results reported are replicable.)

There are only a few specific types (or *brands*) of products that I consider *inherently very unsafe* [because of their function and usage in a typical home, and risk of consequent (possibly *chronic*) exposure to the toxicants used]. In those few cases, I endeavor to be clear and explicit about my concerns with these products. [Some examples of more concerning products: *all Franciscan Potteries china*, *colourful vintage Pyrex bowls*, *and pre-2010* Tupperware.]

### I am not fear-mongering

*Most* of my readers (this includes more than 1,948,000 readers in 2019 alone – in more than 200 countries) do *not* react to what I write with *fear. Most* read the words without "reading between the lines" (*looking* for – i.e. *making up* – some kind of "tacit" meaning beyond my words) and most use the information provided to make informed choices.

Beyond any possible direct health risks or concerns (for the end user of any given product), there are also legitimate environmental issues surrounding the mining, refining, and use of toxic heavy metals in consumer products. But any "fear"/hysteria around this information is counter-productive – and arises in the individual reader – in that person's unintended



interpretation or inappropriate response to the posting of the simple routine factual scientific test results I publish [normally shared intentionally devoid of any emotional charge and always shared without baseless allegations or assertions.]

## Lead is incontrovertibly toxic – in extremely small amounts / at very low exposure levels. This is a fact.

If the presence of Lead were not *inherently problematic at even very low levels*, the information shared on this blog might arguably *not* be valuable or relevant information. However, the mere *presence of any Lead in a child's environment* has been well-documented to be inherently problematic — at *remarkably* low levels [so low that after researchers reached the consensus that there is *no known "low threshold of toxicity" for Lead*, our public health agencies in the U.S. and internationally eventually acknowledged this fact, *and officially and universally moved to include the language that "there is no safe level of Lead exposure"*].

If you are blasé about newly-manufactured consumer goods that contain *high* levels of Lead (Leaded brass, Lead fishing weights, Lead crystal) then *your focus is too narrow*. If you don't have any concern for Lead in products of these types at the levels typically found (because as-of-yet no one has "proven to *you*" the impact to the end user for these products), then you are obviously *not looking at the bigger picture*.

### There's a bigger picture here, the planet.

The bigger picture is the concern for the *entire lifecycle* of any product that incorporates high amounts of Lead — and the very real risks to many people all along *the supply chain*. This includes risks to the miners that mine the Lead (and other toxicants) for the raw materials for these products, risks to the workers that make the products, and perhaps most important — the impact on the human habitat. The larger environmental impacts range from the *highly toxic waste* produced in mining and refining of Lead; to global pollution from emissions generated through manufacturing Leaded products; and ultimately including the issues created at the end-of-life for Lead-containing products with disposal (and even the potential contamination of the manufacturing chain for recycled goods.)

The world does not revolve simply around any one of us. If the air we breathe and the water we drink and the soil we grow our crops in are *fundamentally contaminated* with Lead from manufacturing, mining, refining, use, and reclaiming or disposal of Leaded products – we – as stewards of the Earth – bear *responsibility* for those contaminations, too.

### "OCD" or not?

While the biggest human impact problem (when it comes to Lead) is, first-and-foremost Lead-contaminated dust in older housing and other buildings that were historically painted with Lead paint, being concerned about the very real additional presence and impact of Lead in consumer goods is not "OCD".



If the still-largely-unstudied/undetermined specific impact of lower and lower levels of exposure were not a concern, public health agencies across the globe would **not** have set the toxicity level for Lead in consumer goods at **90 to 100 parts per million**. Consumer goods have the potential to cause harm at very low levels. This is why these government standards have been set. However it is well beyond the capacity of any government to test all things for safety.

In the absence of the government testing of all things – just because something has not yet been proven to be harmful, does not mean it is safe. And thus people like me play a role in nudging scientific research and public policy along in the right direction, shifting public concern in a way that encourages scientists to do further study. To wit – years after activists (including me) began testing and reporting unsafe levels of Lead in *coffee mugs*, a formal study was done concluding that this was actually a problem. Years after activists (including me) began reporting unsafe levels of Lead in *vintage plastic toys*, two formal studies were undertaken, concluding this was actually a problem. Years after activists (including me) began reporting unsafe levels of Lead in the *painted decorations of functional (relatively modern) glassware*, a study was done (in England), concluding this was actually a problem. I am actually just about to publish some new ground-breaking findings about Lead in vintage books and I expect these findings (which are scientifically replicable) will likely precipitate further study by a scientific body. (*I will post that link here as soon as it is published*.)

### Someone has to start the conversation

To those cynics who may be resistant to accepting "new" scientific information — tending to remain *highly sceptical* until such information is *widely acknowledged at a cultural level:* in every field there must be early pioneers.

Just because someone is a pioneer in reporting seemingly "new" facts or "new" concerns does not *invalidate* those concerns (just be patient...there's always a lag between a first discovery, subsequent related *scientific findings* and *popular knowledge*). [Let's see how the timeline plays out with my new findings around vintage books!]

