

LEAD Action NEWS

LEAD Action News vol. 17 no. 2, November 2016 ISSN 1324-6012

The newsletter of The LEAD (Lead Education and Abatement Design) Group Inc.

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VAP Awards, ILPP Week of Action, Lead Poisoning and Stuttering

Volcano Art Prize (VAP) 2016 Awards held during International Lead Week of Action

Three great things happened in Australia during the fourth International Lead Poisoning Prevention Week of Action – Sunday 23 to Saturday 29 October 2016:

Volcano Art Prize (VAP) Awards Ceremony were held in Sydney (sponsored by Pictureproducts);



You can test for many possible sources of **lead** in a pet's environment with a LEAD Group lab kit
www.leadsafeworld.com/shop



For more lead-safety information:



1800 626 086

www.lead.org.au

Two wonderful people joined The LEAD Group's Committee at the Annual General Meeting – Dr Michael Hindmarsh and Lucinda Curran of Eco Health Solutions;

Lucinda interviewed The LEAD Group's Elizabeth O'Brien and uploaded it to <https://youtu.be/JWRs8nKku94> to create one of the first ILPPW videos on YouTube.

Any time of year, you can order a Lead Safe World Poster (like this one by Harla) at www.leadsafeworld.com/shop and ask to have it displayed at your GP or vet clinic, childcare centre, school, university, workplace, gun club or at home 'cos you like the picture! Any VAP Entry can be made into a poster!



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Editorial

By Elizabeth O'Brien, BSc, Grad Dip Health Edn, President, The LEAD Group Inc, Australia

This issue of LEAD Action News starts and ends with news of the fourth WHO International Lead Poisoning Prevention Week of Action (ILPPWA) held during the last full Sunday to Saturday week in October. At the end of this issue, you'll find a full listing of all the events carried out this year, copied from the World Health Organisation's website before they take it down to put up next year's ILPPWA events. The fifth Lead Week of Action will be held from Sunday 22nd to Saturday 28th October 2017.

But you don't have to wait til 2017 – you can start taking action on lead-safety today by:

1. Ordering a Lead Safe World Poster made from any Volcano Art Prize (VAP) entry, at www.leadsafeworld.com/shop and give it to any place in your community where lead-safety messages are needed.
2. Entering your own artwork, photo or short film in VAP 2017 – open now at www.volcanoartprize.com/submitentry/
3. Buying a LEAD Group Kit, test your home, childcare centre, workplace, etc and let others know that you have followed any recommendations received with the kit-results to make your place lead-safe/heavy metal-safe.
4. Planning how you personally (and your friends and family overseas too) can encourage your council and other government agencies, to mark the fifth International Lead Poisoning Prevention Week of Action in 2017.
5. Letting The LEAD Group know what steps you've taken so we can report them in *LEAD Action News*.

First up in this issue, we have the Judge's pick and a photo essay of our most excellent Volcano Art Prize Awards yet! Again I thank Toby Griffin of Pictureproducts for being the major



Volcano Art Prize (VAP) sponsor for the 5th year in a row, as well as our excellent Art Judge for VAP 2016 – Kari McKern, the host Alice Ju (Director of Creative Einstein), MC Roger Kilburn (Secretary of The LEAD Group) and event organiser volunteers Rekha Vasudev and Arin Bala.

Next up is first the bad news: we reprint an IPEN report on “Paint with Dangerous Lead Levels Widely Sold in All Developing Regions” – which was kindly translated by our Spanish and French translator volunteer Orlando Aguirre-Lopez – and then the good news: Vinco Hardware who import lead-free stainless steel tapware into Australia, have become the latest Lead Safe World Partner. See Vinco's solution for lowering blood lead levels at <http://www.leadsafeworld.com/wp-content/uploads/2016/11/Vinco-stainless-steel->



tapware-LEAD-Group-flyer-final-20161129.pdf and contact Vinco via <http://vinco.com.au/contact/> or phone (02) 9517 4800 to find your closest retailer!

Vinco Hardware contacted The LEAD Group after they were interviewed along with Macquarie University Doctoral Student Paul Harvey and The LEAD Group's then-President Professor Mark Taylor by 9News in Sydney and Perth about the journal article by Paul Harvey, Heather Handley and Mark Taylor, published in November 2016 at <http://www.sciencedirect.com/science/article/pii/S0013935116303280> - called *Widespread copper and lead contamination of household drinking water, New South Wales, Australia*.

Another supplier of lead-free plumbing products, this time PVC pipes and fittings made with lead-free stabilisers by Lareter in Italy for the European market, made contact via the Letter to the Editor. And my favourite marmalade-supplier (I eat it daily for the pectin for lead detox) has kindly supplied some pectin know-how in "A jam-maker's view of pectin"!



2016 VAP Entry. Photographer: Elizabeth O'Brien. Title: A perfect lead detox organic breakfastt, Lead-safety Message: Organic food and especially marmalade (which contains pectin), yoghurt, wholegrain foods and green tea are all known for their ability to detox lead from the body. URL: <http://volcanoartprize.com/portfolio-item/a-perfect-lead-detox-organic-breakfast/>



In our major article for this issue, we delve into the history of the silent epidemic of lead poisoning with a follow-up article from a long-term LEAD Group contact in the US who presents more compelling evidence on stuttering as a symptom of lead poisoning. The fantastically well-researched article begins by describing the lead poisoning and stuttering of King George and is thus very timely for those of us watching Season 1 of the highly-acclaimed “The Crown” on Netflix, about the coronation of Queen Elizabeth II, daughter of King George.

I’ve re-edited a 2010 fact sheet on another little-known set of symptoms of lead exposure: “How does lead exposure affect our eyes?” – and Orlando has masterfully translated the 2016 version into Spanish.

On the topic of old things being revised and reprinted, you’ll find the full listing of links to the 2016 NSW Environment Protection Authority (EPA) lead fact sheets (revised by Michelle Calvert, Vice-President, The LEAD Group), along with the NSW EPA 1997-9 original versions (co-written by EPA and The LEAD Group), in “Info Pack Lead fact sheet series of publications by NSW EPA”. Otherwise grant-less since the Coalition won power at the 2013 federal Australian election, the small grant provided to Michelle for this revision by NSW EPA has since been supplemented for staff wages by donations from PARE Medical, Vinco Hardware and several individuals. Thanks to these generous donors and volunteer staff, the free lead information and referral service of The LEAD Group (called Global Lead Advice and Support Service or GLASS when we have government grants) continues to run. As the Lead Advisor of GLASS, I recently received the following enquiry:

Q: Is there a law against setting up a preschool next door to a petrol station? **A:** only if the Council sets that policy. Ask for their Environmental Report.

This enquiry inspired me to create (and include in this issue): Info Pack - Managing lead hazards in childcare centres and schools, and I continually update my Info Pack for tenants due to a regular stream of enquiries. So you’ll find “Info Pack - Renting and Lead - What residential landlords and agents should know” also in this issue.

Once more, I invite you to take action today, in readiness for the WHO International Lead Poisoning Prevention Week of Action (ILPPWA) 2017, to be held during the last full Sunday to Saturday week in October. Be inspired by our final article – the list of ILPPWA 2016 events, and aim to organise or take part or motivate someone in another country to organise or take part in an ILPPWA 2017 event.

Together we can make the world lead-safe!



Volcano Art Prize (VAP) 2016 – Winners

Main Judge-Awarded prize-winner:



Artist's Name: Ritishaa Sreedhar

Title of Image: Feathers on net

Lead-Safety Message: There are no limits to imagination and intelligence in a lead safe world.

Age: 10 years

Materials: Coloured texta pens on paper

URL: <http://volcanoartprize.com/portfolio-item/feathers-on-net/>



Judge-Awarded Pictureproducts mug prize-winners:



Artist/Photographer: Dr Michael Hindmarsh

Title of Image: Aurukun shooter with spoonbills & barramundi mixed tucker bag. Notice: Mr James Kalkyorta (pictured here) is deceased.

Lead-safety Message: Australian hunters take care not to eat lead shot in your tucker!

Materials: Photo from a Slide Show online at <https://vimeo.com/56446946>

URL: <http://volcanoartprize.com/portfolio-item/aurukun-shooter-with-spoonbills-barramundi-mixed-tucker-bag/>

Artist's Name: Meredith Knight

Title of Image: Cooks River Earlwood

Lead-Safety Message: **Ensure only Class 5 PCCP-Accredited Contractors manage the old industrial coatings on infrastructure in your area.**

Materials: iPhone photos of Cooks River, Earlwood, NSW Australia

URL: <http://volcanoartprize.com/portfolio-item/cooks-river-earlwood/>



VAP 2016 Judge-Awarded Pictureproducts mug prize-winners CONT'D:



Artist's Name: Mark Ju

Title of Image: Toucan

Lead-Safety Message: If two continents can phase out lead paint, everyone can.

Age: 10 years

Materials: Colouring pencils on paper

URL:

<http://volcanoartprize.com/portfolio-item/toucan/>



Artist's Name: Alex Weng
Title of Image: Cat sleeping on the grass
Lead-Safety Message: Cats lick their fur so make sure they don't lie on lead-contaminated soil. Use a LEAD Group Kit to test any bare soil.
Age: 10 years
Materials: Colouring pencils on paper
URL:
<http://volcanoartprize.com/portfolio-item/cat-sleeping-on-the-grass/>



Artist's Name: William Nguyen
Title of Image: Dog with doghouse
Lead-Safety Message: You can test paint and soil for lead with a LEAD Group Kit, and keep your dog lead-safe.
Age: 9 years
Materials: Colouring pencils on paper

URL:
<http://volcanoartprize.com/portfolio-item/dog-with-doghouse/>



Artist's Name: Creative Einstein Education (art school) students, Campsie NSW Australia
Title of Image: Remain curious
Lead-Safety Message: If we remain curious we can find out how to make our world lead-safe.
Age: 6-10 years
Materials: Colouring pencils on paper
VAP 2016 Judge-Awarded Pictureproducts mug prize-winners CONT'D:

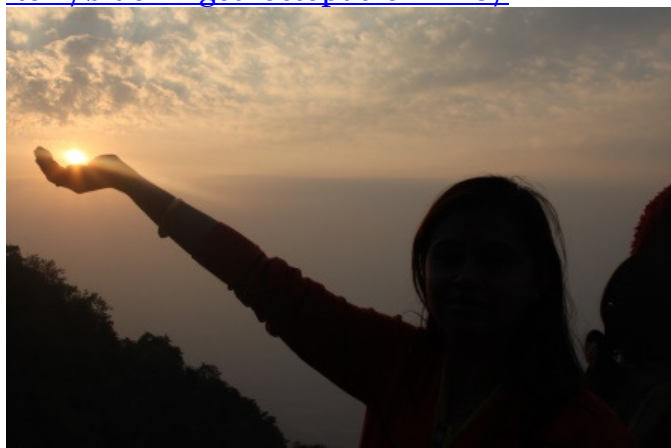
URL:
<http://volcanoartprize.com/portfolio-item/remain-curious/>

1st Winner of People's Choice Cash Prize



Artist's Name: Alice Ju
Title of Image: Blue Ringed Octopus or BRO
Lead-Safety Message: Lead, the Blue ringed octopus of the heavy metals.
Materials: Non toxic acrylic on canvas board
URL:

<http://volcanoartprize.com/portfolio-item/blue-ringed-octopus-or-BRO/>



Artist's Name: Arindam Bala
Title of Image: Sunset – it's in our hands
Lead-Safety Message: We need a sunset clause to eliminate lead in paint in India.
Description of Work: Canon EOS500D photo
URL:

<http://volcanoartprize.com/portfolio-item/sunset-its-in-our-hands/>



Artist's Name: Cecile Chen
Title of Image: LOL Laugh Out Loud and Leave Out Lead

Lead-Safety Message: When every art material manufacturer leaves lead out of children's paints, crayons, chinks and paint on pencils, every parent in the world can relax.

Age: 8 years

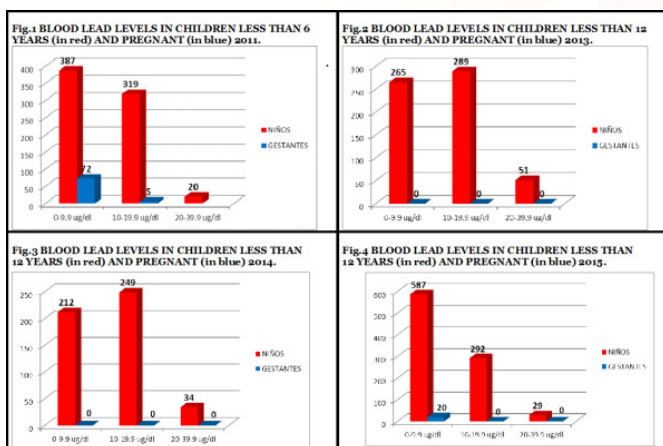
Materials: Colouring pencils on paper

URL:

<http://volcanoartprize.com/portfolio-item/LOL-laugh-out-loud-and-leave-out-lead/>



VAP 2016 Judge-Awarded Pictureproducts mug prize- winners CONT'D:



Artist's Name: Dr Godofredo Arauzo Chuco, El Carmen Hospital, Ministerios de Salud [Health Ministry] AND Red Latina sin fronteras [Latin Network without Frontiers]

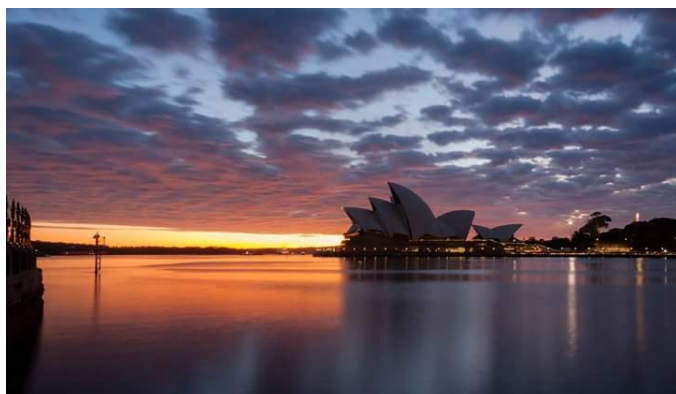
Title of Image: La Oroya is still the most polluted city in the world

Lead-Safety Message: There is no smoke in La Oroya since 2009, but children continue to be born contaminated with lead.

Description of work: Blood lead graphs.

URL:

<http://volcanoartprize.com/portfolio-item/la-oroya-is-still-the-most-polluted-city-in-the-world/>



Artist's Name: Peter Larkin
Title of Image: Sunrise on Sydney Harbour

Lead-safety Message: Every speck of lead dust or paint that is washed into Sydney Harbour when it rains, affects the marine life and builds up in the sediment. Report dusty demolition work or flaking/sanding of old paint to the Environment Protection Authority.

Description of work: Photo taken with a Canon EOS 40D SLR camera.

URL:

<http://volcanoartprize.com/portfolio-item/sunrise-on-sydney-harbour/>

VAP 2016 Judge-Awarded Pictureproducts mug prize-winners CONT'D:



Artist's Name: SAL (Sydney Analytical Laboratories)

Title of Image: SAL is a Lead Safe World Partner

Lead-Safety Message: Sydney Analytical Laboratories (SAL) supports lead-safety in Australia by testing lead and other heavy metals in eggs, paint, water, dust, soil, toys, jewellery, etc and asbestos in building materials via LEAD Group Kits.



VAP 2016 Judge-Awarded Pictureproducts mug prize- winners CONT'D:

Materials: Photos collaged using Word
and Paint.

URL:

<http://volcanoartprize.com/portfolio-item/sal-is-a-lead-safe-world-partner/>



Artist's Name: LeadPro

Title of Film: LeadPro's "Green Machine" for
Retrieving Lead Shot: See the Green Machine
in Action

Lead-Safety Message: Using a revolutionary
process, the Green Machine extracts
approximately 95 percent of lead shot from the
ground.

Description of work: Film

URL:

<http://volcanoartprize.com/portfolio-item/leadpros-green-machine-for-retrieving-lead-shot/>



Artist's Name: Li-Ke Shi

Title of Image: Duck, duckling, fish &
bulrushes

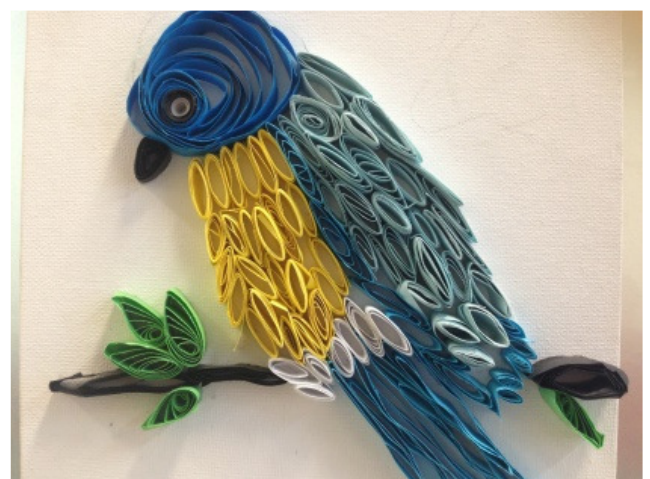
Lead-Safety Message: Ducks need to eat
stones so they can digest their food. Don't
let lead shot or bullets get into their
water.

Age: 9 years

Materials: Colouring pencils on paper

URL:

<http://volcanoartprize.com/portfolio-item/duck-duckling-fish-&-bulrushes/>



Artist's Name: Brandon Banh

Title of Image: Yellow and blue bird

Lead-Safety Message: When lead ore dust
filled the air in the port of Esperance in
Western Australia, 9,000 birds died of
lead poisoning, before the ore was



VAP 2016 Judge-Awarded Pictureproducts mug prize-winners CONT'D:

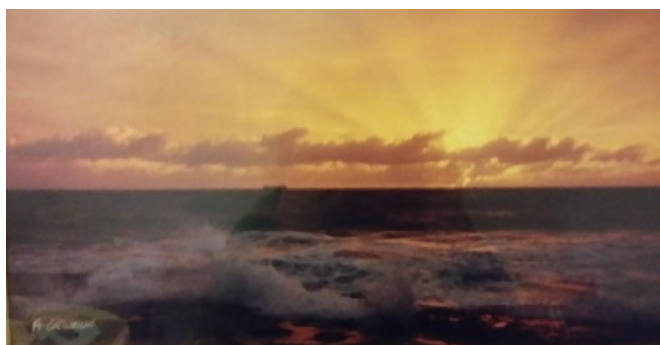
shipped to China. This should never happen again – birds need to be protected from pollution.

Age: 9 years

Materials: Quilled non toxic coloured paper

URL:

<http://volcanoartprize.com/portfolio-item/yellow-and-blue-bird/>



Artist/Photographer: Gabriella Kovac

Title: Hands of God

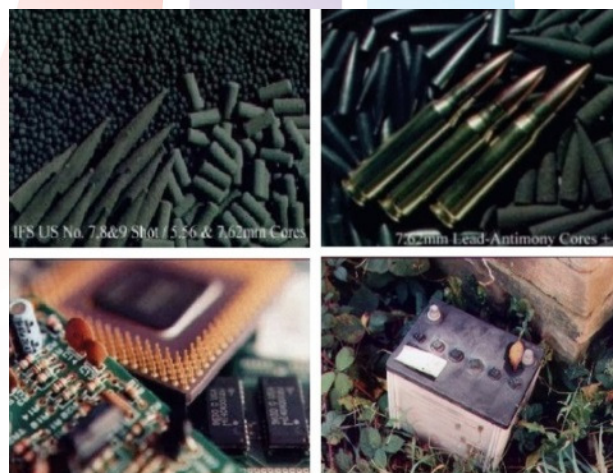
Lead-safety message: Keep our oceans safe from lead.

Description of work: Smart phone photo

URL:

<http://volcanoartprize.com/portfolio-item/hands-of-god/>

2nd Winner of People's Choice Cash Prize



Artist/Photographer: Peter Hurley,
Managing Director at Cylenchar Limited
and Blake International Limited

Title: Leaded ammo, ewaste and used
lead acid battery

Lead-safety message: Recycle toxic lead waste safely! Never let it contaminate soil or be licked or ingested by animals – especially if it also contains toxic antimony like the bullets shown here (top right).

Description of work: Photos collaged in MS Word and Paint, filesize enlarged with AlSee

URL:

<http://volcanoartprize.com/portfolio-item/leaded-ammo-ewaste-and-used-lead-acid-battery/>





VAP 2016 Judge-Awarded Pictureproducts mug prize-winners CONT'D:

Artist's Name: Eric Evans
Title of Image: Little girl painting
Lead-Safety Message: Every child in the world deserves non-toxic lead free artists materials.

Materials: Non toxic acrylic on canvas board

URL:

<http://volcanoartprize.com/portfolio-item/little-girl-painting/>



Artist's Name: Noela Whitton
Title of Image: Caucasian design
handmade woollen rug wallhanging
Lead-Safety Message: When babies are crawling or you have indoor pets, the best place for a rug is hanging on the wall. That keeps your floors moppable and lead-safe.

Age: 86 years

Materials: Hessian backed woollen rug made by Noela Whitton from a traditional design from the Caucasus; prepared with Velcro and a wooden strip for wall hanging by Matt Dickie (phone 0412 432 937), rug expert, Persian & Oriental Rugs and Kelims, Sydney, NSW.

URL:

<http://volcanoartprize.com/portfolio-item/caucasian-design-handmade-woollen-rug-wallhanging/>



Artist's Name: Lola Hou

Title of Image: Dolphins and seaweed

Lead-Safety Message: Our oceans and beaches need to be clean – not polluted by lead-painted scuttled ships or lost lead fishing sinkers.

Age: 6 years

Materials: Colouring pencils on paper

URL:

<http://volcanoartprize.com/portfolio-item/dolphins-and-seaweed/>



Artist's Name: Ritishaa Sreedhar

Title of Image: Feathers on net

Lead-Safety Message: Let your imagination and intelligence not be limited by lead in your brain. Keep our world healthy and beautiful.

Age: 10 years

Materials: Coloured texta pens on paper



VAP 2016 Judge-Awarded Pictureproducts mug prize-winners CONT'D:

URL:

<http://volcanoartprize.com/portfolio-item/feathers-on-net/>



Artist's Name: Harla, Harry & Carla
Title of Image: Don't Let Animals Health Go Down Like a Lead Balloon
Lead-Safety Message: You can test for many possible sources of lead in a pet's environment with a LEAD Group lab kit
Materials: Oil paint on canvas
URL: <http://volcanoartprize.com/portfolio-item/dont-let-animals-health-go-down-like-a-lead-balloon/>



Artist's Name: Monica Erosa
Title of Image: Perspectives
Lead-Safety Message: My piece represents the way we can all remain

focused in our own personal worlds, limiting our awareness of the way we are contaminating the air, water, and soil as well as poisoning ourselves.

Materials: Oil on canvas.

URL:

<http://volcanoartprize.com/portfolio-item/perspectives/>.



Artist's/Photographer's Name: Andrea Didik Photography
Title of Image: I am one month old Aarav I am Papa's baby
Lead-Safety Message: My parents organised blood lead testing before they tried to make me, and during the first trimester and at the birth the cord blood was tested. I'm going to have a wonderful lead-safe life.
Materials: Photographs collaged together with Word and Paint
URL: <http://volcanoartprize.com/portfolio-item/i-am-one-month-old-aarav-i-am-papas-baby/>.



VAP 2016 Judge-Awarded Pictureproducts mug prize-winners CONT'D:



Artist's Name: UNSW Business School
Title of Image: Combine your passions.
Creative Einstein.

Lead-Safety Message: Be like Alice Ju of Creative Einstein. Combine your passions with your work. Great things happen when you ask why not. Why not help The LEAD Group create a lead-safe world?

Materials: Film

URL:

<http://volcanoartprize.com/portfolio-item/combine-your-passions-creative-einstein/>



Artist's Name: Mark Ju

Title of Image: White rose

Lead-Safety Message: Luckily the lead pencil in my background has no lead in it.

Age: 10 years

Materials: Colouring pencils and lead pencil on paper

URL:

<http://volcanoartprize.com/portfolio-item/white-rose/>



Artist's Name: Celeste Chen

Title of Image: Red Frog on a Lily Pad

Lead-Safety Message: Keep frogs happy - keep lead out of the pond.

Age: 8 years

Materials: Colouring pencils on paper

URL:

<http://volcanoartprize.com/portfolio-item/red-frog-on-a-lily-pad/>



VAP 2016 Judge-Awarded Pictureproducts mug prize-winners CONT'D:



Artist's Name: Caitlin Ngo
Title of Image: Butterflies with a pink flower

Lead-Safety Message: If lead dust falls on flowers butterflies will be poisoned when they drink the nectar.