## Learning about Lead in household goods is a great introduction (to the larger Lead issue) for new moms

In addition to all of the above considerations, some conversations (like the concern for Lead in dishware) happen to be a great introduction to the subject of the concerns for Lead in our environment (overall). *Everyone* has *dishes*. *Everyone* also has (or had) a *mother* and a *grandmother* — and therefore *everyone* (or nearly everyone) has had interaction with potentially high-Lead *dishes from past generations*.

While I have worked with many families who were actually *poisoned* by their toxic *dishes*, in the scope of things, I don't in fact see this as a *primary* threat (statistically, relative to other sources of Lead exposure), but I do see the topic of Lead in consumer goods as an impactful



"gateway" / introduction, introducing young families to the concerns for Lead exposure as it relates to them and their lives (especially impactful for young parents who have not previously thought of Lead-poisoning as potentially "their" problem.)

If parents become aware about the potential for Lead in their dishes (whether or not their dishes might contribute to a child's specific blood lead level) they may get their child tested. If their child is tested and is negative for Lead – great! If their child gets tested and is positive for Lead in their blood the parents will likely start looking around their home for other exposure sources (including sources of Lead dust from deteriorating paint.) With the limited resources available today to combat childhood Lead poisoning, anything encouraging an increase in childhood blood Lead testing is a step forward.

### Young parents don't want to think of their house as toxic. It is too confronting.

Most families are reluctant to explore the potential concern of Lead paint in their homes. The financial liability of that inquiry is too much to bear, both in the short and long term. However examining the concern for Lead in consumer goods is a manageable task (dishes, to continue the example above – are inexpensive and easy to replace with modern Lead-free alternatives.) Exploring the concern for Lead in consumer goods is a path to helping families discover an issue (and learn how it may or may not relate to their family) in a way that is less confronting (and less expensive) than testing their entire home – and therefore it has value.

Lead is *everyone*'s problem — and the age-old conundrum is: how do we get everyone to see this? We are fighting against *more than a century* of marketing efforts by the Lead industry — marketing efforts designed to make us numb to the concern for Lead; marketing efforts specifically designed to make us think "this is not *my* problem, this is *someone else*'s problem." By introducing people to the FACT that there is *Lead* in *their* dishware — you are opening their minds to the FACT that this is everyone's problem, and that we all should consider the value of getting Lead out of our homes and environments.

### But some Lead is useful in consumer products, right?

I disagree with this assertion 100%.

As Dr. Mark Pokras says in my film, I wish we could create legislation that says "Thou shalt not use Lead in *anything*, *period*!" It is 2020; today we have alternatives for every application in which Lead was previously used. Uses like Lead in *car-batteries* are now roughly 100-years-old, and there is no reason we should continue this practice. Car batteries absolutely DO poison the planet – the Lead in car batteries is neither unavoidable nor safe. While it is oft-cited as the most "recyclable" source of Lead (and I understand the *Lead mining industry* considers the recoverability/reusability of the Lead in car batteries to be a *problem* that needs to be *addressed!*) it is not ultimately a *necessary* use of Lead — and there are still grave environmental implications with the use of Lead in this way.



### In conclusion

In the meantime, (to those who are dismissing / mischaracterizing my work – as "fear-mongering"), please stop trying to invalidate the work of honest, hard-working advocates simply trying to inform families so they can make intelligent choices for their families – choices not based on double-speak and marketing language provided by manufacturers, but choices based on data and facts and numbers.

Just because the long-term human implications of something has not yet been well-studied — like what happens to someone's body if they "only drink out of Leaded crystal every now and then", or if they drink "really quickly when they do" [two actual "objections" to my recommendation to avoid ever drinking from Leaded crystal] — why would you risk putting one of the most neurotoxic substances known to man up against your lips — when you can buy a Lead-free alternative for one dollar?!\*

Thank you for reading.

Tamara Rubin #LeadSafeMama

\*[Here's an example of a wine glass on Amazon for about \$2.50 per glass. While I have not tested this exact glass, it is advertised as Lead-free (link)- but check out any dollar store or Walgreens or similar for a \$1 per glass version!]

Amazon links are affiliate links. If you purchase something after clicking on one of my links I may receive a small percentage of what you spend at no extra cost to you.

### Comments



Hi Tamara,

Do you have any metal loafpan recommendations?





JUNE 1, 2020 AT 4:43 AM

2.

I appreciate your work! You can't fix what you don't know. As I learn from you, I have been able to replace, and make better buying choices for our household. I am appalled at the "bad stuff" out there in things we use daily. I am most definitely grateful for the knowledge.

**Editor's Note:** while seeking permission to reprint the above article, I asked Tamara Rubin the following question, and she kindly provided the answer below.

### Elizabeth O'Brien's question about negative and positive blood lead results:

I'd be very grateful if you'd clarify (for our international audience) what you mean by a negative blood lead result and a positive blood lead result. Is it possible for you to replace those words "negative" and "positive", with "below xxx ug/dl (micrograms per decilitre)" and "xxx ug/dl or above" respectively?

### Tamara Rubin's response, 29th June 2020

Actually. I do not think replacing "negative" and "positive" with numbers is relevant or helpful. "Negative" = **zero** (**no** Lead detected) and "positive" = **some** amount of Lead present (some Lead detected.) The intention is that we are hoping to spark inquiry into Lead in the home and environment to encourage testing and education. There **is no low "threshold"** for negative, other than an absolute zero (which I also do understand is **uncommon** - and often impossible to achieve in the modern world with current testing methodologies).

The outcome of encouraging testing with those "absolutes" is that likely **everyone** will test **positive** if they have an accurate test (or - unfortunately - negative if their doctor uses a test with a low threshold of 3.3 or 2.0 or 5.0 or whatever) - and accordingly everyone should be incentivized to take on the inquiry of the impact of Lead in their homes (lives, and communities). I have written another entire post addressing that (\*\*\* see below) and I think ranking relative levels of positive exposure is a notion that should not be entertained in this context. Said another way, any result over zero should be seen as concerning and should spark an inquiry - whenever possible.

\*\*\* <a href="https://tamararubin.com/2019/02/blood-lead-testing-please-get-everyone-in-the-family-tested-since-you-have-been-living-in-a-house-with-high-lead-paint/">https://tamararubin.com/2019/02/blood-lead-testing-please-get-everyone-in-the-family-tested-since-you-have-been-living-in-a-house-with-high-lead-paint/</a>

I don't know if you are familiar with the work of Dr. Rabito (on low level lead exposure) - but I discuss that here:

https://tamararubin.com/2019/07/today-is-my-youngest-sons-11th-birthday-happy-birthday-



charlie-parker-eliezer-rubin-the-story-of-how-lead-impacted-his-birth/

And also this is a great article if you have not yet read it (not written by me):

https://tamararubin.com/2017/01/toxic\_lead/

Tamara E. Rubin #LeadSafeMama LeadSafeMama.com





## Response to Tamara Rubin from JustOne Lead Soldier

Dear Tamara,

I think that some of what you refer to in your blog entry is my article in <u>LEAD Action News</u> (May 2020). I am sorry that you feel this article criticises your work specifically. Actually, the only mention of your name was in relation to harassment of lead poisoning prevention activists, but you have not talked about this in your blog.

I would never believe that you do what you do to instil fear. I have also not used the term fear mongering and I do not think you deliberately exaggerate the risks from lead or campaigning on lead. What could happen are some unintended consequences. For instance, I will just share this comment from the 'Support For OCD (contaminants and toxins)' Facebook group - "I honestly picked up a lot of those fears in the Lead (Pb) Group."

The work you do is fantastic for individual families and about specific new products. I even wonder if you could franchise the service and have an army of lead safe mamas, and papas. The difficulty comes when you try to generalise your findings. Maybe fear is too strong a word, but there is a lot of doubt. Consider some of the questions asked your own articles and all the unanswered questions in your Facebook group.

Of course, knowing that an identifiable product contains lead informs customers, but what about similar items from other manufacturers or older versions? It must also matter whether lead comes out or not. I appreciate that you are limited by the tools available to you, but, if you could, why would you not want to do leach tests?

I find the statement "there is no safe level of lead exposure" difficult to apply in real life. Does it mean that there are only dangerous levels of lead? Lead is everywhere and in everything, but noticeable lead poisoning symptoms are not everywhere. We might say that if you can detect the lead with an XRF scanner then there is too much, but what must also matter is how much, how long and how often the lead is released and what compounds of lead are present. These questions are not answered by XRF analysis alone.

Giving families a gateway to learn about lead exposure through dishware may help in some cases, but many of us will then ask 'what else is toxic'. What are we to do? You cannot test everything in the world. Do we assume every untested item is dangerous,



throw it all away, and start again therefore producing huge amounts of waste? With so many readers you should take responsibility for answering these questions or elucidate the limitations of your work.

We are on the same side in this fight and should recognise that no one can know it all and no one can do it all. We perhaps comes from a different point of view on how to address the continued problem of lead toxicity. You deal with specific products and specific families where as I look at how government and business could make changes. When I read your work, I often ask how this could be applied nationally or internationally; without causing excess anxiety. You do a lot for a few, I do very little for many.

Let's be tolerant, sharing friends; not antagonistic enemies; and keep fighting lead.

Best wishes,

JustOne Lead Soldier

16<sup>th</sup> June 2020



Winner of the 2018 Volcano Art Prize: Lead-safety Message: Just one lead soldier deployed undercover with an array of weaponry. Artist: Justone Lead-Soldier

https://volcanoartprize.com/portfolio-item/just-one-lead-soldier/



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