Age: 9 years

Materials: Colouring pencils on paper

URL:

<http://volcanoartprize.com/portfolio-item/butterflies-with-a-pink-flower/>

3rd Winner of People's Choice Cash Prize

Lead-Safety Message: When it rains old lead paint on buildings might get carried away to the stormwater and poison waterlife. Fix old paint lead safely.

Age: 10 years

Materials: Non toxic watercolour paint on paper

URL:

<http://volcanoartprize.com/portfolio-item/city-streets/>



Artist's Name: Ritishaa Sreedhar

Title of Image: Whale washed up to shore

Lead-Safety Message: Due to **rising toxic metal concentration in the oceans**, whales are more stressed and more likely to beach themselves. Protect our seas from mercury, cadmium and lead.

Age: 10 years

Materials: Non toxic crayon and coloured pencils on paper

URL:

<http://volcanoartprize.com/portfolio-item/whale-washed-up-to-shore/>



Artist's Name: Janice Leelapat

Title of Image: City Streets



**VAP 2016 People's Choice
Shared Prize
Winner:**



Artist's Name: Sue Gee
Title of Image: Tara

**Lead-safety Message: Get yourself
and pets checked for lead
poisoning.**

Materials: Samsung Galaxy smart phone
photo

URL:

<http://volcanoartprize.com/portfolio-item/tara/>

**4th Winner of People's Choice Cash
Prize.**

**VAP 2016 Entries Highly
Commended by the Judge:**



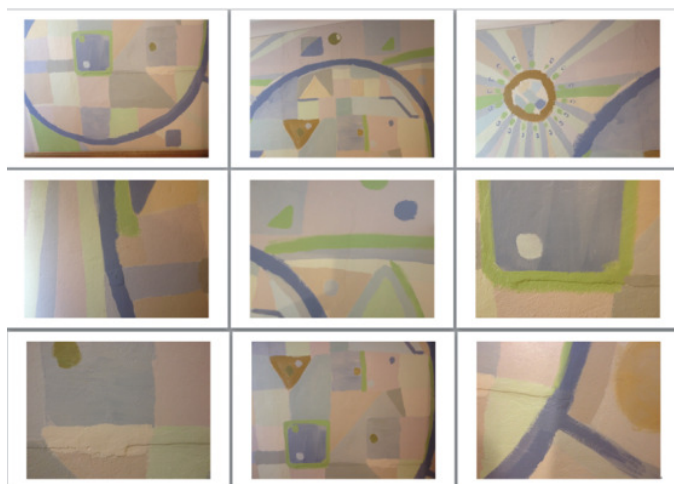
Artist's Name: Claire Mary Leight
Title of Image: Dumb Brunette

Lead-Safety Message: Don't be a dummy,
learn about lead safety.

Description of Work: Digital photo, file
size enlarged with Alsee

URL:

<http://volcanoartprize.com/portfolio-item/dumb-brunette/>



Artist's Name: Ian Smith

Title of Image: Internal wall mural

Lead-Safety Message: As long as you get a
competent contractor like Lets Clean in



VAP 2016 Entries Highly Commended by the Judge CONT'D:

Sydney, to safely strip your lead paint, and then use non-lead paint, you can camouflage surface defects with a mural and AND be lead-safe!

Materials: Various colours of leftover residential paint bought after 1997 (no added lead by law) on bare 1884 originally exterior wall filled-in and converted to an interior wall in the 1960s.

URL:

<http://volcanoartprize.com/portfolio-item/internal-wall-mural/>

together by Mark Goodenough, with google layout engine.

URL:

<http://volcanoartprize.com/portfolio-item/test-your-stock-feed-at-a-lab-with-a-lead-group-Kit/>



Artist's Name: Elizabeth O'Brien

Title of Image: Test your stock feed at a lab with a LEAD Group Kit

Lead-Safety Message: Does your stock feed meet the Stock Food Act lead, cadmium and mercury limits? A [LEAD Group Kit](#) found a brand of chicken feed (not shown here) had 5 times the lead limit but there was no lead detected in the Organic chook food / layer mash made by Country Heritage Feeds.

Description of work: iPhone 4S photos of Stock feed for your horse, parrot, wild bird, poultry, alpaca, llama, goat, sheep, pig, cattle, dog and cat – collaged



2016 Volcano Art Prize (VAP) Awards Ceremony photo essay

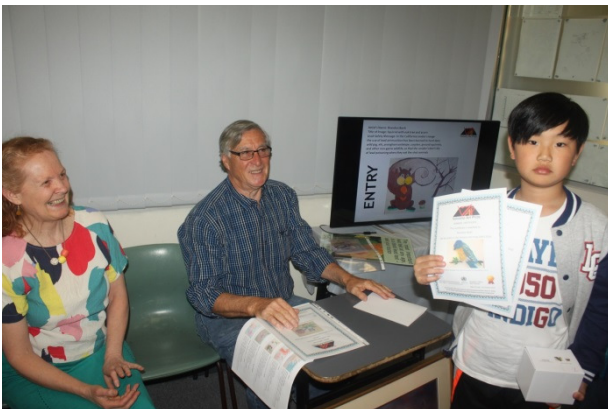
*By Rekha Vasudev, Kit Manager and Arindam Bala, Main Photographer, Events Manager and
IT Specialist, The LEAD Group*



Handing out the Certificates and the Pictureproducts Mug Prizes at 2016 VAP Awards Ceremony were Elizabeth O'Brien, VAP Founder and Roger Kilburn, MC.



Celeste Chen receiving a certificate and a mug for Red Frog on a Lily Pad.



Brandon Banh receives his Certificates and a prize Pictureproducts mug for his Yellow and blue bird paper artwork, with his Squirrel with oak tree and acorn on the screen in the background.



Alice Ju receives People's Choice Cash Prize and certificate on behalf of her art school Creative Einstein



Lola Hou receives certificate and mug for her picture Dolphins and seaweed



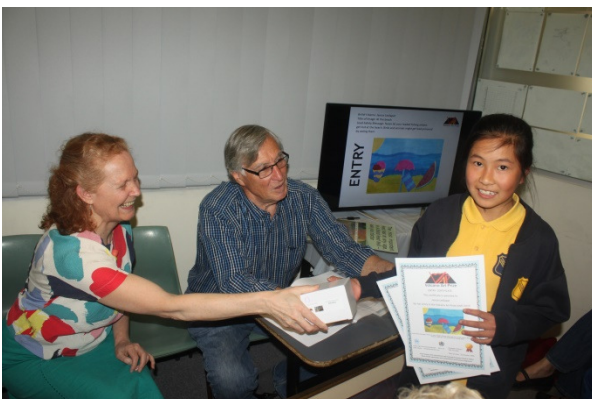
Ritisha Sreedhar receiving mugs and certificates from Liz and Roger for her pictures at the VAP 2016 award ceremony, She has also got \$200 Judge's award cash prize for her picture Feathers on Net.



Mark Ju receiving certificates and mugs for his pictures teddy bear, White Rose, and Toucan from Roger and Liz at the 2016 award VAP ceremony.



Alice Ju receiving a mug for her picture Blue Ringed Octopus from Liz and Roger at the VAP award ceremony



Janice Leelapat receiving mug and certificate from Roger and Liz for her picture City Streets at the VAP 2016 award ceremony.



Arihaan Bala receiving mug on behalf of his father Arindam Bala from Roger and Liz for



the picture Sunset – it’s in our hands at the VAP 2016 award ceremony.



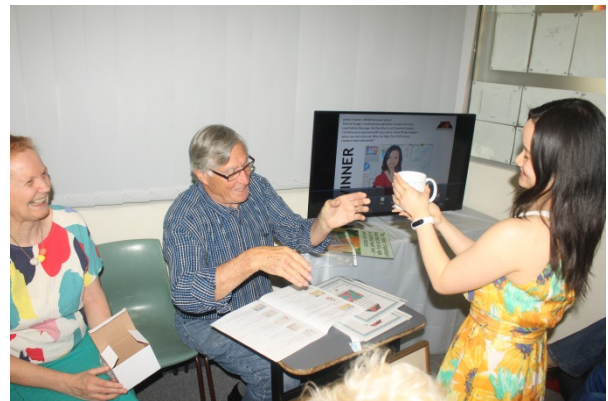
Gabriella Kovac receiving mug and People’s choice cash prize from Liz and Roger for her picture Hands of God at the VAP 2016 award ceremony.



Meredith Knight receiving mug and People’s choice cash prize from Liz and Roger for her picture Tara at the VAP 2016 award ceremony.



Michael Hindmarsh receiving a mug for his picture Aurukun shooter with spoonbills & barramundi mixed tucker bag from Liz and Roger at VAP 2016 award ceremony.



Alice Ju receiving a mug on behalf of UNSW Business School from Liz and Roger at VAP 2016 award ceremony.





Mug winners at VAP 2016 award ceremony.



Guests at the VAP 2016 award ceremony.



Guests at the VAP 2016 award ceremony.



Paint with Dangerous Lead Levels Widely Sold in All Developing Regions of the World

By Dr. Sara Brosché, Global Lead Paint Elimination Project Manager, Manny Calonzo, Global Lead Paint Elimination Project Advisor, and Valerie Denney, IPEN (International POPs Elimination Network)

(Gothenburg, Sweden, 23rd October 2016) Many decorative paints sold in over 40 low- and middle-income countries contained dangerous levels of lead, sometimes in direct violation of national regulation, according to a new report released by IPEN today. The report, [Global Lead Paint Report](#), brings together data from paint studies conducted since 2009 in 46 low- and middle-income countries in Africa, Asia, Latin America and Eastern Europe. The majority of these countries lack regulation limiting the lead content of paint.

“While major producers have begun removing lead from their products in a number of developing countries in Asia, there is an alarming amount of lead paint still sold in all developing regions of the world. It is really quite shocking that a parent who paints their child’s nursery a sunny yellow or someone who runs a colorfully painted child care center may be, through no fault of their own, exposing a child to permanent brain damage caused by lead exposure,” said Dr. Sara Brosché, Project Manager, IPEN Lead Paint Elimination Campaign.

[IPEN](#) released its *Global Lead Paint Report* as a part of worldwide activities during the [International Lead Poisoning Prevention Week of Action \(ILPPWA\)](#), October 23 -29, 2016, co-led by the [United Nations Environment Program \(UNEP\)](#) and the [World Health Organization \(WHO\)](#). In addition to the report, IPEN Participating Organizations also released new reports on lead in paint in nine countries and conducted lead awareness activities in more than 25 countries.

In a [statement](#) prepared for this year’s ILPPWA, Dr. Maria Neira, Director of the Department of Public Health, Environmental and Social Determinants of Health for the World Health Organization (WHO), said: “Exposure to lead poses a significant hazard to human health, especially for children. . . There is no need to add lead to paint - safer alternative chemicals can be used. The best way to ensure the availability of lead-safe paint is for countries to put in place laws, regulations or mandatory standards that prohibit the manufacture, import, export, sale or use of lead paint.”

The report documents that progress has been made since 2009 in eliminating lead paint:

- Data on lead in paint is now available in 46 countries, with 15 additional studies scheduled for release by IPEN and NGO partners in 2016.
- Binding regulatory controls limiting the lead content of paint have been enacted or are pending in 6 Asian countries and 4 African countries. The East African Community



(EAC) has adopted mandatory standards restricting the use of lead in paint in its five member states.

- The International Lead Poisoning Prevention Week of Action generated activities in nearly 90 cities in 30 countries in 2015.
- Akzo Nobel, the world's second largest paint producer, has announced that it has removed lead from all its paint product lines. The world's largest paint producer, PPG, announced that it has removed leaded ingredients from all its consumer paint brands and products in all countries and will completely phase out the use of lead in its products by 2020. In addition, major Asian paint producers in a number of countries have begun eliminating lead from their paint products.
- Three major manufacturers (Boysen, Davies in the Philippines and Multilac in Sri Lanka) have been certified under the world's first certification program, [Lead Safe Paint®](#).

The report makes several recommendations to achieve the [Global Alliance to Eliminate Lead Paint's](#) (GAELP) target date of 2020 for all countries having adopted legally binding laws, regulations, standards and/or procedures to control the production, import, sale and use of lead paints. GAELP is co-hosted by WHO and UNEP.

More country-level data on lead paint is needed. Data on the presence (or absence) of lead paints on the market is currently only available in 23 of the 126 countries that lack regulatory controls on lead paint. Without data it is hard for government officials to establish regulatory controls or to ask paint manufacturers to voluntarily remove lead from their paints.

More governments should begin developing lead paint regulations. Government agencies can begin now to establish multi-stakeholder consultations to address how lead paint controls will be formulated and the timeline for their entry into force. Regulations should include a 90 ppm total lead limit for all paints as well as budgets and protocols for monitoring and enforcement.

Paint manufacturers, paint industry trade associations and paint ingredient vendors should take voluntary action immediately to eliminate lead from all paints, with decorative and other paints used in and around homes and schools as a priority. Ethical manufacturers need not wait for government controls before they act. National, regional and international paint industry trade associations should send clear and strong signals to their members that now is the time to end all manufacture and sale of lead paints.

Donors should make significant new resources available for global lead paint elimination. Additional resources are needed for the collection of lead paint data and to assist national governments in developing and implementing lead paint standards and regulation.



Lead in household paints has been regulated in most highly industrial countries for more than 40 years. The United States and Canada recently established a regulatory limit of 90 parts per million (ppm) lead in response to growing concerns that even low-level lead exposures are harmful to children. Some other countries have established regulatory limits of lead in paint at 600 ppm lead.

Lead in paint is a problem because painted surfaces deteriorate with time and when disturbed. If there is lead in the paint, the lead then contaminates household dust and soils surrounding the home. Children ingest lead from dust and soils during normal hand to mouth behavior. Damage to children's intelligence and mental development occurs, even when there are no obvious or clinical signs of lead poisoning. Recent WHO guidelines indicate that there is no known acceptable lead exposure level for children. (WHO, 2010)

When children are exposed to lead, it tends to decrease their performance in school and their lifelong productivity as part of the national labor force. A recent study investigated the economic impact of childhood lead exposure on national economies and estimated a total cumulative loss of \$977 billion international dollars per year for all low- and middle-income countries. (Attina and Trasande) The estimated economic loss in Africa is \$134.7 or 4.03% of the Gross Domestic Product (GDP).

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IPEN. IPEN is a leading global organization of hundreds of non-governmental organizations from 116 countries working to protect human health and the environment from harms caused by toxic chemical exposure.

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Attina, Teresa M. and Trasande, Leonardo. *Economic Costs of Childhood Lead Exposure in Low- and Middle-Income Countries*, by: Environmental Health Perspectives; DOI:10.1289/ehp.1206424; <http://ehp.niehs.nih.gov/1206424/> .



Paint with Dangerous Lead Levels Widely Sold in All Developing Regions of the World

Pintura con Peligrosos Niveles de Plomo se Vende Ampliamente en Todas las Regiones en Desarrollo del Mundo

By Dr. Sara Brosché, Global Lead Paint Elimination Project Manager, Manny Calonzo, Global Lead Paint Elimination Project Advisor, and Valerie Denney, IPEN (International POPs Elimination Network). Media release translated into Spanish by Orlando Aguirre-Lopez, LEAD Group volunteer.

Por la Dra. Sara Brosché, Directora del Proyecto para la Eliminación del Plomo de la Pintura a Nivel Global, Manny Calonzo, Consejera del Proyecto para la Eliminación del Plomo a Nivel Global, y Valeria Denney, IPEN (Red Internacional para la Eliminación de COP). Comunicado de Prensa traducido al Castellano por Orlando Aguirre-López, voluntario de "LEAD Group".

(Gothenburgo, Suecia, 23 de Octubre, 2016). Muchas pinturas decorativas vendidas en más de 40 países con ingresos bajos o medios contenían peligrosos niveles de plomo, algunas veces con violación directa de la regulación nacional, de acuerdo con un nuevo informe publicado por el IPEN hoy. El informe, **Informe Global sobre Plomo en la Pintura**, reúne datos sobre estudios de la pintura realizados desde 2009 en 46 países de ingresos medios y bajos en Africa, Asia, América Latina y Oriente de Europa. La mayoría de estos países carecen de regulaciones que limiten el contenido de plomo de la pintura.

“Mientras los principales productores han empezado a retirar el plomo de sus productos en un número de países en desarrollo de Asia, hay una alarmante cantidad de pintura con plomo vendida todavía en todas las regiones en desarrollo del mundo. Es realmente demasiado impactante que un padre de familia que pinte el cuarto de su hijo con amarillo soleado o alguien que dirige un centro de cuidado de niños pintado de vivos colores, sin culpa suya, esté exponiendo un niño a permanente daño cerebral causado por la exposición al plomo,” dijo la doctora Sara Brosché, Directora de Proyecto, Campaña por la Eliminación del Plomo en la Pintura, de IPEN.

IPEN difundió su Informe Global sobre Plomo en la Pintura como una parte de las actividades a nivel mundial durante la **Semana Internacional de Acción para la Prevención de la Intoxicación por Plomo (ILPPWA, por sus siglas en Inglés)**, Octubre 23 a 29, 2016, co-liderada por el **Programa del Medio Ambiente de las Naciones Unidas (UNEP, por sus siglas en Inglés)** y la **Organización Mundial de la Salud (WHO, por sus siglas en Inglés)**. Además del informe, Las Organizaciones Participantes de



IPEN comunicaron nuevos informes sobre plomo en pintura en nueve países y realizaron actividades de concientización en más de 25 países.

En una **declaración** preparada para ILPPWA de este año, la doctora Maria Neira, Directora del Departamento de Salud Pública, Determinantes Ambientales y Sociales de la Salud para la Organización Mundial de la Salud (WHO, por sus siglas en Inglés), dijo: “La exposición al plomo plantea un significativo riesgo a la salud humana, especialmente para los niños. No hay necesidad de agregar plomo a la pintura – más seguros químicos suplementarios pueden usarse. La mejor forma de asegurar la disponibilidad de pintura segura contra el plomo es que los países coloquen leyes nacionales, regulaciones o estándares vinculantes que prohíban la manufactura, importación, exportación, venta o uso de pintura con plomo.”

El informe dice que ha habido avances desde 2009 en la eliminación de la pintura con plomo:

- Datos sobre plomo en la pintura están ahora disponibles en 46 países, con 15 estudios adicionales a ser publicados en 2016 por IPEN y ONGs asociadas.
- Se han promulgado o están pendientes controles reglamentarios vinculantes limitando el contenido de plomo en la pintura en 6 países Asiáticos. La Comunidad de Países de Africa Oriental (EAC, por su sigla en Inglés) ha adoptado estándares obligatorios para restringir el uso de plomo en la pintura de sus cinco estados miembros.
- La Semana Internacional de Acción de Prevención de la Intoxicación por Plomo generó actividades en cerca de 90 ciudades de 30 países en 2015.
- Akzo Nobel, el segundo mayor productor de pinturas en el mundo, ha anunciado que ha quitado el plomo de todas sus líneas de productos. El mayor productor de pintura del mundo, PPG, anunció que ha quitado los ingredientes con plomo de todas sus marcas de pintura y productos en todos los países y eliminará completamente el uso de plomo en sus productos para el año 2020. Además, los mayores productores de pintura de Asia en numerosos países han empezado a eliminar el plomo de sus productos de pintura.
- Tres grandes fabricantes (Boysen, Davies en Las Filipinas y Multilac en Sri Lanka) han sido certificados bajo el primer programa de certificación en el mundo, [Lead Safe Paint®](#).

El informe hace varias recomendaciones para el alcance de la fecha objetivo del año 2020 de la '[Global Alliance to Eliminate Lead Paint's](#) (GAELP)' (**Alianza Global para Eliminar la Pintura con Plomo**, GAELP, por su sigla en Inglés) para que todos los países hayan



adoptado leyes vinculantes, regulaciones, estándares y/o procedimientos para controlar la producción, importación, venta y uso de pinturas con plomo. GAELP es co-anfitrión de la OMS y el PNUMA.

Se necesitan más datos sobre pintura con plomo a nivel de países. Información sobre presencia (o ausencia) de pinturas con plomo en el mercado está normalmente disponible solamente en 23 de los 126 países que carecen de controles regulatorios sobre pintura con plomo. Sin datos es difícil para que las autoridades gubernamentales establezcan controles regulatorios o pedir a los fabricantes de pinturas que voluntariamente eliminen el plomo de sus pinturas.

Más gobiernos deberían empezar a desarrollar regulaciones sobre pintura con plomo. Las agencias del gobierno pueden empezar ya a adelantar consultas con las múltiples partes interesadas para determinar cómo se formularán controles para la pintura con plomo y el programa para su puesta en acción. Las regulaciones deberían incluir un límite total para el plomo de 90 ppm en todas las pinturas, así como presupuestos y protocolos para aplicación y monitoreo.

Los fabricantes de pinturas, las asociaciones comerciales de la industria de la pintura y los vendedores de ingredientes para pintura deberían adelantar acciones voluntarias para eliminar el plomo de todas sus pinturas, con prioridad en pinturas decorativas y otras pinturas usadas dentro y alrededor de los hogares y las escuelas. Los fabricantes con ética no necesitan esperar regulaciones gubernamentales para actuar. Las asociaciones comerciales de la industria nacional, de la regional y de la internacional deberían enviar claras y fuertes señales a sus miembros de que ya es la hora de terminar toda fabricación y ventas de pinturas con plomo.

Los donantes deben poner a disposición nuevos significativos recursos para la eliminación global de la pintura con plomo. Se requieren recursos adicionales para la recolección de información sobre pintura con plomo y para ayudar a los gobiernos nacionales en el desarrollo e implementación de estándares y regulaciones sobre pintura con plomo.

El plomo en pinturas de hogares ha sido regulado en la mayoría de los países industriales por más de 40 años. Los Estados Unidos y el Canadá establecieron recientemente un límite regulatorio de 90 partes por millón (ppm) como respuesta a crecientes inquietudes de que aún las exposiciones al plomo en bajo nivel son dañinas para los niños. Algunos otros países han establecido límites regulatorios de 600 ppm de plomo en pinturas.

El plomo en la pintura es un problema porque las superficies pintadas se deterioran con el tiempo y cuando son alteradas. Si hay plomo en la pintura, éste contamina entonces el polvo de la casa y los suelos alrededor. Los niños ingieren plomo del polvo y los suelos durante el desempeño normal de la mano a la boca. Ocurre perjuicio a la inteligencia y al desarrollo mental de los niños, aun cuando no haya signos obvios o clínicos de intoxicación por plomo. Recientes directrices de la OMS indican que no hay nivel aceptable de exposición al plomo para los niños. (OMS, 2010).



Cuando los niños son expuestos al plomo, tiende a decrecer su desempeño en la escuela y su productividad a lo largo de la vida como parte de la fuerza de trabajo nacional. Un estudio reciente investigó el impacto económico de la exposición al plomo en la niñez sobre las economías nacionales y estimó una pérdida acumulativa total de \$ 977 billones de dólares internacionales por año para todos los países de medianos y bajos ingresos. (Attina y Trasande). La pérdida económica estimada en Africa es de \$ 134.7 billones ó 4.03% del Producto Interno Bruto (GDP, por su sigla en Inglés).

IPEN. IPEN es una organización global que lidera cientos de organizaciones no-gubernamentales de 116 países y que trabajan para proteger la salud humana y el medio ambiente contra daños causados por exposición a tóxicos químicos.

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Ver también : Informe UNEP: Plomo en Pinturas Decorativas Esmaltadas: Resultados Nacionales de Pruebas en Pintura: Un Estudio en 9 Países, Sección 3. Exposición al Plomo y sus Efectos en la Salud.

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Paint with Dangerous Lead Levels Widely Sold in All Developing Regions of the World

Peinture avec des Niveaux de Plomb Dangereux est Largement Vendue dans Toutes les Régions en Développement du Monde

By Dr. Sara Brosché, Global Lead Paint Elimination Project Manager, Manny Calonzo, Global Lead Paint Elimination Project Advisor, and Valerie Denney, IPEN (International POPs Elimination Network). Translated into French by Orlando Aguirre-Lopez, The LEAD Group Inc, Australia

Par la Dra. Sara Brosché, Gestionnaire Mondial de Projet d'Élimination de la Peinture au Plomb, Manny Calonzo, Conseiller Mondiale du Projet d'Élimination de la Peinture au Plomb, et Valery Denney, IPEN (Réseau International pour l'Élimination de Polluants Organiques Persistants). Traduit en Français par Orlando Aguirre-López. LEAD Group Inc, Australie.

(Goeteborg, Suède, 23 Octobre 2016). De nombreuses peintures décoratives vendues dans plus de 40 pays à faible et à moyen revenu contenaient des niveaux dangereux de plomb, parfois en violation directe de la réglementation nationale, selon un nouveau rapport publié par IPEN aujourd'hui. Le rapport, [Global Lead Paint Report](#), rassemble les données des études sur la peinture, effectuées depuis 2009 dans 46 pays à faible et moyen revenu en Afrique, en Asie, en Amérique latine et en Europe de L'Est. La plupart de ces pays manquent de réglementations limitant la teneur en plomb de la peinture.

«Alors que les principaux producteurs ont commencé à éliminer le plomb de leurs produits dans un certain nombre de pays en développement en Asie, il y a une quantité alarmante de peinture au plomb encore vendus dans toutes les régions en développement du monde. Il est vraiment choquant qu'un parent qui peint le nourrisson de son enfant en jaune ensoleillé ou quelqu'un qui dirige un centre de garde d'enfants, peint en couleurs, sans faute de leur propre chef, expose un enfant à des lésions cérébrales permanentes causées par l'exposition au plomb », a déclaré la Dra. Sara Brosché, Directeur des Projets, 'Campagne de IPEN pour l'Élimination de la Peinture au Plomb'».

IPEN a publié son Rapport mondial sur la peinture au plomb dans le cadre des activités mondiales de la [Semaine Internationale d'Action en Prévention des Intoxications par le Plomb, \(ILPPWA\)](#), du 23 au 29 Octobre 2016, codirigée par le [Programme des Nations Unies pour l'Environnement et l'Organisation Mondiale de la Santé \(OMS\)](#). En plus de rapport, les Organisations Participantes à IPEN ont également publié de nouveaux rapports sur la peinture au plomb dans neuf pays et ont mené des activités de sensibilisation dans plus de 25 pays.



Dans une déclaration préparée pour l'ILPPWA de cette année, la Dre. Maria Neira, Directrice du Département de la Santé Publique, Déterminants Environnementaux et Sociaux de la Santé, de l'Organisation Mondiale de la Santé (OMS), a déclaré : « L'exposition au plomb pose un risque important pour la santé humaine, surtout pour les enfants...Il n'est pas nécessaire d'ajouter de peinture au plomb – des produits chimiques de remplacement, plus sûrs, peuvent être utilisés. La meilleure façon d'assurer la disponibilité de la peinture au plomb est que les pays mettent en place de lois, de règlements ou des normes obligatoires qui interdisent la fabrication, l'importation, l'exportation, la vente ou l'utilisation de la peinture au plomb. »

Le rapport indique que des progrès ont été réalisés dans l'élimination de la peinture au plomb, depuis 2009 :

- Information sur le plomb dans la peinture est maintenant disponible dans 46 pays, et 15 études supplémentaires devraient être publiées par l'IPEN et les ONG partenaires en 2016.
- Des contrôles réglementaires contraignants, limitant la teneur en plomb de la peinture ont été adoptés ou sont en cours dans 6 pays Asiatiques et 4 pays Africains. La Communauté de l'Afrique de l'Est (CAE) a adopté des normes obligatoires, limitant l'utilisation du plomb dans ses cinq Etats membres.
- La Semaine Internationale d'Action pour la Prévention de l'Empoisonnement du Plomb a généré des activités dans près de 90 villes de 30 pays en 2015.
- Akzo Nobel, le deuxième producteur mondial de peinture, a annoncé qu'il avait éliminé le plomb de toutes ses gammes de produits de peinture. Le plus grand producteur de peinture au monde, PPG, a annoncé qu'il avait éliminé les ingrédients de plomb de toutes ses marques et produits de peinture de consommation dans tous les pays, et qu'il éliminerait complètement l'utilisation de plomb dans ses produits vers 2020. En outre, les principaux producteurs de peinture Asiatiques dans un certain nombre de pays ont commencé à éliminer le plomb de leurs produits de peinture.
- Trois grands fabricants (Boysen, Davies aux Philippines, et Multilac au Sri Lanka) ont été certifiés dans le cadre du premier programme de certification au monde, [Lead Safe Paint®](#).

Le rapport formule plusieurs recommandations pour la réalisation de l'objectif de [l'Alliance Mondiale pour l'Élimination de la Peinture au Plomb \(AMEPP\)](#), fixée à 2020 pour tous les pays, ayant adopté des lois, des réglementations, des normes et/ou des procédures juridiquement contraignantes pour contrôler la production, l'importation, la vente et l'utilisation de peintures au plomb. L'AMEPP est co-hébergée par l'OMS et la PNUE.



Il faut plus de données sur la peinture au plomb au niveau de pays. Les données sur la présence (ou l'absence) de peintures au plomb sur le marché ne sont actuellement disponibles que dans 23 des 126 pays qui manquent de contrôles réglementaires sur la peinture au plomb. Sans données, il est difficile pour les responsables gouvernementaux d'établir des contrôles réglementaires ou de demander aux fabricants de peintures d'éliminer volontairement le plomb de leurs peintures.

Davantage de gouvernements devraient commencer à élaborer des règlements sur la peinture au plomb. Les organismes gouvernementaux peuvent maintenant commencer à établir des consultations multi-actionnaires pour examiner comment les contrôles de la peinture au plomb seront formulés et le calendrier de leur entrée en vigueur. Les règlements devraient inclure une limite de plomb total de 90 ppm pour toutes les peintures, ainsi que de budgets et des protocoles de surveillance et d'application.

Les fabricants de peintures, les associations professionnelles de l'industrie de la peinture, et les fournisseurs d'ingrédients de peinture devraient prendre immédiatement des mesures volontaires pour éliminer le plomb de toutes les peintures, avec priorité dans des peintures décoratives et autres utilisées à l'intérieur et autour des maisons et des écoles. Les fabricants avec d'éthique ne doivent pas attendre les contrôles gouvernementaux avant d'agir. Les associations professionnelles nationales, régionales et internationales de l'industrie de la peinture devraient envoyer des signaux clairs et forts à leurs membres, maintenant qu'il est temps de mettre fin à toute fabrication et vente des peintures au plomb.

Les donateurs devraient mettre à disposition de nouvelles ressources importantes pour l'élimination mondiale de la peinture au plomb. Des ressources supplémentaires sont nécessaires pour la collecte de données sur la peinture au plomb et pour aider les gouvernements nationaux à élaborer et mettre en œuvre des normes et de règlements sur la peinture au plomb.

Le plomb dans les peintures de ménage a été réglementé dans la plupart des pays hautement industriels depuis plus de 40 ans. Les États-Unis et le Canada ont récemment établi une limite réglementaire de 90 parts par million (ppm) de plomb, en réponse aux préoccupations croissantes selon lesquelles même les expositions au plomb de faible niveau sont nocives pour les enfants. Certains autres pays ont établi des limites réglementaires pour la peinture au plomb à 600 ppm de plomb.

Le plomb dans la peinture est un problème parce que les surfaces peintes se détériorent avec le temps et quand elles sont perturbées. S'il y a du plomb dans la peinture, le plomb contamine alors la poussière et les sols domestiques qui entourent la maison. Les enfants ingèrent le plomb de la poussière et de sols pendant le comportement normal de la main à la bouche. Des dommages à l'intelligence et au développement psychologique des enfants se produisent, même en l'absence de signes évidents ou cliniques d'empoisonnement au plomb. Des lignes directrices récentes de l'OMS indiquent qu'il n'y a pas de niveau acceptable d'exposition au plomb chez les enfants. (OMS, 2010)



Lorsque les enfants sont exposés au plomb, ils tendent à diminuer leurs performances scolaires et leur productivité tout au long de la vie dans le cadre de la population active nationale. Une étude récente a cherché l'impact économique de l'exposition au plomb chez les enfants sur les économies et a estimé une perte totale cumulée de 977 milliards de dollars internationaux par an pour tous les pays qui ont un revenu faible ou intermédiaire, (Attina et Trasande). La perte économique estimée en Afrique est de 134.7 milliards ou 4.03% du produit intérieur brut (PIB).

L'IPEN. L'IPEN est une organisation mondiale de premier plan, regroupant des centaines d'organisations non gouvernementales de 116 pays travaillant à protéger la santé humaine et l'environnement des dommages causés par l'exposition aux produits chimiques toxiques.

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Medical studies have shown that blood lead levels as low as 2 micrograms per decilitre can pose significant health risks for [children](#) and [adults](#). Just think - for the next 10 to 20 years all the water you drink and cook with will flow through that tap into you and your children (and pets). REMEMBER your skin is the biggest organ in the human body and can absorb lead, so to achieve The LEAD Group's recommendation of no detectable lead in blood, it is wise to shower and bathe in lead-free water too.

Lead Free

With the focus on lead-free tapware, Vinco has sourced the highest quality 304 stainless steel on the market, to give you and your health the perfect lead-free solution.



GET THE LEAD OUT



Tapware = Better health



Letter to the Editor

Lareter S.P.A. company produces unleaded PVC-U pipes and fittings in Italy for the European market

I work for a company producing pvc-u pipes and fittings in Italy, and I am responsible for the sales in Northern Europe and extra EU countries excluding Russia. I started to work for this company in 2013 immediately after my degree in international economics and I would like to build relations to keep in touch with professionals or everyone involved in the business or even collaterals to the business. We can even keep in touch through LinkedIn if you want, but I am using my personal mail: rizzo.filippo@gmail.com

Searching the net I discovered your association and I would like to support you with eventual reports or with my personal knowledge about the industry.

It is more than 30 years Lareter S.P.A. are producing our pvc-u pipes and fittings for water supply with lead-free stabilizers. It is not by our personal choice but because the norm has changed and is not anymore including lead in the powder mix used for the production of pvc - at least in Europe and in the pipe industry.

Anyway also in the past when pvc pipes were produced using lead stabilizers, they were specifically stabilized inside the pipe and no pipes were releasing lead in the water if they were made with the correct amount and produced according to the norm like we do.

So there was no danger for humans or other living beings. There is a release only if the pipe is exposed to a temperature higher than 45° for long periods, but as these pipes are used in the public or private water distribution they are normally buried underground. Best regards.

Filippo Rizzo
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Lareter S.P.A. exhibited at trade shows in Bologna and Hannover in November 2016 and at EuroExpo Lyon France 29 Novembre - 2 Décembre 2016.





A jam-maker's view of pectin

By Lyn Bearlin

As a serious jam-maker and health worker, I am intrigued by the ability of pectin to remove lead from the body. In making jam, pectin is what makes fruit set (or jell). Most jam made with fruit that is low in pectin has added lemon juice or apple for extra pectin. Home-made jam tends to taste better because it is often made with fresh home grown fruit and does not include fillers such as melon, apple or pear to bulk it out.

Home-made marmalade usually includes more peel (more flavour and more pectin) than commercial varieties. More unusual marmalades I have made include kaffir lime (very tart), rangpur lime, blood orange, tangelo, kalomandin, chinotto cumquat and clementine (a cross between an orange, pomelo and mediterranean citrus).

I also make my own pectin from lemon seeds and pulp after squeezing the lemons. I stand the seed and pithy pulp in water for a couple of days. Then I heat till boiling and strain off the liquid in a sieve, and dilute the seeds with boiling water a second time to make sure I get it all. Seedy citrus provide the best pectin eg kaffir limes, cumquats and meyer lemons.

Apart from citrus, the fruit that is highest in pectin are cooking apples, plums, raspberries and quince.

I will be having a preserves stall at home in Hurlstone Park on Saturday 10th December 2016, to raise funds for Medecins Sans Frontieres. If you would like the details, please email lyn.bearlin@gmail.com.

Pectin rich preserves I currently have available include:

Marmalade: Ruby Grapefruit, Cumquat, Kaffir Lime, Brandied Citrus Medley, Clementine and Orange and Ginger.

Jams: Plum & Passionfruit, Spiced Plum & Vanilla, Quince & Fig and Carrot Lime and Cardamon. I also have Brandied and Pickled Cumquats, Preserved Lemons, Lemon Butter and a Spicy Beetroot & Apple Chutney.





Stuttering and Lead Poisoning: stories from the last century

The premise of this paper is that chronic lead poisoning is one of the causes of stuttering. While that is a fact for some (including this writer) it is a theory for others. Regardless of which camp one is in what follows may be of interest.

Plagues and epidemics are remembered for the suffering they caused. Victims often had fever, sores, and rashes and perhaps they died. But there was an epidemic in the United States and elsewhere that had none of these, and only by retracing events did experts learn that a scourge had even taken place. Had they not done so, had they failed to find a cause for the effect, the events that came to define chronic lead poisoning [Note 1] in the Twentieth Century would have passed into history unnoticed, disappearing without a trace. For victims of this epidemic could not be recognized walking down a street, laying in a sick room, lounging in a hospital corridor, or sitting in a doctor's office. They were never held under quarantine, and despite the fact that lead contamination can at times be passed from one person to the next, their contacts were seldom hunted down. Rather as a group, and stubbornly years to decades after they were poisoned, they could be found where such groups had never been seen before; arraigned in court on criminal charges, sitting in a dentist's chair with a mouth full of cavities, falling behind in academic studies, made objects of ridicule for a stuttering speech defect, failing to achieve the American Dream. For once poisoned, the Dream was reached only by a lucky few despite opportunities afforded to, and hard work and desire from, the many who failed. It is a measure of how little we understood disorders of human behavior that more than 60 years into the Century had passed before the Nation [USA] began to awake to the epidemic's terrible toll.

Since Antiquity cases of lead poisoning have occurred sporadically but never in the numbers seen during the first half of the Twentieth Century, when industry used lead in enormous quantity. As the Century dawned, one of its first poisoning victims was surely a young boy born in 1895 in Norfolk, England. Raised in a well-to-do family his father was an avid hunter of game birds and introduced his sons to the sport. It is reported that the father killed as many as 1,000 birds in a single day with a shotgun and participated in hunts that killed as many as 30,000 in a year. (Rose 1983, Gore 1949) This he did year in and year out until in old age he could no longer shoulder a gun. Such activity, reported by more than one biographer and occurring at a time when there was little appreciation of the dangers of lead, would have required huge quantities of lead shot. In turn lead would have contaminated game meat posing a danger to all who consumed it. Together with the repeated cleaning of guns and other contaminated equipment, the father's obsession would have set the stage for the random dispersal of lead, as dust, residue, and fragments, over a wide area impacting both people and place. It does not take much imagination to appreciate the dangers a young



child would have faced when placed in such an environment. Readers of biographical texts (Bennett 1958) will find terms describing the son's health as a young child and teenager, terms such as "...stammering...chronic stomach trouble...gastric complaint...weight loss..." (Bennett 1958, pps.17&84); "...high strung, easily excitable, and nervous..." (p.27); "...acute depression, outbreaks of anger..." (p.27), as well as learning difficulties experienced as a student (p.32). These conditions individually can have more than one cause but together they make a practically unassailable case for lead poisoning, particularly in view of the father's hunting obsession and its connection to lead. Thus did Albert George Windsor, the son, fall victim to a hazard of the industrial age. And on May 12, 1937 following the abdication of his brother, he became King George VI of England, the subject of the film biopic "The King's Speech".

Stuttering, a common problem in the Twentieth Century until its final quarter, defied efforts to discover the cause although many theories were advanced. Speech clinics sprang up to conduct research and treat affected individuals. One such clinic was established at the University of Iowa at Iowa City and in time that clinic came to be headed by Dr. Wendell Johnson, a speech pathologist. Beginning in the early 1930s Dr. Johnson became involved with a series of case-control studies comparing children who stuttered with those who did not. Most of the children enrolled in Johnson's second study (Study II) and many of the children enrolled in his third study (Study III) were members of a cohort born in the late '30s and early '40s. They and other members of the cohort were enumerated in the Biennial Survey of Education in the United States, 1952-'54. (Office of Education 1959a)

The Survey was compiled from data gathered from questionnaires sent to 4,966 school districts across the United States. Returns were said to be 99.44% complete. (Office of Education 1959a, p.5) ¹ Children who stuttered were included in the subgroup labeled "Impaired Speech" in the category "Exceptional Children". That category identified children with handicaps (blind, crippled, speech impediments, deaf, etc.) severe enough to warrant the attention of school officials who then worked to accommodate their special education needs. "*Special education services for speech-defective children*", wrote the authors of the Survey, "*expanded at nearly 4 times the rate of enrollment growth in public schools*" [Note 2] (Office of Education 1959a, p.2) [Note 3 (Office of Education 1959b, p.6)],... "[an enrollment increase] *that might best be described as phenomenal*" (Office of Education 1959a, p.14). Since exceptional children were not enumerated in every biennial survey, results from the 1952-'54 Survey could not be compared to those from the 1950-'52 Survey, but could be compared to the 1946-'48 Survey. When that comparison is made special education services for speech-defective children grew 68% overall, and 480% in the number of students with speech defects enrolled in special education in the secondary grades. (Office of

¹ ibid, Biennial Survey 1952-'54, page 5



Education 1959a, pps.8&14) The 1952-'54 Survey identified children as being either in "elementary" or secondary" grades, although *"it is likely"*, wrote the authors, *"that the majority of secondary school children in this study are in junior rather than senior high schools"* (p.6). Children in those grades had been born near the start of a decade that would, due to the crush of war, see heavy, chaotic, and often dangerous use of lead, made worse by ignorance, in industries of all types. Children whose parents worked in these industries were placed at risk from lead dust and residue brought home on clothing and person. Reflecting on the ongoing sorry state of industrial hygiene in the lead trades at the end of the 1940s Dr. Robert Kehoe, the most influential occupational physician of his day, observed that the demands of World War II had led to *"a large and abrupt increase in the number and volume of lead-bearing materials and commodities. Under such circumstances production schedules [likely took] precedence over precautionary measures,...lead exposure may well have increased by an increment that...[was] disproportionate to increases in production...[there was an] increased frequency of failures of plant equipment under the stress of production schedules...[there were] mistakes and failures of inadequately trained personnel...inadequacies in supervision...deficiencies in plant housekeeping"*. (Patty 1949, pps.644-645)

The demographic bulge that began in the late '30s and early '40s and grew to almost half a million children with speech defects requiring special education, appeared to slow if not peak by 1958. (Office of Education 1959c, p.3) [Note 4] The 1956-'58 Survey showed a reversal in enrollment rates (in the neighborhood of -20% to -40% when compared to the +480% gain seen in the 1952-'54 Survey) for children in the secondary grades. (Office of Education 1959c, p.12) Enrollment in special education of speech-defective children in the elementary grades continued to show high double digit growth however. (p.11) Enrollment figures in the 1952-'54 Survey were also broken out by state. These figures can be compared by dividing the number of children with speech problems (as reported) by the total number of children in the same age bracket, by state. Since most of those in the secondary grades were said to be in junior high school, children in elementary through secondary grades would have been in the 5 to 14 years age bracket roughly. The total number of children in New York State, for example, in this age bracket in 1950 was 1,987,210. (1950 US Census) Using this figure as the denominator and 84,483 (the number of special education speech-impaired children in both elementary and secondary grades in New York) as the numerator, a rate is established. After ranking, the ten states with the largest percentage of speech-defective children determined in this manner were, in descending order, New York, Rhode Island, California, Illinois, Michigan, Missouri, Wisconsin, Indiana, Pennsylvania, and Florida. With the exception of Florida all had supported the war effort with heavy industry: communication cable manufacturing, national defense plants, mining of metal ores, smelting, shipbuilding and repair, munitions, foundries, and mills. All of this activity continued after the war to a greater or lesser extent, and all of it involved some combination of the mining, milling, smelting,



handling and shipping of lead. Florida's place in the ranking may have stemmed from its limited ship-building industry, a very large military presence in the State during the War with the accompanying use and repair of munitions, and its demographics, namely a greater level of lead use and exposure among Central American/Caribbean immigrants as was suggested by a recent survey. (CDC 2013) At the opposite end of the ranking were 10 states that had the lowest rates of speech-impaired children. [Note 5] These states had mainly contributed to the war effort in ways that did not involve heavy industry or the mining of metal ores. They were: South Carolina, South Dakota, West Virginia, Maine [Note 6 (Wikipedia 2016a)], Arkansas, New Mexico, Montana, Mississippi, Alabama, [Note 7 (Wikipedia 2016b)] and Vermont.

The conclusion that lead exposure can lead to speech impediments in children is reinforced when the distribution of colleges and universities offering undergraduate or post-graduate degrees in speech correction in the 1950s (Mackie and Dunn 1954) is examined and compared to the population each program nominally served (its constituency). If it were assumed (correctly or not) that the frequency of speech disorders requiring correction was roughly equal across constituencies, then the size of a program would have been dictated solely by the size of its constituency, that is, the number of children under the age of 15 living within a pre-defined distance from the institution. [Note 8] Although a few adults and older children may have been clinic patients as well, most would have been younger. And while an occasional patient and/or family may have been willing to travel outside a service area to reach a distant clinic on a recurring basis, this would have been beyond the means of most. Most would have expected to travel to clinic, be evaluated, receive therapy, and return home in a single day.

Speech clinics were needed to train students and offer assistance to patients. The greater the demand for clinical services the larger and more numerous the clinics. More clinics meant more training opportunities for more students who in return helped staff the clinics. Clinics needed students (to help manage the flow of patients) as much as students needed clinics (to acquire competency in their profession). And just as the number and size of clinics was an indicator of demand for services, the number of students in a program was likewise an indicator. One method of comparing demand across programs is to construct a ratio for each with the number of students in the program (graduate and undergraduate) as the numerator and the number of constituents the denominator. The resulting fraction, reduced to a decimal and read as students per constituent, adjusts for differences in the size of constituencies and can serve as a basis for comparison. The assumption is that the larger the value of the decimal fraction the greater the demand relative to the size of the constituency.

Despite the fact that Northwestern University in Chicago operated the largest program by far offering degrees in speech correction during the 1950s, [Note 9 (Mackie and Dunn 1954) (1950 U.S. Census)] that was not the program that satisfied the largest demand for clinical services relative to the size of the constituency. That honor went to three other programs, the



Municipal University of Wichita (now Wichita State University) [Note 10 (Mackie and Dunn 1954) (1950 U.S. Census)] in Wichita Kansas, which headed the list by a good bit, the University of Wisconsin, and the University of Utah. It is particularly instructive to look at Wichita.

Wichita Kansas lies downwind from the northwest corner of the Tri-State Mining District, which includes portions of Missouri and the southeastern corner of Kansas, and from the site of the now closed zinc smelter in Blackwell, Oklahoma, just 60 miles south of Wichita. Blackwell was at one time the largest zinc smelter in the U.S. (irock@4grc.com 2009, Wikipedia 2016c) Tri-State was the great lead and zinc mining and smelting area of the United States. Lead is still being mined in Missouri. Beginning in about 1870 zinc smelters began populating southeastern Kansas, in an area the center of which today is about a 3-hour drive from Wichita. Lead and zinc are often mined together and the resulting zinc ore contains lead as an impurity. Thus lead is always found in the waste slag produced by zinc smelters and lead impurities spewed from their smoke stacks when the smelters were active. All of the smelters, 15 at last count all in or very close to the southeast corner of Kansas, have long been abandoned, some for more than 100 years. While some of the slag piles have recently been cleaned-up, others are eroding to dust allowing heavy metals to become airborne and enter the water. (Junge and Bean 2006) Prior to reclamation efforts the piles collectively were many acres in size and scattered over hundreds of square miles, abetted by the repurposing of slag material for road construction in some areas. (Kansas Geological Survey 2005)

These stories are among the many thousands from the front lines of the lead poisoning epidemic of the last century. Most will never be told because poisoning was never suspected. But thanks to the power of the Internet with help from America's libraries and archives, one story, inspired by published research that sat neglected on a library shelf for more than 50 years, is having its day in the sun. If that story, now a blend of fact and conjecture, should someday be proven true, it would offer a sad footnote to our nation's history, one that has never come to light until now. Here is the conclusion to that story that began in the 1930s with Dr. Wendell Johnson at the University of Iowa.

After completing their studies in the mid-1950s Johnson and his associates published their findings in a book, The Onset of Stuttering: Research Findings and Implications (Johnson 1959) in March 1959. Each of the over eight hundred multiple-choice questions used to query parents of the approximately 400 children who participated in the studies, together with the answers they gave (collectively known as the "data"), were included in the book as a 240-page appendix, almost half the book.

As a rule researchers maintain tight control over their data so that they are able to defend them on their own terms. On the face of it, Johnson's situation was no different. He and his associates knew the data's nuances and the thinking that lay behind the wording of each



question. They had worked to validate the research model, raise the money, train the work force, meet the deadlines, identify and recruit study subjects, choose the statistical models, and consult with others engaged in the same field of study. The process of generating the hypothesis, designing the questionnaires, validating them, field testing them, administering them, recording the answers, coding them, entering the codes on IBM punch cards, checking the cards for accuracy, and generally trouble-shooting the many problems that normally arise in this type of endeavor, collectively took hundreds of hours and thousands of 1950s' dollars to accomplish. To include, at considerable expense, a data appendix of this length and detail in a scientific publication and then to issue an invitation [Note 11 (Johnson 1959)] to anyone who happened to walk by to analyze and interpret the data in any manner they saw fit, is unheard-of in both instances and more to the point is not done...unless there is a compelling reason.

Ultimately why they chose to publish in this manner is unknowable prompting speculation. To begin, given the effort and expense involved not to mention loss of control over the data, it is unlikely that they released it to the public out of kindness, on a whim, or to satisfy their own curiosity. It is more likely that they saw in the data something that troubled them, enough to make the extraordinary effort they did to bring it to the public's attention. And what they may have seen was a link between stuttering and lead poisoning. By the 1950s much was known about lead poisoning in children. In addition to published research that connected hyperactivity [Note 12] (Winters 1956, Thurston et al 1955) [Note 13 (Klebanoff et al 1954)], delayed speech and speech impediments with lead poisoning [Note 14 (Mellins and Jenkins 1955)] [Note 15 (Mellins and Jenkins 1957)] [Note 16 (Byers and Lord 1943)], Cecil and Loeb's (1955) Textbook of Medicine and Mitchell-Nelson's Textbook of Pediatrics (Nelson 1950) identified constipation, (Cecil and Loeb 1958 p.538) emotional irritability, academic difficulties, sleeping difficulties, (Nelson 1950 p.755) psychological impairment, (Nelson 1950 p.756) muscular incoordination, (Nelson 1950 p.755) attention deficit, (Cecil and Loeb 1958, p.538) poor appetite, and lack of self control. (Nelson 1950 p.755) These findings and more were in evidence in the stuttering children enrolled in Johnson's studies.

Under normal circumstances Dr. Johnson and his colleagues would have brought their suspicions to the attention of others in their field; sought collaboration with experts in lead poisoning; done further testing on the children; counseled the families; designed and conducted additional studies; presented their data at meetings; sought the support of the medical community. And although one or more of these events may have occurred there is not a hint in either the book or in the medical literature that suggests that happened.

But the 1950s were not normal times in Iowa or elsewhere. America's cold war was raging and the crown jewels in the Country's strategy of nuclear deterrence were the factories that manufactured nuclear bombs and missiles. (Shiman 1997) Two such facilities, the Burlington Atomic Energy Commission plant near Burlington Iowa [Note 17], at one time the Country's



only nuclear weapons production facility (Carroll 2000), and the Rock Island Arsenal in Rock Island Illinois, near the Iowa border, were within 70 miles of Iowa City. The grounds of the two facilities are widely acknowledged to have been contaminated with lead from industrial waste; lead paint, lead coatings, the milling, machining, and burning of lead and lead alloys and, for the Burlington plant, the legacy of conventional lead-bearing ordnance. [Note 18] (Bricka et al 1994, ATSDR 2010) Clearly the wage earners of the families of at least some of the children who stuttered (and perhaps most of them) worked at the plants, as they were the largest employers in the area by far.

To threaten a production slowdown at facilities that at the height of the Cold War were feverishly manufacturing nuclear weapons for national defense, over safety concerns stemming from an uncorroborated finding based on "soft science" [Note 19 (Wikipedia 2016d)], that lead brought home by parents (who themselves seemed fairly healthy [Note 20] on clothing, shoes, skin, hair, etc., (Baker and Landrigan 1971, Pueschell 1996, Woodcock 1977) was poisoning children, at a time when paranoia and fear of Communist aggression were running riot in Washington and elsewhere, would almost certainly have been viewed as political suicide. [Note 21 (Fuortes 2006)] [Note 22 (Carroll 2000)] Given this reality Wendell Johnson may well have been advised that for the good of the University as well as for the sake of his own job to reveal his suspicions to no one.

Assuming that happened it would have left Dr. Johnson and his colleagues with an ethical dilemma. If the data of interest suggested that lead poisoning could cause stuttering in children, how could they get that message out to the world, inspire further study, and still keep their jobs? One guess is that they hit on the idea of hiding the data of interest in plain sight by publishing as an appendix much of their research database, which included the data of interest. Under the sheer weight of an enormous amount of data the appendix would have, to the uninformed reader, dissolved in a blur of numbers allowing the data of interest to, in effect, fade from view if not disappear entirely.

Farfetched? Perhaps. But in 1959 Wendell Johnson inexplicably and uncontestably issued a challenge in the form of a riddle to readers of an otherwise dry scientific treatise. In it he suggested that unspecified data in the Appendix contained information not identified or discussed anywhere in the book. Without giving any hints he invited readers to search for the data and, in his own words, consider the "implications" of any information found. More than 50 years later a search of the Appendix was undertaken following his suggestion. And as was hinted, data in the Appendix do indeed reveal information not mentioned anywhere in the book. A full decade or more before serious research began on the effects of lead in children, the data provide strong evidence that some or all of the children who stuttered had lead poisoning.

Because the history of chronic lead poisoning is one of obfuscation, suppressed information, and missed opportunities, narratives such as these require assumptions and extrapolations of



necessity. Without these "leaps of faith" the story would go mute, threatening to repeat itself at some future date. In spite of the uncertainties inherent in the telling, each of the narratives rests on one or more truths: the Cold War was a time of terror and repression for many despite the economic gains of the '50s; children's rights as research subjects were abridged (see Hornblum 2013); lead exposure and poisoning at ammunition plants was a fact of life; children were poisoned by lead brought home on parent's clothing from work; Johnson's data do show very consistent evidence of a link between lead poisoning and stuttering [Note 23]; research in the social sciences was discounted by those in medicine and the other "hard sciences"; researchers do protect their data from unauthorized use as a rule; King George VI, "the stuttering King", did show evidence of lead poisoning; concern about the effect of lead poisoning on speech in children was in evidence by the mid-'50s, and Dr. Johnson did hint in the preamble that data in the Appendix contained unrevealed information. Which if any of the truths relevant to the Iowa experience figured into Johnson's decision to publish the Appendix, and whether in fact he suspected that a link existed between lead poisoning and stuttering, are matters for debate.

Notes:

1. The definition of lead poisoning has been debated for almost a century. Today, any amount of lead in children is thought to be unacceptable.
2. The number of elementary school children enrolled in special education programs for the speech impaired was 254,179 for the 1952-'53 school year, amounting to 65% of all children enrolled in special education programs for the year. For children in secondary school (mainly junior high school) the figures were 52,568 and 48%.
3. In 1959 Johnson estimated the prevalence of speech disorders per 1000 children at 25 for "articulation problems" and 7 for "stuttering". These numbers were at least 7 fold greater than the next most frequent speech disorders, "voice problems" and "fluency and rate problems". Only disorders rated as "severe" were counted. (Office of Education 1959b, p.6). The pathologic process behind all of these disorders may in fact be one and the same, differing only in the precise location of the brain injury. Damage to the brain's basal ganglia has been observed both in individuals who stutter and in those known to have had lead poisoning. And although research has never attempted to link the two, this suggests that damage to the basal ganglia from lead poisoning could be causative for speech disorders.
4. Statistics of Special Education for Exceptional Children and Youth, 1957-'58, p.3. This was the final statistical report of the: Biennial Survey of Education in the United States, 1956-'58, Chapter 5.
5. Differences in the states' abilities to fund special education would not appear to explain the rankings. When total tax revenue for each group of 10 states was divided by the total number of residents in the group, the bottom grouping of 10 differed from the top grouping by only \$4 per state resident. Furthermore, special education teaching loads for those handling speech impaired children were considerably lower for the bottom 10 than for the top 10 states in the ranking. This is the reverse of what would be expected were funding an issue.



6. Seventeen percent (17%) of children aged 5 to 14 in Maine lived in Cumberland County. However 91% of Maine's speech defective children enrolled in special education lived there, all in South Portland. South Portland was the home of Todd-Bath and South Portland shipyards, which during the War built 266 ships for the War effort (Wikipedia 2016a)
7. Seven percent (7%) of children in Alabama aged 5 to 14 lived in Mobile County. However 16% of Alabama's speech defective children enrolled in special education lived there. Mobile County was the home of Alabama Drydock and Shipbuilding Co which during the War built 123 ships for the War effort. (Wikipedia 2016b).
8. The maximum distance was arbitrarily set at approximately 100 miles (200 miles round trip) although adjustments were made if programs were adjacent. Adjacent programs tended to be in areas of high population density. One hundred miles was estimated to be what a young family with children could manage if they were to travel to clinic for an appointment, be seen, eat meals, return home in a single day, and do this on a repeated basis. In the case of adjacent programs the distance was as little as 35 miles (70 miles round trip). Adjustments in distance were made in an effort to avoid counting constituents twice due to overlapping program service areas. The availability of U.S. Census data by county necessitated interpolation when estimating population size based on precise distance from a point.
9. Six colleges and universities in Northern Illinois offered degrees in speech correction; Northwestern, Bradley, Normal, Elmhurst, College of St Francis, and Northern Illinois Teacher's College. Together they had 350 students enrolled for the 1953-'54 school year, and together they served a constituency estimated at 1,972,119. For the same school year Northwestern had 236 students enrolled, and within a 25 mile radius of the school served a constituency estimated at 1,237,267. (Enrollment figures from Mackie and Dunn 1954, Appendix A". Demographics from 1950 U.S. Census).
10. Wichita Municipal had a student enrollment of 80 in speech correction for the 1953-'54 school year, serving a constituency estimated at 289,059. (Enrollment figures from Mackie and Dunn 1954, Appendix A". Demographics from 1950 U.S. Census).
11. In the preamble to the Appendix (Johnson 1959), Dr. Johnson wrote, "*the main purpose of making the findings [of Studies II and III] available in this detailed fashion are to allow essential reference to them in the body of the report and to encourage further evaluation of them and continued development of their implications, not only by students of the stuttering problem but also by...medical investigators and others.*"
12. Hyperactivity is sometimes referred to as "restless"; "hyperkinetic"; "overactive".
13. Although the review paper (Klebanoff et al 1954) does not address lead poisoning it does address brain damaged children. It had long been known by the 1950s that lead poisoning in children could result in anatomically demonstrable brain damage. "*Descriptive studies of the motor performance of [traumatically brain damaged children], wrote the authors, "characterize them as hyperkinetic, overactive, restless, impulsive, and incoordinated."*
14. Mellins and Jenkins (1955) is a case study of 21 children, 7 of who were found to have serious impairment of speech and language as a result of lead poisoning; from page 18, "*it appeared from the behavior of the children during the test sessions that some knew what they wanted to say but could not express it vocally. They seemed frustrated by this inability to verbalize.*"



Six had speech impediments acquired during the acute illness. Others, though they had no speech impediment, did not talk much."

15. Jenkins and Mellins (1957) is an extension of the Mellins and Jenkins (1955) study published in J.A.M.A. in 1955; from page 75, *"two years following hospitalization the damaging effects of lead can still be seen, especially in impaired speech..."* [18 of the 46 cases had acutely impaired speech].
16. In a study by Byers and Lord (1943), several of the children had delayed or poor speech following lead poisoning.
17. The Burlington factory (originally, and again later, known as the Iowa Army Ammunition Plant) began manufacturing ordnance early in WWII. After the war the plant took on the additional role of manufacturing and assembling nuclear weapons. Growing the Country's nuclear arsenal was a top priority for Washington during the 1950s and a key part of the Nation's strategy of nuclear deterrence. Lead contamination of the grounds at the sprawling manufacturing facility has been widely acknowledged.
18. Whether occupational lead poisoning occurred at this plant is not known. However, lead poisoning occurred commonly in workers at ammunition plants in Indiana, Kansas, and Illinois (letters on file, file boxes 79, 36, and 43; at the Robert A. Kehoe archive, Henry R. Winkler Center for the History of the Health Professions, University of Cincinnati Libraries, Cincinnati, Ohio).
19. "Soft science" was a derogatory term sometimes used by researchers in the "hard sciences" (medicine, physics, chemistry, engineering, etc.) to describe research done in the social sciences (sociology, psychology, speech pathology, public health, etc.). "Soft" was in reference to the belief by some that social science research "endpoints", often gathered from questionnaires (e.g., the number of times a "yes" response is recorded versus the number of times a "no" response is recorded is an example of an endpoint), could not be dispassionately reproduced with the reliability and accuracy of, say, a blood pressure or temperature measurement. Acknowledging this as a weakness, social scientists, Johnson and his associates included, employed techniques that specifically addressed this problem. These included the use of "interlocking" questions (seeking exactly the same information using two or more differently worded questions), finely honed interviewing techniques, reducing distractions by interviewing study subjects individually, testing the same research hypothesis in two or more studies, seeking exactly the same information from two or more study subjects and then comparing answers, etc. Parenthetically, much of the research of the effect of cigarettes on health was the work of social scientists.
20. Although this is an assumption it is probably a safe one to make. Compared to children adults can tolerate a significantly higher dose of lead before poisoning becomes blatantly obvious. However even today the health effects of long-term exposure to low doses of lead in young and old alike are incompletely understood.
21. In testimony before Congress in 2006, Dr Lawrence Fuortes, (Fuortes 2006) Professor of Public Health at the University of Iowa gave comment on working conditions at the Plant in the 1950s; *"These workers labored under a great weight of secrecy.... [They and their families] said at first that the government was only waiting for them to die. Sadly the facts and history appeared to bear this out. The impression among many workers and their*



families is that the workers had been put at risk, made ill, and died as a result of their work, yet the government was merely going to stall and deny."

22. Dennis J Carroll, a reporter for the Boston Globe, interviewed former Plant workers in 2000. His report appeared in the Globe on May 29, 2000. Mr. Carroll wrote, "Vaughn Moore, a former guard at the plant, painted a dark picture of conditions at the plant. *'Talking about your work was strictly taboo. Back in them days, they would tell you, 'Run your mouth and you're going to Leavenworth Penitentiary', said Moore. 'They had 15 FBI agents stationed in this town', he said. 'All they did was run around in bars listening, grocery stores listening. They knew what clubs you belonged to, they knew where you ate, they knew where you went fishing. They knew all about you', Moore said. 'They knew more about you than you knew about yourself.'*" (Carroll 2000)
23. To read a description and analysis of the evidence, written by the current author, go to http://www.lead.org.au/bellsystemleadpoisoning/images/Johnson_analysis.pdf

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How does lead exposure affect our eyes?

By Daisy Shu, Optometry student, University of New South Wales, Australia, January 2010. This version edited by Elizabeth O'Brien, November 2016.

GLASS provides information & referrals on lead poisoning & lead contamination prevention & management, with the goal of eliminating lead poisoning globally & protecting the environment from lead. GLASS is run by The LEAD Group Incorporated ABN 25 819 463 114



Introduction

Lead exposure is known to disrupt a myriad of body processes due to its toxicity to our vital organs, particularly our bones, heart, kidneys and nervous system¹. However, there has been scarce research into its effects on vision, a fundamentally cognitive process. Due to the direct association between our eyes and the central nervous system (CNS), there is no doubt that the ability of lead to hinder the development of the nervous system will inevitably affect our vision. Studies have shown that lead exposure can result in a reduced sensitivity of rod photoreceptors², blurred vision³ and irritated eyes⁴ as well as an increased susceptibility to cataract⁵ and optic neuritis⁶. [Photoreceptors: A nerve ending, cell, or group of cells specialized to sense or receive light. www.answer.com Rods are not sensitive to colour, unlike cones, but are many times more numerous than cones, and more sensitive to light.]

Scotopic visual deficits

Human vision is brought about by the photoreceptors of the retina, namely the rods and cones. Cones are responsible for vision under high light levels whilst scotopic vision, which is vision under dim lighting, is mediated by the rods. Fox and Katz² conducted an electrophysiological study on rats, revealing long-term changes in the sensitivity of rods following low and moderate lead exposure (peak blood lead of 19 and 59 $\mu\text{g}/\text{dL}$, respectively)². Electroretinographic (ERG) observations show that such alterations are present at the level of the retina. They found an increase in rod outer segment (ROS) calcium, a decrease in rhodopsin content (photopigment found in rods) per eye and reduced rod sensitivity in the dark adaptation function suggesting that rods are directly and selectively influenced by lead². Evidently, lead can severely affect the ability of our eyes to function under dim light conditions, particularly in adapting to the dark.

The development of the CNS and retina occur during gestation in humans and hence lead exposure during this period can have a detrimental effect². A study on rhesus monkeys by Bushnell et al⁸ revealed that lead exposure of 85 $\mu\text{g}/\text{dL}$ during the first year of life impaired



visual discrimination under dim lighting compared to their performance under bright light. Although the study was conducted on animals, the data has consequences for children exposed to high lead levels during development. It has been suggested that temporary blood lead levels in the vicinity of $200\mu\text{g}/\text{dL}$ early in life and chronic exposure at $85\mu\text{g}/\text{dL}$ subsequently can cause similar impairments of scotopic vision in humans⁸.

Lead intoxication induces a harmful, chronic impairment of the vision needed under dim lighting, a condition known as night blindness⁸ and it has been proposed that this may occur via damage originating from the brain. Rods are quite poorly represented at an area of the brain responsible for vision, called the visual cortex, as there is much less neural tissue dedicated to processing its information compared to the cone photoreceptors⁸. Since lead induces brain damage via demyelination⁸, which is the loss of the myelin sheath around nerve fibres, deficits in the visual system will be likely to appear first in rod-mediated vision.

Susceptibility to cataract

Cataract is a clouding of the crystalline lens of the eye, causing an obstruction in the passage of light to our retina. Schaumberg et al⁵ found that cumulative lead exposure can increase the risk of age-related cataract. They measured bone lead levels in the tibia and patella of a selection of men aged 60-93 years old (mean age of 69) from Boston⁵. It was found that men with the highest levels of lead in the tibia ($7.78 \pm 4.85 \mu\text{g}/\text{dL}$) had a greater than 2.5-fold increased risk of cataract compared to men with the lowest tibia lead levels ($4.49 \pm 2.65 \mu\text{g}/\text{dL}$)⁵. After controlling for age, the approximated attributable fraction of cataract in this population due to lead exposure was 42%⁵.

Lead has been found to be present in lenses with cataract in various studies⁹. It is thought that the invasion of lead into the lens may alter its redox status and cause conformational changes in protein, hence reducing lens clarity⁹. Lead is known to disrupt glutathione metabolism in the lens⁹ and raise the protein-bound glutathione and cysteine content⁵. Moreover, lead can hinder the biological balance of calcium in our system, that is, the calcium homeostasis, which is vital in maintaining lens transparency⁹. Evidently, many studies reveal that lead may be present at higher concentrations in cataractous lenses compared to transparent lenses^{5, 9-11}. [redox: a reversible chemical reaction in which one reaction is an oxidation and the reverse is a reduction. The Free Dictionary]

Other visual symptoms

Since ancient times, lead poisoning has been found to cause damage to the visual system and even blindness in humans and animals⁶. These effects are collectively termed as “optic atrophy” or “blurred vision”, appearing only in cases of lead poisoning severe enough to cause brain damage⁵. The importation of lead in wine-making, cookery, and jewellery into Rome’s



aristocracy circa 150 BC may have contributed to its ultimate ruin and decay⁶. Classical authorities on medicine at the time described symptoms of deteriorating eyesight due to optic neuritis, which is an inflammation of the optic nerve⁶. Moreover, lead was also found to potentially result in amaurosis which is the loss of sight due to disease of the optic nerve or brain without pathology of the eye itself⁶.

More recently, lead exposure has been implicated in ocular neuritis in children which renders them either visually impaired or permanently blind¹². Gibson found that cases of optic neuritis were often accompanied by an increased intracranial pressure which seemed to directly irritate the optic nerve head¹³. Hence he coined the condition as “ocular plumbism” believing it to be due to swelling rather than inflammation¹³. Lead-induced blindness, albeit a now rare and often transient phenomena, can be quite startling, emphasizing the burden of lead on our well-being.

Other visual symptoms have been documented, including strabismus and double vision noticed in a child with lead poisoning in a public health report on Queensland children¹⁴. [“Strabismus: a condition in which the eyes do not point in the same direction. It can also be referred to as a tropia or squint.” www.answer.com]

It has been suggested that the increased intracranial pressure induced by lead exposure can also cause paralysis of the external recti [straight] muscles involved in eye movement¹². This may contribute to strabismus, and consequently, double vision, due to the lack of fixation of both eyes on a target.

Tetraethyl lead is a compound more commonly encountered in occupational conditions where it is used as an anti-knock compound in petroleum, including leaded Aviation Gasoline or AvGas³. Exposure to tetraethyl lead can cause symptoms of redness and pain in the eyes, as well as blurred vision³. Moreover, it can irritate the eyes and result in a potential loss of vision⁴.

Vision-related cognitive deficits

Various studies suggest that cumulative lead exposure is related to many chronic disorders of aging, including cognitive decline⁵. A study conducted by Shih et al measured tibia lead levels using ¹⁰⁹Cd-induced K shell X-ray fluorescence (XRF)¹⁵. Subjects were then required to complete a series of tests including those related to hand-eye coordination, visual memory and visuoconstruction¹⁵. It was found that higher tibia lead levels significantly correlated with poorer vision-related cognitive functioning¹⁵. [“Visuoconstruction abilities involve the coordination of fine motor skills with visuospatial abilities, usually in the reproduction of geometric figures. This domain looks not only at the individual's aptitude for copying a figure, but how well planned and organized that figure is. Individuals who have difficulties



with visuoconstruction and spatial abilities often struggle with daily tasks such as arithmetic, driving, and writing.” http://www.advancedpsy.com/visuoconstruction_abilities-page-25.html]

Prevention of lead-induced damage to the eyes

Lead contamination is widespread in our environment, primarily due to leaded petroleum and lead-based paint, causing practically every adult to have amassed some degree of lead in their system⁵. In industrial settings, avoiding lead exposure of pregnant women, adolescents and children is particularly crucial³. Other preventative measures include avoidance of generation of mists³ [e.g. liquid droplets of an acid in the sulphuric acid works of a lead smelter], adherence to strict hygiene rules and implementation of eye wash fountains in the immediate work area⁴. Eye protection such as splash and impact resistant goggles as well as face shields is also necessary⁴. It is advised that contact lenses should not be worn when working with tetraethyl lead⁴.

Prevention of the lead-induced visual disorders remains an important public health goal, and can only be achieved by reducing the distribution of lead in our environment. Through public health campaigns and the enforcement of stringent lead contamination policies, the burden of lead can be significantly reduced.

Treatment

Cataract is commonly treated by surgery which involves removing and replacing the opaque crystalline lens with a plastic intraocular lens (IOL). In Australia, expenditures for cataract surgery cover the largest single line item in the Medicare budget⁵, revealing the serious financial burden which lead has contributed to.

Other causes of cataract: “There is some evidence that long-term exposure to sunlight, tobacco, and heavy alcohol consumption may be associated with cataract formation. Some research suggests that people who have a low dietary intake of fruits and vegetables, vitamin C and E and betacarotene are also at higher risk of the disease. Systemic diseases such as diabetes and vascular disease may increase the risk of cataract development, as may eye injury or the use of some medications, including corticosteroids.”

<http://www.health.gov.au/internet/eyehealth/publishing.nsf/Content/commonprob>

Treatment of irritated and red eyes includes the application of lubricant eyedrops.

Conclusions

Although progress has been made in limiting lead exposure in industrialized countries, most individuals have already accrued a considerable body burden of lead⁵. Further research into the effects of lead on vision is particularly needed, especially considering the recent finding of accumulated lead exposure as an unrecognised risk factor for cataract⁵, the leading cause of



global blindness and visual impairment¹⁶. [As a case in point, the national eye health awareness campaign of the Australian Department of Health and Aging, quoted from above, under “other causes of cataract”, does not mention lead exposure as a cause of cataract.]

Research suggests that reduction of lead exposure could help decrease the global burden of cataract. Future investigations into the potential of decreasing the risk of cataract may involve prompt treatment of lead poisoning using chelation therapy. Furthermore, the selective rod deficits resulting from lead exposure during gestation and in perinatal development⁶ should help raise greater concern for the need to limit foetal and childhood lead poisoning.

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Cómo afecta a nuestros ojos la exposición al plomo?

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GLASS provides information & referrals on lead poisoning & lead contamination prevention & management, with the goal of eliminating lead poisoning globally & protecting the environment from lead.



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Introducción

Se sabe que la exposición al plomo interrumpe una miríada de procesos corporales debido a su toxicidad para nuestros órganos vitales, particularmente nuestros huesos, el corazón, los riñones y el sistema nervioso (1). Sin embargo, ha habido escasa investigación acerca de sus efectos en la visión, un proceso fundamentalmente cognitivo. Debido a la relación directa entre nuestros ojos y el sistema nervioso central (SNC), no hay duda que la habilidad del plomo para hacer difícil el desarrollo del sistema nervioso afectará inevitablemente nuestra visión. Algunos estudios han demostrado que la exposición al plomo puede producir una reducción en la sensibilidad de los foto receptores de los bastones (2), visión borrosa (3) y ojos irritados (4), así como crecida susceptibilidad a la catarata (5) y neuritis óptica (6). [Foto receptores: Una terminación nerviosa, célula, o grupo de células especializadas en sentir y recibir la luz, www.answer.com. Los bastones no son sensibles al color, a diferencia de los conos, pero son muchas veces más numerosos que éstos, y más sensibles a la luz.

Faltantes visuales escotópicos



La visión humana es provocada por foto receptores de la retina, o sea, los bastones y los conos. Los conos son responsables de la visión cuando hay altos niveles de luz, mientras que la visión escotópica, que es la visión cuando hay iluminación tenue, está mediada por los bastones. Fox y Katz (2) realizaron un estudio electrofisiológico en ratas, el cual reveló cambios a largo plazo en la sensibilidad de los bastones después de exposiciones bajas y moderadas (tope de plomo en la sangre de 19 y 59 $\mu\text{g}/\text{dL}$, respectivamente) (2).

Observaciones electroretinográficas (ERG) muestran que tales alteraciones se presentan al nivel de la retina. Se encontró un incremento en el calcio del segmento externo del bastón (SEB), una disminución en el contenido de rodopsina (un foto pigmento encontrado en los bastones) en cada ojo, y una reducida sensibilidad de los bastones en la función de adaptación a la oscuridad, lo que sugiere que los bastones están directa y selectivamente influenciados por el plomo (2). Evidentemente, el plomo puede afectar severamente la habilidad de nuestros ojos para funcionar bajo condiciones de luz tenue, particularmente en la adaptación a la oscuridad.

El desarrollo del Sistema Nervioso Central (SNC) y la retina ocurre durante la gestación en los humanos y por lo tanto la exposición al plomo durante este período puede tener un efecto dañino (2). Un estudio sobre los macacos de la India, por Bushnell y otros (8), mostró que la exposición al plomo de 85 $\mu\text{g}/\text{dL}$ durante el primer año de vida deteriora la capacidad de selección visual bajo poca iluminación, comparado con el desempeño bajo brillante iluminación. Aunque el estudio fue realizado en animales, las cifras tienen consecuencias para niños expuestos a altos niveles de plomo durante su desarrollo. Se ha sugerido que niveles temporales de plomo cercanos a 200 $\mu\text{g}/\text{dL}$ al comienzo de la vida y la exposición crónica a 85 $\mu\text{g}/\text{dL}$ pueden causar posteriormente impedimentos de la visión escotópica en los humanos (8).

La intoxicación por plomo induce un dañino y crónico deterioro de la visión requerida bajo iluminación tenue, condición conocida como ceguera nocturna (8) y se ha sugerido que esto puede ocurrir a través de daño originado desde el cerebro. Los bastones están muy pobremente representados en un área del cerebro responsable de la visión, llamada corteza visual, ya que hay mucho menos tejido neuronal dedicado al proceso de su información en comparación con los conos foto receptores (8). Como esto induce a daño cerebral a través de la desmielinización (8), que es la pérdida de vainas de mielina alrededor de las fibras nerviosas, déficits en el sistema visual que aparecerán posiblemente en la visión que se debe a los bastones.

Susceptibilidad a la catarata

La catarata es una opacidad de los lentes del cristalino del ojo, que causa una obstrucción en el paso de la luz a nuestra retina. Schaumberg y otros (5) encontraron la exposición



acumulativa al plomo puede incrementar el riesgo de catarata relacionada con la edad. Midieron los niveles de plomo en el hueso, en la tibia y en la rótula de un grupo de hombres en edades entre 60 y 93 años (edad promedio de 69), en Boston (5). Se encontró que los hombres con los mayores niveles de plomo en la tibia ($7.78 \pm 4.85 \mu\text{g/dL}$) tenían un riesgo mayor de 2.5 veces de catarata comparados con hombres con los menores niveles de plomo en la tibia ($4.49 \pm 2.65 \mu\text{g/dL}$) (5). Después de los controles por edad, la fracción aproximada atribuible de catarata en esta población debida a exposición al plomo fue de 42%.

Se ha encontrado plomo presente en lentes con catarata en varios estudios (9). Se cree que la invasión de plomo en los lentes puede alterar su estado 'redox' y causar cambios de conformación en la proteína, y, por tanto reducción de la claridad de la lente (9). Se sabe que el plomo altera el metabolismo del glutatión en el cristalino y eleva el contenido de glutatión y cisteína relacionada con las proteínas (5). Más aún, el plomo puede dificultar el balance biológico de calcio en nuestro sistema, esto es, la homeostasis del calcio, que es vital en el mantenimiento de la transparencia del cristalino (9). Evidentemente, muchos estudios revelan que el plomo puede estar presente en grandes concentraciones en cristalinos con catarata comparados con cristalinos transparentes (5-9-11). [Redox: una reacción química reversible en la cual una reacción es una oxidación y el retorno es una reducción].

Otros síntomas visuales

Desde tiempos antiguos se ha encontrado que la intoxicación por plomo causa perjuicio al sistema visual e inclusive ceguera en humanos y animales (6). Estos efectos se denominan colectivamente como "atrofia óptica" o "visión borrosa", que aparece solo en casos de intoxicación por plomo suficientemente severa para causar daño cerebral (5). La importación de plomo para la aristocracia de Roma para vinificación, cocina, y joyería, cerca del año 150 AC, puede haber contribuido a su última ruina y decadencia (5). Autoridades clásicas en medicina en ese tiempo describían síntomas de visión en deterioro debido a neuritis óptica, la cual es una inflamación del nervio óptico (6). Por otra parte, se encontró también que el plomo resulta potencialmente en amaurosis, que es la pérdida de la vista debido a la enfermedad del nervio óptico o el cerebro sin patología del ojo mismo (6).

Más recientemente, se ha implicado la exposición al plomo en neuritis ocular en niños, lo que los vuelve incapacitados visuales o ciegos permanentemente (12). Gibson encontró que casos de neuritis óptica estaban frecuentemente acompañados de una crecida presión intracraneal que parecía irritar directamente la cabeza del nervio óptico (13). Entonces el acuño la condición llamada "plomismo ocular" que se cree causada más bien por hinchazón que por inflamación (13). La ceguera inducida por plomo, aunque es un fenómeno raro ahora y, a menudo transitorio, puede ser bastante sorprendente, recalándose el peso del plomo sobre nuestro bienestar.



Otros síntomas visuales se han documentado, incluyendo estrabismo y visión doble observada en un niño con intoxicación por plomo según un informe sobre salud pública de los niños de Queensland (14). [“El estrabismo: una condición en la cual los ojos no enfocan en la misma dirección. Puede también ser referido como una tropía (estrabismo). www.answer.com].

Se ha sugerido que la crecida presión intracraneal inducida por la exposición al plomo puede también causar parálisis de los músculos recto exteriores, implicados en el movimiento de los ojos (12). Esto puede contribuir a estrabismo, y consecuentemente, a visión doble, debido a la carencia de fijación de ambos ojos en el objeto.

El plomo tetraetil es un compuesto encontrado más comúnmente en condiciones de trabajo donde se utiliza como un antidetonante en petróleo, incluyendo Gasolina de Aviación con plomo, (o AvGas(3), por sus siglas en Inglés). La exposición a plomo tetraetil puede causar síntomas de enrojecimiento y dolor en los ojos, así como visión borrosa (3). De otro lado, puede irritar los ojos y resultar en una potencial pérdida de visión (4).

Deficiencias cognitivas relacionadas con la visión

Varios estudios sugieren que la exposición acumulativa al plomo está relacionada con muchos desórdenes crónicos del envejecimiento, incluyendo la disminución cognitiva (5). Un estudio realizado por Shih y otros midió los niveles de plomo en la tibia usando la protección K(109) inducida, Cd, de fluorescencia de rayos X, (XRF) (15). Los sujetos debían completar una serie de pruebas incluyendo las relacionadas con la coordinación mano-ojos, la memoria visual y la viso construcción (15). Se encontró que los niveles de plomo más altos de la tibia se correlacionaban significativamente con una más pobre visión relativa a la función cognitiva (15). [“Las habilidades de viso construcción incluyen la coordinación de buenas destrezas motoras con habilidades viso espaciales, usualmente en la reproducción de figuras geométricas. Este dominio mira no solo a la capacidad del individuo para copiar una representación, sino cómo está esa figura o representación planeada y organizada.

Los individuos que tienen dificultades con la viso construcción y las habilidades espaciales luchan frecuentemente con tareas diarias como la aritmética, la conducción de vehículos y la escritura.”

http://www.advancedpsy.com/visuoconstruction_abilities-page-25.html

Prevención del daño a los ojos producido por el plomo

La contaminación por plomo es esparcida en nuestro medio, primeramente debido a la gasolina con plomo y a la pintura basada en plomo, lo que ha causado que prácticamente todo adulto haya acumulado cierta cantidad de plomo en su sistema (5). En establecimientos industriales es particularmente crucial el evitar que mujeres en embarazo, adolescentes y niños eviten la exposición al plomo (3). Otras medidas preventivas incluyen el evitar la



generación de nieblas, [por ejemplo, gotitas de líquido ácido en los trabajos con ácido sulfúrico de la fundición de plomo], a adhesión a estrictas normas de higiene y la creación de fuentes para el lavado de los ojos en el área inmediata de trabajo (4). La protección de los ojos contra el impacto de salpicaduras, así como protectores de la cara, son también necesarios (4). Se recomienda que no se usen lentes de contacto cuando se esté trabajando con plomo tetraetil (4).

La prevención de los daños a la visión inducidos por el plomo se mantiene como un importante objetivo de salud pública, y puede solo alcanzarse mediante la reducción de plomo en el medio. A través de campañas por la salud pública y la aplicación obligatoria de estrictas políticas sobre la contaminación por plomo, la carga de éste puede ser reducida significativamente.

Tratamiento

La catarata se trata corrientemente por medio de una cirugía que implica retirar y reemplazar el lente opaco cristalino por un lente plástico intraocular (IOL). En Australia, los gastos para cirugía de cataratas se convierten en la partida mayor de una sola línea en el presupuesto de Medicare (5), mostrando la seriedad de la carga financiera a la que el plomo ha contribuido.

Otras causas de la catarata: “ Hay algunas evidencias de que la exposición por largo tiempo a la luz del sol, el tabaco y alto consumo de alcohol pueden estar relacionadas con la formación de cataratas. Alguna investigación sugiere que la gente que tiene una dieta baja en contenido de frutas y legumbres, vitaminas C, E y betacaroteno son también los de mayor riesgo de la enfermedad. Las enfermedades sistémicas tales como diabetes y enfermedad vascular pueden incrementar el riesgo de desarrollo de cataratas, como puede serlo las heridas en el ojo o el uso de medicamentos incluyendo los corticosteroides.”

<http://www.health.gov.au/internet/eyehealth/publishing.nsf/Content/commonprob>

El tratamiento de ojos irritados y rojos incluye la aplicación de gotas lubricantes para los ojos.

Conclusiones

Aunque se ha hecho progreso en la limitación de la exposición al plomo en países industrializados, la mayoría de las personas ha acumulado ya una considerable carga corporal de plomo. Investigaciones posteriores sobre los efectos del plomo sobre la visión son de particular necesidad, especialmente si se considera el descubrimiento reciente que la exposición acumulada al plomo es un factor de riesgo no reconocido para la catarata (5), la causa líder de ceguera e impedimento visual (16). {Como ejemplo de ello, la campaña nacional de sensibilización sobre la salud ocular del Departamento Australiano para la Salud



y la Edad, citada de lo anterior, bajo “otras causas de catarata”, no menciona la exposición al plomo como una causa de catarata.]

Las investigaciones sugieren que la reducción de la exposición al plomo podría ayudar al decrecimiento del problema total de catarata. Las investigaciones futuras en cuanto al potencial de decrecimiento de dicho riesgo pueden implicar el pronto tratamiento de la intoxicación por plomo mediante el uso de la terapia Chelaton. Además, las deficiencias selectivas de los bastones de la vista, resultantes de la exposición al plomo durante la gestación y el desarrollo perinatal (6) ayudarían a levantar mayor preocupación en cuanto a la necesidad de limitar la intoxicación por plomo para el feto y para la niñez.

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Info Pack – Lead fact sheet series of publications by NSW EPA

List of links compiled by Elizabeth O'Brien, President, The LEAD Group Inc.

The NSW Environment Protection Authority (EPA) has in May 2016 published the following series of fact sheets at www.epa.nsw.gov.au/lead and distributed 70,000 copies to hardware stores and childcare centres in NSW. They promise to list our freecall number correctly as 1800 626 086 in the second edition of the fact sheet series!

The NSW EPA lead fact sheet series 2016:

- Fact Sheet: Lead, your health and the environment -
<http://www.epa.nsw.gov.au/resources/pesticides/lead-health-environment-fact-sheet-150719.pdf>
- Fact Sheet: Lead safety at home -
<http://www.epa.nsw.gov.au/resources/pesticides/lead-safety-home-fact-sheet-160085.pdf>
- Fact Sheet: Old lead paint -
<http://www.epa.nsw.gov.au/resources/pesticides/lead-old-paint-fact-sheet-150700.pdf>
- Fact Sheet: Lead and home renovations -
<http://www.epa.nsw.gov.au/resources/pesticides/lead-renovations-fact-sheet-150716.pdf>
- Fact Sheet: Lead in ceiling dust -
<http://www.epa.nsw.gov.au/resources/pesticides/lead-ceiling-dust-fact-sheet-160087.pdf>
- Fact Sheet: Working safely with lead -
<http://www.epa.nsw.gov.au/resources/pesticides/lead-workplace-fact-sheet-160086.pdf>
- Fact Sheet: Lead hazard management in children's services -
<http://www.epa.nsw.gov.au/resources/pesticides/lead-childcare-fact-sheet-160209.pdf>

You will also find the complete original 1990s set of “Lead Safe” publications, developed by the Lead Reference Centre (LRC), a now-defunct part of the NSW Environment Protection Authority (EPA), now on our website at http://www.lead.org.au/NSW_Lead_Reference_Centre_and_NSW_Government_Publications.pdf or find them individually in the factsheets section at <http://www.lead.org.au/fs-index.html> - where you'll see that the NSW set of “Lead Safe” publications is comprised of:

37. Lead in ceiling dust
http://www.lead.org.au/fs/Lead_in_Ceiling_dust.pdf



76. Lead, Your Health & the Environment. Available in Arabic, Chinese, English, Korean, Macedonian, Spanish, Turkish and Vietnamese PDF

[http://www.lead.org.au/fs/lead_safe/Lead Your Health & the Environment-Arabic.pdf](http://www.lead.org.au/fs/lead_safe/Lead_Your_Health_&_the_Environment-Arabic.pdf)
[http://www.lead.org.au/fs/lead_safe/Lead Your Health & the Environment-Chinese.pdf](http://www.lead.org.au/fs/lead_safe/Lead_Your_Health_&_the_Environment-Chinese.pdf)
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[http://www.lead.org.au/fs/lead_safe/Lead Your Health & the Environment-Spanish.pdf](http://www.lead.org.au/fs/lead_safe/Lead_Your_Health_&_the_Environment-Spanish.pdf)
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[http://www.lead.org.au/fs/lead_safe/Lead Your Health & the Environment-Vietnamese.pdf](http://www.lead.org.au/fs/lead_safe/Lead_Your_Health_&_the_Environment-Vietnamese.pdf)

77. Lead Safe Housekeeping PDF

[http://www.lead.org.au/fs/lead_safe/Lead Safe Housekeeping Lead Safe.pdf](http://www.lead.org.au/fs/lead_safe/Lead_Safe_Housekeeping_Lead_Safe.pdf)

78. Old Lead Paint PDF

[http://www.lead.org.au/fs/lead_safe/Old Lead Paint Lead Safe.pdf](http://www.lead.org.au/fs/lead_safe/Old_Lead_Paint_Lead_Safe.pdf)

79. Working safely with lead PDF

[http://www.lead.org.au/fs/lead_safe/Working safely with lead Lead Safe.pdf](http://www.lead.org.au/fs/lead_safe/Working_safely_with_lead_Lead_Safe.pdf)

80. A Renovator's Guide To The Dangers Of Lead (Brochure 30 pages) PDF

[http://www.lead.org.au/fs/lead_safe/A Renovator Guide To The Dangers Of Lead Lead Safe.pdf](http://www.lead.org.au/fs/lead_safe/A_Renovator_Guide_To_The_Dangers_Of_Lead_Lead_Safe.pdf)

81. A Guide For Health Care Professionals (Brochure 34 pages) PDF

[http://www.lead.org.au/fs/lead_safe/A Guide For Health Care Professionals Lead Safe.pdf](http://www.lead.org.au/fs/lead_safe/A_Guide_For_Health_Care_Professionals_Lead_Safe.pdf)

82. A Guide To Keeping Your Family Safe From Lead (Brochure 20 pages) PDF

[http://www.lead.org.au/fs/lead_safe/A Guide To Keeping Your Family Safe From Lead Lead Safe.pdf](http://www.lead.org.au/fs/lead_safe/A_Guide_To_Keeping_Your_Family_Safe_From_Lead_Lead_Safe.pdf)

83. Lead Hazard Management In Children's Services (Brochure 15 pages) PDF

[http://www.lead.org.au/fs/lead_safe/Lead Hazard Management In Childrens Services.pdf](http://www.lead.org.au/fs/lead_safe/Lead_Hazard_Management_In_Childrens_Services.pdf)

89. Lead and Home Renovations PDF

[http://www.lead.org.au/fs/lead_safe/LRC Fact Sheet-Lead and Home Renovations.pdf](http://www.lead.org.au/fs/lead_safe/LRC_Fact_Sheet-Lead_and_Home_Renovations.pdf)

The Development Control Plan (DCP) for lead was also developed by the Lead Reference Centre (LRC) and can still be found online on the NSW EPA website at:

<http://www.environment.nsw.gov.au/resources/pesticides/o3004managinglead.pdf>



The above link to the DCP (full title: “Managing Lead Contamination in Home Maintenance, Renovation & Demolition Practices. A Guide for Councils”) is available as the “EPA Lead Guide for Councils Section 1 - Management of lead contamination” from The LEAD Group’s Council Lead Project (CLP) ToolKit at http://www.lead.org.au/clp/lstkstep_3.html

There are also many other valuable fact sheets by The LEAD Group Inc – environmental health charity – at <http://www.lead.org.au/fs-index.html> and the world’s largest online searchable lead library is accessible via the yellow highlighted link at the top of that webpage.



Info Pack - Managing lead hazards in childcare centres and schools

Information collated by Elizabeth O'Brien, President, The LEAD Group Inc.

The NSW Environment Protection Authority (EPA) has in May 2016 published a series of fact sheets at www.epa.nsw.gov.au/lead including a fact sheet for childcare/school operators and staff, which states:

“For further information and advice about protecting yourself from lead, testing for lead and removal services and guidelines for safe home renovation, call The LEAD Group on 1800 626 086 or (02) 9716 0014. Laboratory lead test kits are available from The LEAD Group (www.lead safeworld.com/shop)...”

See:

- Fact Sheet: Lead hazard management in children's services - <http://www.epa.nsw.gov.au/resources/pesticides/lead-childcare-fact-sheet-160209.pdf>

The original edition of the above fact sheet was a 15 page booklet (see the full series list above):

Lead Hazard Management In Children's Services (Brochure 15 pages) PDF
http://www.lead.org.au/fs/lead_safe/Lead_Hazard_Management_In_Childrens_Services.pdf - which states (on page 5):

“TESTING FOR LEAD

“Because most children and adults who have been exposed to lead show no symptoms until high levels are reached, the best way to confirm excessive lead exposure is a blood test....

(and on page 8) “If the property was built before 1970 or you suspect lead may be an issue, organise a lead audit as soon as is feasible.”

Sadly, the lead auditors who were working in Sydney at the time the above was written have stopped working as lead auditors but happily, one of them, Jason Bawden Smith donated the Lead DIY-Sampling Laboratory Testing Kit that he'd developed for his far-away clients, to The LEAD Group. This LEAD Group Kit is what the NSW EPA now recommends for testing childcare centres and schools (as well as homes and other workplaces) for lead (and other metals). Even eggs (which are grown at some preschools and schools) can be tested for lead using a LEAD Group Kit – egg preparation entails an additional cost but the LEAD Group Kit price includes laboratory analysis and reporting.



Info Pack - Renting and Lead - What residential landlords and agents should know

By Elizabeth O'Brien, Lead Advisor, LEAD Group test kit results interpretation service

I submitted the following suggestions to the Queensland RTA webmaster so keep a lookout at <https://www.rta.qld.gov.au/Renting/During-a-tenancy/Maintenance-and-repairs> for when they add useful info about lead to their site about renting:

"Your Maintenance and repairs page should list Lead-safety, and the Lead-safety page should include: when paint is flaking chalking or peeling, test the paint at a lab for lead; when a commercial property was first painted prior to 2010 or a residential property was first painted prior to 1997, test paint, soil and internal and external dust wipes at a lab for lead; when rainwater is used for drinking and the building was built prior to 2004 OR the tank was added to an existing building built any year, test first flush and flushed rainwater from tap (prior to it being used for drinking, and at the start of each new tenancy lease); before soil is used for poultry or vegetable-growing, test at a lab for lead."

In addition to the factsheet "Lead paint & ceiling dust management - how to do it lead-safely [Info Pack 3]" at www.lead.org.au/fs/fst38.html, please find our info pack on Renting & Lead below and follow the links.

According to the factsheet: Asbestos and lead (2010, July 2011, last updated January 2014):

"Lead is a metal found in old paint (before 1970), dust in the roof and soil. Lead can be harmful, especially to small children and pregnant women...."

"The landlord must:

- provide the premises 'reasonably' clean and fit to live in...

"[The tenant] must: ..."

- mitigate loss – take reasonable steps to limit or avoid loss (see below)....

"Mitigation of loss Examples include:

- a tenant stopping use of a room where asbestos fibres have been exposed
- a landlord promptly fixing damage to reduce risk."

[Ref: <http://intranet.tenants.org.au/print/fs26.pdf>]



The factsheet cites the case of *Symonds v Duncan (Tenancy)* [2004] NSWCTTT 499 (20 August 2004) about a Mullumbimby pre-schooler in a home that was sandblasted inside and outside, and which was tested and found by Council to exceed lead standards. The child had a notifiable blood lead level (ie a blood lead level above 5 micrograms per decilitre, which the lab was required to notify the NSW Health Department about, according to the Public Health Act), and the final statement by A. Borsody, Member, Consumer, Trader & Tenancy Tribunal (CTTT) NSW, was:

"The landlord is to pay the tenant the sum of \$1,866.98 on or before 2 September 2004."

In the Mullumbimby case of *Symonds v Duncan (Tenancy)* [2004] NSWCTTT 499 (20 August 2004) [www.austlii.edu.au/au/cases/nsw/NSWCTTT/2004/499.html], a letter I wrote for the tenants: "Lead hazard abatement instructions for household items" was submitted as evidence ["Lead Advisory Service Australia, regarding lead hazard abatement instructions"] and apparently accepted by the Tribunal Head.

A witness (a painter) for a real estate agent who was representing the landlord in the case of *Symonds v Duncan (Tenancy)* [2004] NSWCTTT 499 (20 August 2004) stated that:

"there was lead paint in the house, there is lead paint in all old houses and everyone knows that."

[Ref: www.austlii.edu.au/au/cases/nsw/NSWCTTT/2004/499.html]

Whilst it is clearly not true that "everyone knows" there is lead paint in all old houses, it is generally true that there is lead paint in all old houses (unless the paint has been tested and found not to be leaded, for example, if all the old paint has been stripped). The lead standards which were referred to in this case (above) are the levels of lead found (by laboratory testing) in dust wipes and soil samples, which provide "clearance" (that is, if the results exceed the standards, the home is deemed not lead-safe, if the results are less than the standards, the home is "cleared" or "safe" for residence by young children and pregnant women) from the Australian Standard AS 4361.2 - 1998 Guide To Lead Paint Management – Part 2: Residential And Commercial Buildings.

Landlords and agents for pre-1970 residences, should know that an old home with peeling or chalking paint is not fit to live in for young children or pregnant women (unless the paint has been tested and found to be unleaded); and even if the paint is in good condition, the dust in the premises and soil outside may exceed the lead standards, again, making the home not safe to live in for young children or pregnant women (unless tested prior to the tenants moving in).

As "[The tenant] must: ...• mitigate loss – take reasonable steps to limit or avoid loss...." – the only reasonable way to do that, once a tenant has tested paint in a house full of peeling and chalking paint with a resident young child, or tested dust wipe samples in a home with sanded paint dust everywhere and a resident pregnant woman, and found it to be leaded, is to



move out immediately, in order to avoid lead exposure for that young child or foetus. Once notified of the lead paint hazards by the tenant, a reasonable landlord or agent, would organise lead-safe paint management by a trained and experienced paint contractor, followed by “clearance testing” (analysis at a lab of dust wipe and soil samples to determine that no further clean-up is required to make the home fit for habitation by young children and pregnant women) as soon as possible, so that the tenant (or a new tenant) could move back in.

Here’s what I wrote for a tenant who recently moved her family (including her one year old child) out of a 70-90 year old home with peeling paint and damp problems, after she tested the paint with a LeadCheck kit and presented the photo of the red-coloured tip as evidence that the paint was leaded:

“From my reading of the Tenants Rights fact sheet 26, I believe that the property should not have been rented out to a family with a 1 year old [unless paint, dust and soil had previously been tested and found to be lead-safe]. I would go further and say that, renting a 1900s terrace house [without lead-assessment] to a family with a 1 year old is a breach of the landlord’s duty to “provide the premises ‘reasonably’ clean and fit to live in”. Without knowledge as to the lead-safety of the premises (including the yard), the landlord was not providing a home fit for a 1 yr old to live in. Thus, if I were you, I would be claiming all my expenses of moving in, paying rent, and moving out. (Presumably you got your bond back.) I would not however bother to claim the cost of medical expenses for your blood lead tests, because these do not seem to be accepted by other Tribunal Heads. Your action in moving out as soon as possible following your lead test of the peeling and chalking paint, was completely in line with your duty to “mitigate loss – take reasonable steps to limit or avoid loss”. You were avoiding the loss of IQ in your child (and potentially in your future children) and preventing other potential lead poisoning impacts on health and learning behaviour. Have you submitted receipts for all your costs of moving in and moving out?”

“More than **1,420 advisors and media events** have inspired over one hundred thousand people to contact The LEAD Group Inc (environmental health charity) for more information, then hundreds of thousands of people, if not millions of people, (and millions have visited our long-standing website www.lead.org.au) have been told about lead or heard about lead in the Australian media, and as it is a duty of a landlord to ensure that a rental premises is fit to live in, it is the landlord’s duty to know that the older a property is, the more likely it is to contain high lead levels in the paint, dust, ceiling dust and soil, and when plumbing taps and fittings are less than five years old, also in the drinking water, and therefore the less likely it is to be fit for a young child to live in, or for a woman who is pregnant or planning a pregnancy, to have to clean.

“Lead-aware landlords contact The LEAD Group’s information service regularly, and buy our kits to determine whether their rental properties are lead-safe for young children, pets, poultry and vegetable gardens, or whether it is safe for tenants to do their own renovation or preparation for repainting.”



[End of advice given to tenant with the one year old.]

Unfortunately, the tenant was advised by the Tenants Advice Service NOT to seek reimbursement for costs of moving in and moving out, and only to seek reimbursement for rent paid during the period after they notified the landlord of the lead paint test results, until the time they were able to find alternative rental accommodation and move out. The Tribunal member decided to grant them a 50% rent reduction only for the whole weeks of that period between notification of lead paint and moving out. You can read the Tribunal member's decision by requesting (from The LEAD Group) a copy of:

<NCAT NOTICE OF ORDER re rent reduction for Lead paint in Balmain home 20140306.doc> [stripped of all identifying information, for privacy reasons].

The Queensland version of this Info Pack was web-published at www.lead.org.au/lanv12n3/lanv12n3-15.html; as part of our May 2012 issue of *LEAD Action News* e-newsletter at www.lead.org.au/lanv12n3/LEAD Action News vol 12 no 3.pdf

Lead assessors in NSW are listed in a very old list at www.lead.org.au/clp/assessorsnsw.html and a real estate agent or landlord could be asked by the tenant to organise a home lead assessment (sampling for laboratory analysis, report-writing) after peeling paint has been cleaned up, or, if the paint contractor doesn't want to be blamed for existing lead contamination, the tenant could request a home lead assessment BEFORE and AFTER paint is prepared for painting-over, or fully stripped.

If the home lead assessment by a lead assessor is regarded as too expensive (it depends on the number of samples collected but it is typically \$500-\$1000), the landlord or agent can cooperate with the tenant in using a LEAD Group DIY-sampling lead assessment kit which is half to quarter the cost of a lead assessor. See www.leadgroup.com.au/solutions/lead-group-diy-sampling-lab-analysis-lead-test-kits/ - the samples can be sent to the lab in two batches if preferred so that you have both pre- and post-repainting dust wipe and soil results to check on whether the painter has done a lead-safe job and finally whether the home and yard is lead-safe for a pregnant woman, child or pet.

At the very least, the landlord should reimburse a tenant for the cost of testing the flaking paint with a spot test kit (3M LeadCheck kit) or the cost of laboratory analysis of paint and dust wipe samples (and soil, rainwater and ceiling dust samples if relevant) if the paint has already been dispersed by flaking or cracking off, dry-sanding, sawing, water-blasting (without debris capture) or grinding. Note that if the colour on the tip of the LeadCheck kit tester turns pink when you use it on paint, then the paint must contain at least 0.5% lead, which is equivalent to 5000 parts per million (ppm) lead -- a very high figure indeed! Always take a photo of the sample being tested (preferably showing the colour change on the paint while the paint is still on the painted surface, so that your photo cannot be questioned), and the coloured tip of the LeadCheck tester, for your records. LeadCheck kits cannot be used to test dust or soil. But purchasing a LEAD Group test kit yourself is always an option. The LEAD Group kit cost includes a written report including the results and interpretation of the



results:- comparison of the specific results to Australian and other standards, and world's best practice standards, as well as recommendations specific to the results.

Another NSW lead paint residential tenancy case, at www.austlii.edu.au/cgi-bin/sinodisp/au/cases/nsw/NSWCTTT/2008/1354.html?stem=0&synonyms=0&query=lead%20paint states:

[The Tenants] sought orders on 12th May 2008:

That the agreement be ended for a breach by the landlord

That the landlord refund all rent from 16th April 2008

That the landlord ensure that the premises and the tenant's possessions are decontaminated and that carpets are replaced no later than twenty-eight days from the date of the order

That the property is not re-let until it has been decontaminated

That the landlord compensate the tenants for goods which have been contaminated, for cleaning of possessions, for alternate accommodation, for removalists costs, for storage of possessions, emergency supplies and other costs

That the landlord compensate for non economic loss for causing anxiety....

“The onus of establishing that a loss was suffered and the amount of that loss rests with the parties seeking to recover the loss....

“Compensation for distress may be awarded under Section 16. The onus of establishing the claim for non economic loss rests with the applicants and very little acceptable evidence has been adduced in relation to this claim. Having regard to the whole of the evidence and noting that the landlord was not informed of the alleged problems for almost three weeks it is appropriate to assess compensation of non economic loss in the sum of \$1000.00

“The landlord is accordingly ordered to pay the tenants the sum of \$1,000.00 by way of compensation and \$1,000.00 by way of non economic loss. A total sum of \$2,000.00 is to be paid within 14 days.”

If you are submitting any of the above types of costs for reimbursement, the above case behoves you to provide full documentation, including photos of the condition of the premises and your possessions, and receipts, and any written reports.

Unfortunately the NSW Department of Environment & Climate Change has, for no good reason, taken the part of the Lead Safe Renovator's Guide that they did web-publish, off their website, so you need to go to the Google Archive to find it: Part of A Renovator's Guide to the Dangers of Lead is available on-line at

<http://web.archive.org/web/20070830233627/www.epa.nsw.gov.au/leadsafe/leadinf4.htm>

– then look for the Three Bucket Method because that is the system someone will need to use to clean up the paint flakes and dust.

We have also published the whole Guide at

[www.lead.org.au/fs/lead safe/A Revovator Guide To The Dangers Of Lead Lead Saf](http://www.lead.org.au/fs/lead_safe/A_Revovator_Guide_To_The_Dangers_Of_Lead_Lead_Saf)



[e.pdf](#) and you'll find links to the rest of the Lead Safe series of booklets and fact sheets (including housekeeping / cleaning guidance) in "Info Pack 31 - Lead Safe series of publications by NSW Lead Reference Centre, EPA" at <http://lead.org.au/lanv13n3/lanv13n3-23.html>

One of the Lead Safe series of publications by the NSW Government dating from the late 1990s, contained a map showing the number of pre-1970 residences by NSW Council area, and stated "Before 1970, paint used for domestic and other applications contained significant quantities of lead." [Ref: page 5 and map, page 21, (October 1997)
[www.lead.org.au/fs/lead safe/A Guide For Health Care Professionals Lead Safe.pdf](http://www.lead.org.au/fs/lead_safe/A_Guide_For_Health_Care_Professionals_Lead_Safe.pdf)]

Please find from another edition of our newsletter, *LEAD Action News*, at [www.lead.org.au/lanv9n4/LEAD Action News vol 9 no 4.pdf](http://www.lead.org.au/lanv9n4/LEAD_Action_News_vol_9_no_4.pdf) (also available on request as filename: <Residential tenant's successful letter seeking compensation over lead contamination 20090430.doc> to use as a template for your own letter), a letter to a real estate agent, written by a NSW tenant who had to move his family out of a lead-contaminated home but who was later compensated for various costs and refunded his rent.

The Housing NSW policy on lead paint, at www.housing.nsw.gov.au/Forms+Policies+and+Fact+Sheets/Policies/Lead+Paint+Policy.htm states:

"Lead is highly toxic and affects virtually every system of the body. While adolescents and adults can also suffer from excessive lead exposures (especially those who are occupationally exposed to lead, and pregnant women), the people most at risk are children under the age of four....

"Where there is any significant lead paint risk, Housing NSW will not allocate properties to tenants, particularly to families with children under the age of four years, until the hazards have been rectified.

"In properties where children under the age of four years are part of the household, Housing NSW will act immediately it is aware of the presence of lead paint where it is in a form and context that can be directly ingested by children."

Kits can be purchased through www.lead safeworld.com/shop or see the factsheet at www.lead safeworld.com/solutions/lead-group-diy-sampling-lab-analysis-lead-test-kits

FURTHER READING

Tenants Rights Fact Sheet 26 – Asbestos and Lead, by Tenants Advice and Advocacy Services, NSW, January 2014 <http://intranet.tenants.org.au/print/fs26.pdf>;

No 1 - Residential Tenancies Act - Tenants Rights Fact sheet - Your Rights Under The Residential Tenancies Act Tenants Advice And Advocacy Service
<http://intranet.tenants.org.au/print/fs01.pdf>



No 6 – Repairs and Maintenance - Tenants Rights Fact sheet - Your Rights Under The Residential Tenancies Act Tenants Advice And Advocacy Service
<http://intranet.tenants.org.au/print/fs06.pdf>

No 9 - You Want To Leave - Tenants Rights Factsheet - Your Rights Under The Residential Tenancies Act Tenants Advice And Advocacy Service
<http://intranet.tenants.org.au/print/fs09.pdf>

No 11 – Consumer, Trader and Tenancy Tribunal - Tenants Rights Fact sheet - Your Rights Under The Residential Tenancies Act Tenants Advice And Advocacy Service
<http://intranet.tenants.org.au/print/fs11.pdf>

AS 4361.2 Lead - Guide To Lead Paint Management - Preventing Lead Poisoning In Australia Specifier Vol 7 Issue 2 www.lead.org.au/clp/AS4361.2.html

Lead Alert - The Six Step Guide To Painting Your Home - Fifth Edition Department of the Environment, Australia www.environment.gov.au/system/files/resources/e9ddd00e-8914-4d57-8279-19b3d2616dee/files/lead-paint-fifth-edition.pdf; GRAPHICLESS TEXT ONLY VERSION FOR EASY READING WHEN PRINTED:
www.environment.gov.au/system/files/resources/e9ddd00e-8914-4d57-8279-19b3d2616dee/files/lead-paint-fifth-edition.doc; PDF AND DOC VERSIONS DOWNLOADABLE FROM: www.environment.gov.au/protection/publications/lead-alert-six-step-guide-painting-your-home;

Parents Of Lead-Poisoned Children & Tenants [Case Studies from LEADLINE (previous name for Global Lead Advice and Support Service)] LANv3n4 Spring 1995
www.lead.org.au/lanv3n4/lanv3n4-7.html ; www.lead.org.au/lanv3n4/lanv3n4-8.html

Residential Tribunal Lead Paint Case: Fitness for Habitation - Reasons For Decision [EXTRACTS published in LEAD Action News vol 7 no 3, 1999] The LEAD Group
www.lead.org.au/Lanv7n3/L73-17.html

Do-It-Yourself Lead Safe Test Kits The LEAD Group www.lead.org.au/clp/products/Do-It-Yourself-Lead-Safe-Test-Kits-20070526.html

Developer Contaminates Neighbour's Property Lead Aware Times Vol 1 No 1 ISSN 1440-4966
www.lead.org.au/lat/lat005.html

Exempt, Complying and Integrated Developments" in "LEAD SAFETY TOOL KIT FOR [NEW SOUTH WALES] COUNCILS: A Tool Kit for making your community safe from lead" The LEAD Group Inc page 41 of 64 [pdf p 47 of 70] at www.lead.org.au/clp/toolkit.pdf

GUIDANCE NOTE FOR CEILING DUSTS CONTAINING LEAD WorkCover Authority NSW [originally at



www.workcover.nsw.gov.au/formspublications/publications/Documents/ceiling_dust_containing_lead_guidance_note_4955.pdf; now only online at www.adra.com.au/WorkCover_NSW_Ceiling_Dust_Guidance_Note_200609.pdf – the website of ADRA, the Australian Dust Removalists Association).

Insulation - installing ceiling insulation and your health and safety - Workplace Health and Safety Queensland

www.deir.qld.gov.au/workplace/resources/pdfs/alert-insulation_installing.pdf

List of events for the international lead poisoning prevention week of action 23-29 October 2016

[URL: http://www.who.int/ipcs/lead_campaign/events/en/]

Disclaimer: Inclusion of events on this site is for information purposes only and does not imply the endorsement of the World Health Organization. The posting of entries is at the discretion of the World Health Organization.

List of events

BaliFokus Foundation (NGO)

City/Area:

Jakarta, Bandung, Surabaya, Denpasar

Country:

Indonesia

Title of event:

Lead-Free Paint Children's Environment

Brief description of event:

We will conduct awareness campaign in several kindergarten, childcare facilities, children health care facilities and schools

Target audience for event:

Children, teachers, parents, schools managers and health care facilities managers

Start date:

23/10/2016

End date:

30/10/2016

National Center for Disease Control & Public Health of Georgia (Government agency)

City/Area:

Tbilisi

Country:

Georgia

Title of event:

"Say no to Lead Paint"

Brief description of event:

The following activities will be conducted
1. to organize raise the awareness of government authorities and regulators, the private sector, manufacturers, consumers, workers, trade unions and health-care providers about the toxicity of lead in



- paints and the availability of technically superior and safer alternatives;
2. Engaging the general public through social media
 3. National conferences and meetings to engage key decision-makers
 4. Translate of the campaign materials into Georgian.

Target audience for event:

Engaging the general public through social media
 The primary goal of the campaign is to prevent children's exposure to paints containing lead and to minimize occupational exposures to lead paint to achieve the phase-out of the manufacture and sale of paints containing lead and to eventually eliminate the risks that such paints pose.

Start date:
23/10/2016

End date:
29/10/2016

Ecological Restorations (NGO)

City/Area:
Accra

Country:
Ghana

Title of event:
Lead paint in the development of the child

Brief description of event:
 Ecological Restorations would use a featured article to call the attention of policy makers, producers/manufacturers of lead paint, consumers to the effect of lead on the development of the child.

Target audience for event:
n/a

Start date:
27/10/2016

End date:
27/10/2016

Greenwomen, the Analytical Environmental Agency (NGO)

City/Area:
Almaty

Country:
Kazakhstan

Title of event:
Increase citizens' awareness on lead paint

Brief description of event:
 - Translate and disseminate information provided by GAELP, upload other relevant materials on our Facebook page and distribute through e-lists.
 - Prepare a press release to the media.

We also expecting the results of the research which IPEN conducted to determine the levels of lead in paint sold in some countries including Kazakhstan. (Data was obtained this summer). If we will receive the results before the Week starts, we will distribute during the Week a report with data on levels of lead containing in paint sold in Kazakhstan.

Target audience for event:
General public

Start date:
23/10/2016

End date:
29/10/2016



Ecological Society "Ruzgar" (NGO)

City/Area:

Baku

Country:

Azerbaijan

Title of event:

Press Conference on Contamination of household paints by lead

Brief description of event:

The Press-Conference Announcement will be published in the NGO Network "Ecoforum" on first week of October/ The review on lead contamination of household paints will be prepared by expert on Environment and health effect of chemicals. The representatives of newspapers, Radio, internet sites will be invited to the Press-Conference. Preliminary press-release of event will be disseminated among the stakeholders. The results of Press-Conference materials will be published in newspaper, Internet sites, disseminated by radio

Target audience for event:

Mass-media, NGO, municipality, pedagogical collective, community leaders. Women-Children-Health Organisations.Environmentalist

Start date:

23/10/2016

End date:

29/10/2016

Toxics Link (NGO)

City/Area:

New Delhi

Country:

India

Title of event:

"Awareness program for lead (in paint) and its hazards."

Brief description of event:

Toxics Link is planning to air radio jingle during the week of action, at the same time the we will organize school program and the national level poster competition on Lead and its harm.

Target audience for event:

School children, general public, health care professionals, government authorities, industries

Start date:

20/10/2016

End date:

28/10/2016

Bridgeport Health Department Lead Poisoning Prevention (Government Agency)

City/Area:

Bridgeport

Country:

United States of America

Title of event:

RRP Certification

Brief description of event:

Initial and refresher certification course will be held to teach methods to safely remove lead based paint



Target audience for event:

Property owners, landlords, property management firms, general carpenters, painters, electricians, realtors, will all benefit the people they work for and safeguard from adverse health effects due to lead exposure.

Start date:

25/10/2016

End date:

26/10/2016

BC Centre for Disease Control (Government Agency)

City/Area:

BC- Vancouver

Country:

Canada

Title of event:

Lead Poisoning Prevention Week

Brief description of event:

- Adding educational materials on our website
- Having a corner table in the entrance door of BCCDC
- Providing some emails
- Distributing flyers, posters and information

Target audience for event:

Health Professionals and Public

Start date:

23/10/2016

End date:

29/10/2016

LEADERS Nepal (NGO)

City/Area:

Biratnagar, Eastern Part of Nepal

Country:

Nepal

Title of event:

Awareness Program on Lead Poisoning

Brief description of event:

This event will raise awareness in workers and their family members on measures to prevent lead poisoning from contaminated work clothes of such workers and lead acid batteries for power backup in their rooms.

Target audience for event:

Occupational workers and their children

Start date:

25/10/2016

End date:

28/10/2016

Green & Healthy Homes Initiative (NGO)

City/Area:

Baltimore, Maryland

Country:

United States of America

Title of event:

Live Webinar: Strategic Plan to End Childhood Lead



Poisoning - A Five Year Blueprint for Action

Brief description of event:

Decades after ending lead in paint, gasoline, solder and other sources, lead poisoning remains one of the nation's most devastating environmental health threats. Now is the time to move the arc of public and political will, to bring an end to the toxic legacy of lead in the United States. The Green & Healthy Homes Initiative has developed a Strategic Plan - a set of broad policy recommendations to strategically marshal the financial resources and regulatory tools to end childhood lead poisoning as a major public health threat in the next five years.

Target audience for event:

Policy makers and regulators at federal, state and local level, NGOs in environmental health, housing and energy efficiency, social innovation finance professionals

Start date:

27/10/2016

End date:

27/10/2016

This workshop will examine the latest science on the toxicity of lead, with an emphasis on the developmental effects on children and implications in later life. Participants will learn about current policies and programs for medical and environmental interventions in Maryland and Baltimore, and have an opportunity to discuss what is known about sources and routes of exposure and blood lead levels in children. Participants and speakers will help identify information, data and knowledge gaps in current surveillance and intervention efforts.

Target audience for event:

Health professionals, health advocates and those interested in the well-being of children.

Start date:

27/10/2016

End date:

27/10/2016

Khazer Ecological and Cultural NGO (NGO)

City/Area:

Yerevan, Gyumri

Country:

Armenia

Title of event:

Protect our kids from lead exposure

Brief description of event:

- a) An important task is to promote the suspension of the production of enamel paints containing lead and to minimize the risk of exposure of these paints on health. This would be achieved via the dissemination of information among doctors, especially pediatricians, paint manufacturers, retailers and other stakeholders.
- b) The key objective of the project is to form a productive environment for motivated participation of

Chesapeake Physicians for Social Responsibility (NGO)

City/Area:

Baltimore, MD

Country:

United States of America

Title of event:

Understanding Lead Poisoning in Baltimore and Maryland.

Brief description of event:



civil society in decision-making on issues of environmental protection, health, emphasizing the rights of civil society.

Target audience for event:

the target audience includes (but is not limited to) civil society, Ministry of Economy and Ministry of Health, business sector which produces or imports those paints, as well as the consumers' community, media, local authorities, NGOs and teachers.

Start date:

22/10/2016

End date:

27/10/2016

Target audience for event:

Volcano Art Prize graphics since the competition began in 2012 are all archived at www.volcanoartprize.com and anyone anywhere in the world is welcome to select their favourite VAP entry and go to [www.lead safeworld.com /shop](http://www.lead safeworld.com/shop) to order a Lead Safe World Poster of that entry. VAP is now open for 2017. Children and adult entrants from both OECD and non-OECD countries welcome. All children enter for free. Adults from OECD countries pay AU\$10. The winners from overseas and outside Sydney will have the opportunity to "attend" the Award Ceremony via Skype.

Start date:

24/10/2016

End date:

24/10/2016

The LEAD Group (NGO)

City/Area:

Sydney

Country:

Australia

Title of event:

Volcano Art Prize (VAP) 2016 awards ceremony

Brief description of event:

This is a photo / short film / art competition event held annually. Any film, photo or drawing which has lead safety awareness significance can be submitted. The objective of this competition is to spread lead poisoning awareness among the general population. The art competition is organised by The LEAD Group - a lead poisoning prevention charity organisation. There is no age bar for this competition. Thirty winning entries will receive a Picture products mug with their lead safety message and photo printed on it. The Judge's choice and the People's choice entries will each receive a cash prize.

Center for Public Health and Environmental Development (CEPHED) (NGO)

City/Area:

Kathamndu, Lalitpur and Bhaktpur

Country:

Nepal

Title of event:

Eliminating Leaded Paint through Effective Implementation of Standard in Nepal

Brief description of event:

1. Collection, Customization, preparation, production and widely dissemination of IEC(posters, fliers and campaign Icon, Radio and TV PSA etc.) materials on lead and its health implications;
2. Organize a Press Meet to Kick Off the International Lead Poisoning Prevention Week of Action (ILPPWA)
3. Organize Stakeholder Seminar on Effective



Implementation of Lead Paint Standard;
 4. Organize Awareness and Interaction program for Painters, CUPPEC and Paints dealers;
 5. Organize School Orientation Programs on LEAD PAINT ELIMINATION for LEAD SAFE KIDS.
 6. Organize Meeting with the celebrities who are acting in Paint Advertisement and provide misleading message to the public.
 7. News Article publications to maximize the outreaches and inform about the present status of lead in paint and compliance status of our mandatory standard.

Target audience for event:

General Public ,School Children , Parents, Teachers , School administration, Policy makers. government officials, monitoring agencies, custom officers, health workers, painters, paint dealers, paint manufacturers, construction companies, Urban developer and planners etc.

Start date:

15/10/2016

End date:

15/11/2016

Inspection environmental and technical safety of the Kyrgyz Republic and the Government of the Kyrgyz Republic. Disseminate information on the dangers of lead in products, including paint products, a wide range of public through social media for the raising of awareness on the impact of lead poisoning caused by the exposure to lead paint.

Target audience for event:

Government, civil society, media, NGOs

Start date:

23/10/2016

End date:

29/10/2016

University of Zambia, School of Medicine

(Academic Institution)

City/Area:

Lusaka

Country:

Zambia

Title of event:

Zambia to enact legally binding controls on lead paint by 2020: Lead in paint is harmful to human health, take necessary safety measures to protect yourself and others

Brief description of event:

Television and radio launch, Match pass and dances at strategic places in city

Target audience for event:

Paint manufacturing companies, retailer shops dealing in paints and paint products, Government departments, and the general consumers

PA "Independent Ecological Expertise" (NGO)

City/Area:

Bishkek

Country:

Kyrgyzstan

Title of event:

Lead poisoning prevention week

Brief description of event:

The results of the study "Lead in oil paint for residential use in the Kyrgyz Republic" will send to the State



Start date:
25/10/2016

End date:
29/10/2016

Armenian Women for Health and Healthy Environment (NGO)

City/Area:
Yerevan and Grumri

Country:
Armenia

Title of event:
Lead in Paint campaign in Armenia

Brief description of event:
AWHHE is going to organize 4 events: 3 NGO meetings and a press conference. AWHHE has been organizing events related to the project supported by IPEN on study results of the lead in paints in Armenia.

Target audience for event:
The target audience of meetings are: Armenian NGOs; the Ministries of Health, Nature Protection, and Emergency Situations; academia, International Organizations (UNDP, UNICEF), experts. General public will receive information through mass media.

Start date:
14/09/2016

End date:
25/10/2016

EDEN Center (Environmental Center for Development, Education and Networking) (NGO)

City/Area:
Tirana

Country:
Albania

Title of event:
Lead Free New Generation

Brief description of event:
•Flashmob

This activity will help to increase the awareness of residents of Tirana in lead poisoning. The message of the Flashmob will be connected directly with the aim of the campaign.

•Educative lectures

EDEN will conduct 2 open classes in order to inform the students about the risk from the lead poisoning and they will be informed how to prevent lead poisoning. Lectures will contain information for lead in paint and will help students receive the necessary information so they can disseminate the information to their families, friends, neighbors etc.

•Mini campaign in order to raise awareness

EDEN volunteers will design posters with awareness information and they will distribute them in different schools of Tirana and Health centers. Together with the posters we will distribute factsheets with data and information about lead paint poisoning.

We will organize as well competition in two elementary schools for the best slogan about lead poisoning.

Target audience for event:
•Inhabitants of Tirana
•General public
•Local and central governance
•Students of university



Start date:
26/10/2016

End date:
28/10/2016

**Lead Safe Virginia Program, Virginia
Department of Health** (Government Agency)

City/Area:
Commonwealth of Virginia

Country:
United States of America

Title of event:
2016 National Lead Poisoning Prevention Week

Brief description of event:
The Lead Safe Virginia Program, at the Virginia Department of Health has various activities planned throughout the state to promote primary prevention of lead poisoning. There are also magazine ads promoting the use of lead safe work practices. Many of the local health departments have activities planned, and many will be using "Dusty the Dog" exhibit that is a hands-on display. The program website will have information posted about lead poisoning prevention.

Target audience for event:
Homeowners, contractors, painters, remodelers, and families of children living in identified high-risk areas of Virginia.

Start date:
01/10/2016

End date:
31/10/2016

**Environment and Social Development
Organizaiton-ESDO** (NGO)

City/Area:
Dhaka

Country:
Bangladesh

Title of event:
"Campaign for Lead Free Paint : Legislation and Public Awareness"

Brief description of event:
ESDO is going to organize policy advocacy and public awareness activities for legislation to ban Lead Paint in Bangladesh. Activities are: Mass rally and mobile campaign will be conducted for public awareness and policy advocacy and focus media campaign also will be the major action. and participation of concerned personnel. 100 youth will be expected to be participating, so we are expecting to bring a positive concern about harmful effects of leaded paints among them. Moreover media campaign will get media coverage. Social media campaign is expected to reach out two thousand directly, indirect beneficiary to about one million.

Target audience for event:
Government, Paint Manufacturer's Association, SMEs', health care professionals, students and children. National Print and Electronic media personals

Start date:
27/10/2016

End date:
29/10/2016

Ecological Waste Coalition of the Philippines
(NGO)

City/Area:
Quezon City

Country:
Philippines



Title of event:

"Zombie Run to Beat Phaseout Deadline for Lead Decorative Paint"

Brief description of event:

On 23 October 2016, the EcoWaste Coalition will organize a "Zombie Run" at a public park to press for the full compliance to the 31 December phaseout deadline for lead-containing decorative paints. Zombies dressed as "lead paint cans" will run after the children to emphasize their vulnerability to the health effects from lead exposure. Towards the finish line, the participants will step on a marker at the ground that says: "Phase Out Lead Paint by 31/12/16." Upon reaching the marker, the Zombies will drop dead to signify that their time in the market is up. Aside from the member groups of the EcoWaste Coalition, other stakeholders in the nation's ongoing effort to eliminate lead paint will be invited to participate.

Target audience for event:

Stakeholders from the government, industries, academe, civil society and the general public are our target audience for the event.

Start date:

23/10/2016

End date:

23/10/2016

Brief description of event:

The following activities will be conducted

1. Conceive, print and display one giant poster with a key message focused the annual cost of children exposure to lead in the capital city.
2. Handouts on lead paint issues to key stakeholders and mass media
3. Radio and TV broadcasts on lead paint issues of concern in the nation context

Target audience for event:

- Decision makers including relevant government ministries, politicians, industry CEOs, investors
- Health professionals
- Mass media
- Development Agencies
- General Public

Start date:

23/10/2016

End date:

29/10/2016

Gamarjoba (NGO)

City/Area:

Tbilisi

Country:

Georgia

Title of event:

Lead-free is better

Brief description of event:

Information campaign to promote the results of paint study. How much lead contain paint used by people of Georgia.

- 1.Statement to authority

Centre de recherche et d'Education pour le Développement (CREPD) (NGO)

City/Area:

Yaoundé

Country:

Cameroon

Title of event:

"ACT NOW TO PHASE OUT THE DEADLY LEAD PAINT"



2. Media company
3. News and info release for people

Target audience for event:

- The Parliament of Georgia
- Mass Media
- Citizens

Start date:
23/10/2016

End date:
29/10/2016

under the Third Party Certification process and SCS global certified that all Multilac products are now lead safe.

Target audience for event:
General Public

Start date:
22/10/2016

End date:
28/10/2016

Centre for environmental Justice and Multilac Paints

Type of organization

CEJ is a NGO. Multilac Paint is a Major Paint Manufacturing Company in Sri Lanka.

City/Area:
Lead safe paint

Country:
Sri Lanka

Title of event:
Launching of first third party Certified Lead safe paint in Sri Lanka

Brief description of event:

Multilac is the first Sri Lankan paint Manufacturer to receive the lead safe Certification issued by the SCS Global. This came under the Third Party Certification process promoted by the Centre for Environmental Justice and IPEN under the European Union Funded Asia Lead Paint Elimination project from 2011-2015. CEJ filed legal action in 2011 and obtained mandatory lead level which is 90 ppm for Emulsion and 600 ppm for Enamel paint. Multilac has over 1200 products and

World Inspections, Ltd

Type of organization
Training Provider

City/Area:
San Diego

Country:
United States of America

Title of event:
RRP Initial Class

Brief description of event:
Renovation, Repair and Painting class

Target audience for event:
California

Start date:
20/10/2016

End date:
20/10/2016



**National Institute of Public Health (Slovenia),
Regional Unit Ravne na Koroškem** (Health care
institution)

City/Area:
The Upper Meža Valley (Mežica, Črna na Koroškem)

Country:
Slovenia

Title of event:
Workshops "Let's play health"

Brief description of event:
The Upper Meža Valley (Slovenia) has a long lasting
lead mining tradition and environment is polluted with
lead. Since health of inhabitants is at risk, there is
remediation/ health protection programme being
carried out since 2007. Like every year, during the
International Lead Poisoning Prevention Week, we will
carry out workshops in kindergartens promoting
hygiene, healthy food and other health protective
activities (How to reduce exposure to contaminated
dust, soil, paint...) regarding exposure to heavy
metals.

Target audience for event:
Children in kindergartens and their parents, preschool
teacher, kindergarten cooks.

Start date:
24/10/2016

End date:
28/10/2016

EcoContact (NGO)

City/Area:
Chisinau

Country:
Republic of Moldova

Title of event:
International lead poisoning prevention week of action
in Moldova

Brief description of event:
National information and awareness events on lead
poisoning prevention (press conference, workshops for
governmental authorities and NGOs, schools, TV and
radio programs) and presentation of the results of the
IPEN 's Global Lead Paint Elimination Campaign

Target audience for event:
Ministry of Environment, Ministry of Health, Ministry of
Education, governmental authorities, environmental
and social NGOs, local paint producers and importers,
youth organisations, schools

Start date:
24/10/2016

End date:
28/10/2016

Academia, Government, NGOS and Industry

Type of organization
Academia, Government, NGOS and Industry

City/Area:
Mombasa

Country:
Kenya



Title of event:

Commitment among Stakeholders and collaboration towards Establishment of National Standards and Regulations to Eliminate in Paint

Brief description of event:

Awareness creation to the target groups on lead poisoning and prevention through, banners, t-shirts, brochures, pamphlets, poems, songs, TVs, Magazines, Newspaper and social media. Presentation on commitment and progress made on the development of national standards to eliminate lead paint

Target audience for event:

Paint Manufacturers, Technical Committee Members involved in the Development of Standards, Students, Teachers and Communities affected by Lead Poisoning, Policy Makers at County Level as well as the National Government and General Public

Start date:

24/10/2016

End date:

29/10/2016

Brief description of event:

We will organize a press conference. Media will be invited to relay to the population, the dangers to health and economic costs that the use of lead paint exposes man, and the need to reverse the trend.

Participants will discuss challenges related to the commercialization of lead paint. Specifically, we will highlight the salient points of the book "Remove the lead paint: protecting the health of children."

At the end, media could talk about the subject, and raise awareness for the elimination of lead in paint. This event will promote high visibility, reach and impact.

Target audience for event:

The target groups are:

- Public and private, print, broadcast, online media;
- Technical staff of ministries of environment, trade, health and justice;
- Researchers (universities);
- Economic operators in the paint;
- Parliamentarians;
- Organizations of civil society.

Start date:

25/10/2016

End date:

29/10/2016

Les Amis de la Terre-Togo (NGO)

City/Area:

Lomé

Country:

Togo

Title of event:

Sensibilisation du public, en général, et des décideurs, en particulier, sur les dangers liés à l'utilisation de la peinture au plomb et les coûts économiques associés

Centre for Environment Justice and Development(CEJAD) (NGO)

City/Area:

NAIROBI

Country:

Kenya

Title of event:

An Engagement forum to raise awareness and address



health effects associated with lead exposure amongst Children in Kenya.

Brief description of event:

this event will involve holding a forum in a local primary school to raise awareness on lead poisoning Prevention. we also look forward to engaging paint manufacturers in third party certification.

Target audience for event:

the event targets primary school children, their teachers and parents. The paint manufacturers are also a target. the event will include the Media too via press release and inviting them to the organized forum at a local primary school.

Start date:

23/10/2016

End date:

29/10/2016

Lead-Free MV Coalition

Type of organization

Other

If Other, please specify

Non-profit Coalition of Community Organizations/
Community Foundation backing

City/Area:

Utica

Country:

United States of America

Title of event:

"Lead: Peeling Back the Layers" Presentation

Brief description of event:

The Lead-Free MV Coalition will offer a free presentation on the history of lead poisoning in our country, featuring David Rosner, PhD, & Gerald Markowitz, PhD, authors of "Lead Wars: The Politics of Science and the Fate of America's Children". Following the presentation, a panel of local lead experts will discuss the impact of lead poisoning in our communities. Panelists include: David Rosner, Gerald Markowitz, Phyllis Ellis - Director of Health for the Oneida County Health Department, Helene Cecconi - Community Health Nurse Supervisor for Herkimer County Public Health, Mark Warfel - St. Elizabeth Family Medicine Residency Program Director and Director of Medical Education for Mohawk Valley Health System, Gene Allen - Marketing Director of the Utica Urban Renewal Agency. In recent years, Oneida County has had one of the highest levels of childhood lead poisoning in the state. The Lead-Free MV Coalition seeks to eradicate childhood lead poisoning in our region by eliminating lead hazards in pre-1978 housing, expanding testing and increasing community awareness of the problem.

Target audience for event:

Community members in Herkimer & Oneida Counties, New York. Health Officials, Community Foundation partners, students, healthcare providers, Federal and State officials involved with similar lead poisoning prevention initiatives.

Start date:

25/10/2016

End date:

25/10/2016

Florida Department of Health in Miami-Dade County (Government Agency)

**City/Area:**

Miami

Country:

United States of America

Title of event:

Lead Poisoning Prevention Week, 23-29 October, 2016

Brief description of event:

Every year we organize Lead Poisoning Prevention Week. During that week, we educate parents on lead poisoning and how to prevent, distribute brochures & flyers, offer free blood lead test at different health centers throughout Miami-Dade County.

Target audience for event:

Parents, Family, Health Care providers, Nurses, Doctors, Health Science Students, Childcare Centers, WIC clients.

Start date:

23/10/2016

End date:

29/10/2016

personnel de l'école REHOBOTH pour leur parler du PLOMB dans la peinture et le risque que courent les enfants au contact de la peinture usagée.

Target audience for event:

les enfants de cette école et le personnel y compris les parents d'élèves.

Start date:

24/10/2016

End date:

26/10/2016

Research Centre for Gender, Family and Environment in Development (CGFED) ...

(NGO)

City/Area:

Hanoi

Country:

Viet Nam

Title of event:

Lead in Paint Report Launch and Public Awareness Raising

Brief description of event:

CGFED will release the results of the study on lead in paint that it conducted in collaboration with IPEN. A short film will be prepared based on the findings and recommendations arising from the study, which will be shown in local television.

Target audience for event:

Government regulators, paint manufacturers, paint consumers and the general public

Start date:**ISE POP CI** (NGO)**City/Area:**

Abidjan, Yopougon Camp militaire

Country:

Cote d'Ivoire

Title of event:

SENSIBILISATION DES TOUT-PETITS DE L'ECOLE PRIMAIRE REHOBOTH par rapport à l'utilisation du matériel de jeu peint.

Brief description of event:

Notre activité consistera à réunir les enfants et le



28/10/2016

End date:
28/10/2016

City/Area:
Chisinau

Country:
Republic of Moldova

Title of event:
Evaluation of Exposure associated to lead compounds

Brief description of event:
1)to ensure the collection of biological samples in the general population for lead testing;
2) collecting soil samples from polluted areas of town and testing them for lead;
3) To accord the methodical assistance to public health institutions in the country in organizing and conducting the communication and information for organization the International Week on preventing lead poisoning;
4) To sent the analitical report to the Ministry of Health by November 16, 2016
5)to organized communication activities, information and awareness within the International Week on preventing lead poisoning, which include: public discussions and individual lessons open action in the community, radio and TV, press information etc . ;
6) to collaborate with the media (press, television, radio), education institutions, local authorities, NGOs, families in order to raise awareness about preventing lead poisoning.

Target audience for event:
n/a

Start date:
24/10/2016

End date:
30/10/2016

Green & Healthy Homes Initiative

Type of organization
Non-Profit

City/Area:
Baltimore, Maryland

Country:
United States of America

Title of event:
Turner Station Conservation Team Community Fair - NLPPW Outreach

Brief description of event:
Community Fair highlighting Baltimore County resources and services.

Target audience for event:
Baltimore County residents and Baltimore County Organizations.

Start date:
24/10/2016

End date:
24/10/2016

National Center of Public Health (Government Agency)

CHILDREN'S ENVIRONMENTAL HEALTH FOUNDATION (NGO)



City/Area:
LIVINGSTONE

Country:
Zambia

Title of event:
INTERNATIONAL LEAD POISONING PREVENTION WEEK
OF ACTION 23-29 OCT. 2016

Brief description of event:
Raising of awareness on the impact of lead poisoning caused by the exposure to lead paint. Lobbying the enactment of National regulations to ban lead in paint.

Target audience for event:
We shall target children, teachers, parents, paint manufacturers and retailers, Government policy makers and the agents involved in the enforcement of national laws.

Start date:
25/10/2016

End date:
29/10/2016

Brief description of event:

1. Seminar will be conducted for medical students to be involved in raising awareness campaign on lead-paint exposure and health risks in children;
2. Raising awareness campaign will be carried out together with students in kindergartens, children's hospital and communities in the old districts of the city;
3. Materials will be translated and published into Georgian language; Posters will be displayed in the Campus;
4. Presentations will be prepared focusing on: preventability of lead poisoning's serious health effects in children; importance of testing home, testing child;
5. Campaign material will be posted on the University website and in social media.

Target audience for event:

1. Medical University Students and faculty staff;
2. Children, parents, guardians, teachers, medical professionals;
3. Communities in the old parts of the city as well as General public via social media;
4. Municipality authority in the old part of the city to engage their attention for active contribution to problem solution.

Start date:
23/10/2016

End date:
29/10/2016

"Health XXI" (NGO)

City/Area:
Tbilisi

Country:
Georgia

Title of event:
"Lead-free Environment for Children's Health"

Land and Human to Advocate Progress (LHAP) (NGO)

City/Area:
Amman

Country:
Jordan



Title of event:

Developing Jordanian National Legislation for Lead Management

Brief description of event:

The main activity is working on developing a national lead in paint legislation to manage lead in paint in the country. This document will be formed through recruiting two experts a legal and a technical. The two experts will come up with a draft national lead in paint legislation. Then the outcome will be discussed in a bigger group coming from different sectors: The government sector represented by the two Ministries of Environment and Health; the private sector represented by the paint companies; the academic institutions represented by Jordan University; the civil society organization active in the area of environment protection and media to publish the outcomes where the meeting will take place in LHAP meeting room. The product which is in this case the national lead in paint legislation will be sent in formal letters to the two Ministers of Environment and Health to consider adoption, the wider national committee, and to the printed and electronic media. The outcome will also be published on LHAP group page. Jordan is currently going through parliamentarian election and therefore by October the 18th Jordanian MP will be already formed. In this case, the document will also be sent to the legal and health committees of the new parliament for consideration and the establishment of communication with the government on the matter issue where many of LHAP friends and supporters run for election and some may win. Therefore, the aim is to come up with a lead in paint legislation. The deliverable will be the product legislation. The target of formation will be the different sectors concerned with the issue of lead in paint. The expected impact is driving the country, mainly the ministry of Health to adopt a national legislation to manager lead in paint in the country.

Target audience for event:

Ministry of Environment, Ministry of Health, paint industry, ENGOs and media

Start date:

01/10/2016

End date:

30/11/2016

Sustainable Research and Action for Environmental Development (SRADev Nigeria)| (NGO)

City/Area:

Lagos

Country:

Nigeria

Title of event:

Public outreach and advocacy to regulate Lead use in paint in Nigeria

Brief description of event:

The event involves holding a public outreach to paints sellers/marketers and meeting their trade union in Mushin, Lagos to disseminate (handbills) the dangers Lead use in paint pose to children and pregnant women especially and their alternatives. The event will also intimate them on government's upcoming regulation and certification, sound message on the dangers of lead in paint. Courtesy visits will also be pain to government agencies SON, Ministry of Environment, LASEPA etc).

Target audience for event:

paint sellers, paint marketers, government regulatory agencies, media, general public

Start date:

23/10/2016

End date:

29/10/2016



Eco-Accord (NGO)

City/Area:
Moscow

Country:
Russian Federation

Title of event:
Raising public awareness on lead in paint issues in Russia

Brief description of event:
ECO-Accord to inform Russian officials about the results of lead in paint testing in Russia as well as suggest recommendations to address the problem; a press-release and a report containing new data on lead in paint will be disseminated via Russian media, NGOs, paint producers and retailers. Meetings with managers of the paint stores where lead containing paint was purchased will be organized with the goal to present new data and discuss the results of the research.

Target audience for event:
NGOs, governmental officials, paint manufacturers, consumers

Start date:
24/10/2016

End date:
29/10/2016

City of Pompano Beach Utilities (Government Agency)

City/Area:
Pompano Beach FL/South Florida

Country:
United States of America

Title of event:
NextDoor.com outreach campaign

Brief description of event:
The City of Pompano Beach Utilities Department will be posting the WHO's prepared media on the NextDoor.com Public Partnership portal to reach all 3,000 of our water service customers who subscribe to it.

Target audience for event:
City of Pompano Beach Utilities water service customers

Start date:
13/10/2016

End date:
13/10/2016

State of Tennessee's Lead Hazard Program (Government Agency)

City/Area:
Nashville, Tennessee

Country:
United States of America

Title of event:
Celebrate Lead-Free Kids at the Tennessee Tower

Brief description of event:
Calling all families and friends! Come join us at the Tennessee Tower Plaza in downtown Nashville on Tuesday, October 25 from 10 am to 2 pm for free



popcorn, hot dogs, live music, and other giveaway prizes to celebrate "Lead-Free Kids for a Healthy Future."

Target audience for event:
Parents and General Public

Start date:
25/10/2016

End date:
25/10/2016

Target audience for event:
Paint Industry Associations and their Member Companies

Start date:
20/10/2016

End date:
30/12/2016

International Paint and Printing Ink Council (IPPIC) (NGO)

City/Area:
Washington DC

Country:
United States of America

Title of event:
Advancing Industry Support for the Lead Paint Alliance Partnership Program

Brief description of event:
The International Paint and Printing Ink Council continues to actively support the work of the Lead Paint Alliance in advancing its "Action Plan" goals for 2016 and beyond. Working collectively and in conjunction with the LPA "partners program", IPPIC members have been encouraged to make an organizational commitment to the LPA as a "partner" as this is a clear indicator of industry (and paint manufacturer) support. To date, IPPIC is aware of formal partnership letters submitted by industry associations in Japan, the United Kingdom, Brazil, and Canada, which collectively represent the support hundreds of paint companies in their combined membership. More can be expected as each IPPIC association completes its required approval process.

Omaha Healthy Kids Alliance (NGO)

City/Area:
Omaha

Country:
United States of America

Title of event:
Lead Free in Five

Brief description of event:
Omaha Healthy Kids Alliance, the City of Omaha, Methodist College and Nebraskans for Civic Reform are hosting a day of events to honor national lead week. The Lead Free in Five campaign will be launched at a luncheon and will highlight being done and a plan for lead elimination in Omaha.

Target audience for event:
Elected officials, community leaders, parents, everyone.

Start date:
24/10/2016

End date:
24/10/2016



28/10/2016

GAPROFFA-NGO (NGO)

City/Area:
Cotonou/Parrana

Country:
Benin

Title of event:
Lead free Paint public awareness raising

Brief description of event:
African population is facing several dangers related to the anarchic use of chemicals has lead paint. In Benin, several houses are painted with bad paintings. The population is not informed and do not know the harmful effects of these products on public health and the environment. The objective of the awareness raising is to sensitize the stakeholders on the hazards related to exposure to oil paint. The sensitization campaigns will be conduct in the city with stakeholders exposing on the paints for the behavior change of population in Benin. Press release statement will be done through media.

Target audience for event:
Two target audiences will be select to participate to the awareness meeting: directs actors and indirect actors:
- Directs actors or beneficiaries are the painters, paint sellers, mechanics agents, school managers, agents, students
- Indirect actors: students, parents, private sectors like enterprise workers, customers, policies, painter pregnant women

Start date:
24/10/2016

End date:

Ministry of Health and Social Welfare (Government Agency)

City/Area:
Banjaluka, Republic of Srpska

Country:
Bosnia and Herzegovina

Title of event:
International lead poisoning prevention week of action

Brief description of event:
During the International lead poisoning prevention week of action 23-29 October 2016, Ministry of Health and Social Welfare in cooperation with the Republic Administration for Inspection Affairs and the Institute of Public Health of the Republic of Srpska will support the international lead poisoning prevention week of action by testing crayons and similar products children use daily that might contain lead. These products will be sampled in department stores and sent for the analysis.
Final report will be published in mass media.
The Ministry will also prepare informative materials regarding the campaign and importance of it, and these will be published on web site as well as in mass media during the international lead poisoning prevention week of action.

Target audience for event:
Bosnia and Herzegovina

Start date:
23/10/2016

End date:



29/10/2016.

Washington DC USA

Country:
Colombia

Title of event:
Industry Workshop on Restricting Lead Use in Residential and Decorative Paints

Brief description of event:
In support of the International Week of Action, IPPIC is pleased to announce a series of two industry workshops to be held in Medellin and Bogota Colombia on November 9 and 10, 2016 respectively. These workshops, which will be focused on industry education and technical requirements for lead use restriction in residential and decorative paints, are being organized by ABRAFATI which is the Brazilian Paint Association, an IPPIC- affiliated organization and a member of LatinPIN - the Latin America regional alliance of coatings technicians and paint manufacturers.

The workshops will draw on support of STAR and ACTR, paint technical societies from Colombia, and ANAFAPITY which is the industry association in México. The IPPIC Secretariat will participate in these workshops, which will feature content from the current LPA "toolkit", as well as technical support provided by local standards organizations. Representatives from the Colombian government and local NGO's have been invited to attend and participate. A detailed summary of the workshops will be provided to the UNEP and WHO Secretariat to the LPA.

Target audience for event:
Paint Industry Associations and their Member Companies

Start date:
09/11/2016

End date:
10/11/2016

Green & Healthy Homes Initiative

Type of organization
Non-Profit Organization

City/Area:
Baltimore, Maryland

Country:
United States of America

Title of event:
"Day At The Market" East Baltimore Community Outreach Initiative

Brief description of event:
Free Community event highlighting local health agencies providing free resources and information.

Target audience for event:
East Baltimore community and community organizations.

Start date:
26/10/2016

End date:
26/10/2016

International Paint and Printing Ink Council (IPPIC) (NGO)

City/Area:



EPA Region 10 Lead & Asbestos Program

(NGO)

City/Area:

Boise, Idaho

Country:

United States of America

Title of event:

EPA Participates in the Annual Idaho's Boise Fall Home Show

Brief description of event:

We will have a booth to do outreach, raise awareness, and provide materials regarding Lead Poisoning Prevention, RRP and other lead-related information. This event is well attended by the community and Boise's surrounding cities. It is expected that over 6000 people (consumers/families and the regulated community) will attend this home show.

Target audience for event:

Consumers and contractors

Start date:

28/10/2016

End date:

30/10/2016

AGENDA for Environment and Responsible Development (AGENDA) (NGO)

City/Area:

Dar es Salaam

Country:

United Republic of Tanzania

Title of event:

We need standards to control lead in paint in Tanzania

Brief description of event:

Tanzania has no standard to control lead paint. AGENDA will organize a media event for demanding the government to endorse lead paint standard. This will be done in collaboration with consumers groups who will raise their voices demanding a ban of lead paint to protect their children's health. It will also be used to raise public awareness that the country lacks standard to control lead in paint. It will outline the effects of lead paint and why children are the most vulnerable. There will also be a dialogue with industries urging them to produce lead-free paints.

Target audience for event:

Consumer NGO, Industries, government officials especially from the ministries responsible for health and environment. But more important is the Tanzania Bureau of Standards (TBS) which is formulating the standard for lead in paint; and the representative from the GEF focal point in Tanzania.

Start date:

26/10/2016

End date:

26/10/2016

US EPA Region 10-Lead Program (Government Agency)

City/Area:

Boise, Idaho

Country:

United States of America



Title of event:

Boise Spring Home Show

Brief description of event:

Home show geared towards home improvements

Target audience for event:

Contractors and owners of pre-1978 homes

Start date:

28/10/2016

End date:

30/10/2016

Start date:

23/10/2016

End date:

29/10/2016

**Foundation to support civil initiatives
(Dastgiri-Center) (NGO)**

City/Area:

Dushanbe

Country:

Tajikistan

Title of event:

Lead poisoning prevention week

Brief description of event:

Information about results of the study "Lead in oil paint for residential use in Tajikistan". The results of the study will send to the Ministry of the health and social protections of Tajikistan, State Committee of environment protection under the Government of the Republic of Tajikistan. Dissemination information on the dangers of lead in the paint products between government organizations, civil society, NGOs, press-people. Raising awareness on the impact of lead poisoning caused by the exposure to lead paint through social media, websites, newspapers, meetings.

Target audience for event:

n/a

Start date:

24/10/2016

Manchester Health Department (Government Agency)

City/Area:

Manchester, CT

Country:

United States of America

Title of event:

LEAD-FREE KIDS FOR A HEALTHY FUTURE—NATIONAL LEAD POISONING PREVENTION WEEK

Brief description of event:

In an effort to address these concerns, the Manchester Health Department is providing educational materials in the Town Hall lobby. Please stop by and pick up information that will help you reduce lead hazards in your home.

Target audience for event:

To raise awareness of the consequences of lead poisoning among parents and pregnant women who live in homes built before 1978.



End date:
29/10/2016

Torrington Area Health District (Government Agency)

City/Area:
Torrington

Country:
United States of America

Title of event:
National Lead Poisoning Prevention Week

Brief description of event:
Along with putting out posters and signs we are going to be collaborating with Family Strides and WIC in holding a Halloween Lead Prevention Party. We are going to go over basic facts about lead, show participants the 3 bucket cleaning system, have participants sign up for a healthy homes inspection if you like, and a whole lot more.

Target audience for event:
Families with children under the age of 6 years old.

Start date:
23/10/2016

End date:
29/10/2016

Volgograd-Ecopress Information Centre (NGO)

City/Area:
Volgograd

Country:
Russian Federation

Title of event:
Lead-free paint to every home

Brief description of event:
Information about lead paint will be prepared and disseminated in the form of short leaflets. This activity will help to raise stakeholder awareness about lead threat to the health of children and lead paint as a significant source of exposure. A press-conference will be held to highlight the importance of lead elimination from paint and the available data. Both activities will provide an input into raising public awareness on lead content in paint produced or sold in Russia and contribute to the overall goal of elimination of lead from paint in the country.

Target audience for event:
Local authorities, schools, kindergartens, family doctors, civil society groups and local media groups

Start date:
23/10/2016

End date:
29/10/2016

UNENGO MAMA-86 (NGO)

City/Area:
Kyiv, Kharkiv, Nova Kakhovka, Yaremche, Zaporozhye, Kropivnytskyi, Vynnytsia, Poltava, Mykolayiv

Country:
Ukraine

Title of event:
The international lead poisoning prevention week of



action in Ukraine

Brief description of event:

1. Conduct awareness campaign in several kindergarten and schools in cities where there are the MAMA-86 branches.
2. Holding a press conference in Kyiv: 1 – the presentation of the report with data on levels of lead containing in paint sold in Ukraine as the results of the research which IPEN conducted to determine the levels of lead in paint sold in some countries 2 – call to the Government and industries for urgent action.

Target audience for event:

General public, children and their families, teachers and employees of kindergartens, health care professionals, government authorities, industries, journalists

Start date:

23/10/2016

End date:

26/10/2016

Target audience for event:

n/a

Start date:

25/10/2016

End date:

27/10/2016

Julia Lead The Way Lead Poisoning Awareness Group

Type of organization

Lead Poisoning Awareness

City/Area:

Marshfield, Ma

Country:

United States of America

Title of event:

Social media posts for lead poisoning awareness consisting of videos, articles and petitions specific to eliminating lead poisoning

Brief description of event:

Sharing the #Finditfunditfixit hashtag until lead poisoning is a disease of the past!

Target audience for event:

Planet Earth

Start date:

24/10/2016

End date:

District of Columbia Department of Energy and Environment (Government Agency)

City/Area:

Washington DC

Country:

United States of America

Title of event:

Thrift Store Ceramic Foodware Survey

Brief description of event:

Have you ever purchased ceramics from Thift Stores? We are surveying Thrift Store owners throughout Washington DC about their knowledge of the link between lead in ceramics, criterias on which they sell ceramic foodware and its popularity among patrons.



29/10/2016

End date:
27/10/2016

Human Health Institute (NGO)

City/Area:
Astana

Country:
Kazakhstan

Title of event:
Press conference dedicated to a study of lead content in paints

Brief description of event:
Astana, October 27th 2016
During the International Lead Poisoning Prevention Week, a press conference dedicated to a study of lead content in paints will be held at "Park Inn by Radisson Astana" (8A Saryarka ave., Conference Hall) at 10 AM. The study was conducted by NGO "Greenwomen" in Almaty and public association "Human Health Institute" in Astana.
Representatives of governmental structures and international organizations, ecology experts, environmental activists and members of the public will participate in the event.
The event program includes:
1. Discussion of effects of lead content in paints for household purposes;
2. Presentation of information about effects of lead on human body.

Target audience for event:
Representatives of governmental structures and international organizations, ecology experts, environmental activists and members of the public

Start date:
27/10/2016

King Fahad Medical city (Health care institution)

City/Area:
Riyadh

Country:
Saudi Arabia

Title of event:
awareness to public about dangers of lead poisoning

Brief description of event:
outreaching general public through social media
Our primary goal is to spread awareness about the dangers of exposure to paints containing lead

Target audience for event:
public

Start date:
25/10/2016

End date:
29/10/2016

Green & Healthy Homes Initiative, Lewiston-Auburn, Maine (NGO)

City/Area:
Lewiston/Auburn, Maine



Country:

United States of America

Title of event:

Sign Up for FREE Lead Dust Kits

Brief description of event:

Homeowners and tenants can stop in at any one of the participating organizations to sign up for a FREE lead dust kit or sign up online.

Target audience for event:

Homeowners and tenants

Start date:

24/10/2016

End date:

28/10/2016

regarding urban soil and contamination.

This is a GCEF funded and totally free, family friendly workshop so don't be shy!

Maybe you've been excited to plant in your backyard but was worried about all the stories of lead contamination? Well we are here to EDUCATE and EXPLAIN how to be safe. We encourage gardening and interacting with soil- THE SAFE WAY! So come on out!

This workshop will take place at Eagle Street Rooftop Farms volunteer day and market so we can get our hands dirty right away.

The soil test will measure:

- Lead
- Arsenic
- Copper
- Zinc

Target audience for event:

Families, Gardeners, community members,

Start date:

30/10/2016

End date:

30/10/2016

Neighbors Allied for Good Growth (NGO)

City/Area:

Brooklyn

Country:

United States of America

Title of event:

Free Soil Testing Workshop!

Brief description of event:

This is your last chance (until the spring) to get your soil tested by the experts at Brooklyn College Analytical Center! They bring the equipment right to our community and will test your soil on the spot. They'll also be educating and answering all questions

Center for Environmental Solutions (NGO)

City/Area:

Minsk

Country:

Belarus

Title of event:

Lead-free paint campaign launch



Brief description of event:

CES will launch a public campaign to increase awareness about lead poisoning and contribute to ban of usage of lead in paints in Belarus.

Target audience for event:

Public, paint manufactures, importers, national regulators, mass media.

Start date:

25/10/2016

End date:

30/10/2016

entrepreneurs and young government employees.

Start date:

22/10/2016

End date:

30/10/2016

European Environment and Health Youth Coalition (NGO)

City/Area:

Vilnius

Country:

Lithuania

Title of event:

Lead Poisoning Prevention - Putting People First

Brief description of event:

The main aim of the awareness raising campaign is to foster communication and lead poisoning prevention information exchange in order to improve mutual understanding as well as to mobilize youth communities and the whole society to bring about the necessary change in attitudes and behavior. The campaign will be run via virtual youth communication channels. The expected outcome of the event is statement to policy decision makers.

Target audience for event:

Youth organizations, informal groups, students, youth professionals, young researchers and activists, young

US Environmental Protection Agency

(Government Agency)

If Other, please specify

Academia, Public Health, NGO

City/Area:

Baltimore, MD

Country:

United States of America

Title of event:

Baltimore Children's Health Fair

Brief description of event:

A children's health fair will be held on the campus of Morgan State University. This event recognizes both Children's Health month (October) and National Lead Poisoning Prevention Week (10/23-29, 2016). Vendors and training sessions will be available on subjects such as lead, asthma, healthy homes, sickle cell anemia, environmental justice, and tenants' rights. In addition, the full EPA Lead-Safe Renovation Certification course will be offered. There will be a fire engine, a costume parade, featuring Derrick the Dinosaur, snacks and games for kids.

Target audience for event:

The audience is parents and young children.

Start date:

29/10/2016



End date:
29/10/2016

1-Health environment management agency- Ministry of Health of Vietnam, 2-Poison control center of Bach Mai hospital, 3-National institute of occupational and environmental health (Government Agency)

If Other, please specify

Co-operation of 3 government and healthcare institutions

Childhood Lead Action Project (NGO)

City/Area:
Newport, RI

Country:
United States of America

Title of event:
Community outreach table

Brief description of event:

The Childhood Lead Action Project will staff an outreach table at a clinic providing services to local families enrolled in WIC (Special Supplemental Nutrition Program for Women, Infants and Children). We will provide information to parents and families about lead hazards, resources for lead poisoning prevention, and how to get involved in a grassroots campaign to eliminate lead poisoning.

#leadfreekids #LPPW2016 #LeadSafeRI #FindFixFund

Target audience for event:

parents, families, tenants, low-income residents, social service providers

Start date:
27/10/2016

End date:
27/10/2016

City/Area:
Hanoi and North eastern province of Hưng Yên

Country:
Viet Nam

Title of event:
Workshop and announcement by mass media

Brief description of event:

1. On 28/10/2016: Workshop on the reduction of exposure to lead by children and workers in Dong Mai village, Chi Dao commune, Van Lam district, Hung yen province, Vietnam
2. 04/11/2016: Workshop on the situation of lead poisoning and interention measures

Target audience for event:

Leaders of local administrative authorities, public health workers, local workers and people, mass media

Start date:
28/10/2016

End date:
04/11/2016

Moroccan Society of Clinical and Analytical



Toxicology (NGO)

City/Area:
RABAT

Country:
Morocco

Title of event:
International Lead Poisoning Prevention Week of Action (ILLPWA)

Brief description of event:

During this week, we will have several targets:

- A public awareness through publication of a newspaper article concerning this problem and the posting of the IPEN brochures and materials in this field on the Site of Poison Control Centre of Morocco (CAPM) and the Moroccan Society of Clinical and Analytical Toxicology (SMTCA)
- Physicians awareness through a Toxicovigilance Technical Committee meeting about saturnism
- Students and teachers awareness at a one public school as exemple
- Authorities awareness by publishing of an alert in the next issue of the CAPM journal: Toxicology Morocco

Target audience for event:
Public, physicians, authorities, students

Start date:
24/10/2016

End date:
27/10/2016

Type of organization

IGO and the Government of China co-hosting the event

City/Area:
Beijing

Country:
China

Title of event:
"Lead Based Paint Substitution and Recycling of Lead Acid Batteries"

Brief description of event:

The event is organised within the framework of the 11th International Conference on Waste Management and Technology (ICWMT) that is taken place from 21-24 October 2016 in Beijing, China. The event focus on lead based paint substitution and the efforts from the Government of China and other stakeholders to eliminate lead paint worldwide under the framework of the work of the Lead Paint Alliance. ICWMT is an important international platform for specialists and officials to discuss scientific problems, exchange experiences, and look for innovative solutions. Initiated by Basel Convention Regional Centre for Asia and the Pacific, ICWMT has been held 10 times since its inception in 2005.

Target audience for event:
Governments, research institutions, universities and industries. There were more than 500 delegates from nearly 30 countries participating in ICWMT10.

Start date:
24/10/2016

End date:
24/10/2016

UN Environment and the Government of China (Solid Management Center of Environment Protection Department)

Green & Healthy Homes Initiative



Type of organization
Non-Profit Organization

City/Area:
Baltimore, Maryland

Country:
United States of America

Title of event:
"Day At The Market" East Baltimore Community Outreach Initiative

Brief description of event:
Free Community event highlighting local health agencies providing free resources and information.

Target audience for event:
East Baltimore community and community organizations.

Start date:
26/10/2016

End date:
26/10/2016

Louisiana Healthy Homes and Childhood Lead Poisoning Prevention Program (Government Agency)

City/Area:
New Orleans, Louisiana

Country:
United States of America

Title of event:

Louisiana Celebrates Lead Poisoning Prevention Week

Brief description of event:
Throughout the week, LHHCLPPP will:

- Educate and train over 1,500 people on lead poisoning prevention;
- Provide free lead testing at WIC clinics in the parishes of Orleans, Jefferson, Plaquemines and St. Bernard;
- Survey physicians about their lead testing practices through a collaboration with the New Orleans Health Department and work with American Academy of Pediatrics to distribute the Lead Poisoning Prevention Physician Flyer to all pediatricians in their database;
- Provide targeted initiatives in Regions 1, 6 and 8 in the state;
- Partner with Text4baby to raise awareness of mandatory lead screening laws to all Text4baby enrollees with children 0-12 months of age;
- Host the WIC Clinic Lead Testing Award Luncheon and announce the Lead Poisoning Prevention Champion Partner Awardee at the LHHCLPPP State Advisory Board Meeting
- Raise awareness about lead and its effects on human health by participating in health fairs, presentations, advisory board meetings, trainings and events at area WIC clinics, local Head Start programs, churches, universities, state agencies and community-based organizations

Target audience for event:
This annual awareness campaign highlights to Louisianans the importance of testing homes for lead, testing children for lead poisoning and learning how to prevent lead poisoning to all Louisiana residents.

Start date:
23/10/2016

End date:
29/10/2016



Rhode Island Department of Health

(Government Agency)

City/Area:

198 Harrison Street, Pawtucket, RI

Country:

United States of America

Title of event:

Celebrating National Lead Poisoning Prevention Week

Brief description of event:

"Find It, Fix It, Fund It" - The multifamily house to be showcased at this press conference is a great example of a collaborative effort to transform an abandoned building with lead hazards into safe, affordable housing for local families.

Target audience for event:

State, City, and Community Partners; General Public

Start date:

26/10/2016

End date:

26/10/2016

Brief description of event:

Seminario organizado por la DIGESA junto con ALTERVIDA donde se trabajara con los empresarios, Gobierno, Sociedad Civil.

Target audience for event:

Asuncion

Start date:

28/10/2016

End date:

28/10/2016

International Pharmaceutical Students' Federation

Type of organization

International Advocacy Organisation

City/Area:

Hague

Country:

Netherlands

Title of event:

International Lead Poisoning Prevention Week 2016

Brief description of event:

During international lead poisoning prevention week, educational materials were released over social media (i.e. facebook) giving information related to lead poisoning. For example:

- People most vulnerable to lead poisoning (e.g. pregnant women and children)
- The consequences of lead poisoning (e.g.intellectual disability)
- How to protect yourself from lead poisoning (e.g.

Direccion General de Salud Ambiental

(Government agency)

City/Area:

asuncion

Country:

Paraguay

Title of event:

Taller



avoiding inhalation)

- Where you can find lead (e.g. toys, paints and old pipes)

- How lead affects your body

The global health campaign created awareness through the medium of posters and captions further explaining the points mentioned above. These were then translated into more than one language for further understanding.

Target audience for event:

This campaign was aimed at pharmacy students around the world who would then share the information with the general public. Regions include: Eastern Mediterranean; African; Asia Pacific; European; and Pan-American.

Start date:

23/10/2016

End date:

29/10/2016

school in the 19134 zip code of Philadelphia; a target area for lead prevention services.

Target audience for event:

The target audience for this event are parents and guardians of children ages six and under.

Start date:

25/10/2016

End date:

25/10/2016

Philadelphia Department of Public Health

Type of organization

City

City/Area:

Philadelphia, PA

Country:

United States of America

Title of event:

Healthy Neighborhood Project

Brief description of event:

Memphis Street Academy will host a Parent Teacher Organization meeting where the Healthy Neighborhood Project, a part of the Lead and Healthy Homes program, will present to parents about lead poisoning prevention. Memphis Street Academy is an elementary

Colnodo / Red de Desarrollo Sostenible (NGO)

City/Area:

Bogotá

Country:

Colombia

Title of event:

Presentation of the Report Lead-based paint solvents for domestic use in COLOMBIA 2016

Brief description of event:

Colnodo and the Sustainable Development Network will release the Report Lead-based paint solvents for domestic use in COLOMBIA 2016 and start an advocacy campaign through the Sustainable Development Network - www.rds.org.co to aim paint manufacturers to produce lead free paints and to advocate policy makers at the Colombian Senate to pass the bill that will limit the lead content in paints sell in Colombia and the general public to get informed about the risks of lead exposure, especially to childrens.

Target audience for event:

Paint manufactures, policy makers, general public.

Start date:

24/10/2016



End date:
29/10/2016

EPA Region 10 Lead & Asbestos Program

(Government Agency)

City/Area:
Seattle

Country:
United States of America

Title of event:
Prevent Lead Poisoning

Brief description of event:
Region 10 uses social media (tweets, facebook, website) in raising awareness on lead poisoning prevention and the Renovation, Repair, and Painting Rule Requirements.

Target audience for event:
Consumers in Alaska, Idaho, Oregon, & Washington

Start date:
23/10/2016

End date:
29/10/2016

Consumers' Association of Penang (NGO)

City/Area:
Penang

Country:
Malaysia

Title of event:
Eliminate Lead in Paint

Brief description of event:
Prepare and issue a press release calling for promulgation of regulation to ban lead in paint. This is a follow-up to our lead paint elimination campaign.

Target audience for event:
Government, paint industries, public (consumers)

Start date:
25/10/2016

End date:
26/10/2016

United Parents Against Lead (UPAL) (NGO)

City/Area:
Richmond

Country:
United States of America

Title of event:
A Child is a Terrible Thing to Waste Lead Awareness Campaign

Brief description of event:
UPAL will team up with the Department of Health's Lead Safe Virginia Program to disseminate Lead



Poisoning Prevention information to George Mason Elementary School's Kindergarten and First Grade students. This awareness and education program will feature the "Lead Dust Busters" kit and curriculum; The Sesame Street Lead Away! video viewing and students will receive Lead Away coloring books, crayons and Lead Growth charts while parents receive Lead in Your Water and Protecting Your Child from Lead information booklets.

Target audience for event:

Elementary school children, staff and parents of students at George Mason Elementary School in Richmond, Virginia.

Start date:

24/10/2016

End date:

28/10/2016

Target audience for event:

Public event

Start date:

24/10/2016

End date:

24/10/2016

Green & Healthy Homes Initiative

Type of organization

Non-Profit Organization

City/Area:

Baltimore, Maryland

Country:

United States of America

Title of event:

National Lead Poisoning Prevention Week Kick Off Press Conference

Brief description of event:

Press Conference to highlight importance of lead poisoning prevention as well as preview events throughout NLPPW 2016.

Green & Healthy Homes Initiative

Type of organization

Non-Profit Organization

City/Area:

Baltimore, Maryland

Country:

United States of America

Title of event:

Contractor Training Webinar (Delivered in Spanish)

Brief description of event:

Webinar to provide information to contractors about best practices for lead work in Maryland (delivered in Spanish).

Target audience for event:

Spanish speaking contractors in Maryland.

Start date:

26/10/2016

End date:

26/10/2016



EPA Region 10 Lead & Asbestos Program

(Government Agency)

City/Area:

Alaska, Idaho, Oregon, Washington

Country:

United States of America

Title of event:

Lead Poisoning Outreach Campaign

Brief description of event:

Region 10 sends out an article on Lead Poisoning Prevention by informing consumers and home contractors about the Rule - Renovation, Repair, and Painting Requirements.

Target audience for event:

Consumers and Contractors

Start date:

24/10/2016

End date:

25/10/2016

Childhood Lead Action Project (NGO)

City/Area:

Providence, RI

Country:

United States of America

Title of event:

Lead Poisoning Prevention Week Banner Displayed on City Hall

Brief description of event:

Massive lead poisoning prevention awareness banner displayed on the front of City Hall in Providence, the capital city of Rhode Island, facing the central hub of the statewide bus system. The message is Lead-Safe Homes = Lead-Safe Kids, with contact information for programs available to help families to eliminate lead-paint hazards. Jointly coordinated by the Childhood Lead Action Project and City of Providence.

#leadfreekids #LPPW2016 #LeadSafeRI #LeadSafePVD

Target audience for event:

Parents, homeowners, tenants, workers, tourists, Providence residents, Rhode Island residents

Start date:

23/10/2016

End date:

29/10/2016

The "Center Cooperation for Sustainable Development"

Type of organization

Social Fund

City/Area:

Almaty

Country:



Kazakhstan

Title of event:

Impact of lead on health and environment

Brief description of event:

Increasing awareness of students about the dangerous impact of lead on human health and the environment in general.

Target audience for event:

Students of "Ecology" specialization, NARXOZ University

Start date:

28/10/2016

End date:

28/10/2016

Target audience for event:

Contractors, and others conducting renovation work in homes built before 1978.

Start date:

27/10/2016

End date:

27/10/2016

Georgia Development Agency (NGO)

City/Area:

Tbilisi

Country:

Georgia

Title of event:

International Lead Poisoning Prevention Week / Health and Safe School

Brief description of event:

1. Adding all provided By "International Lead Poisoning Prevention Week" educational materials on online spaces: Alliance "Healthy and safe School" members and partners, Social pediatrician funds, Georgia development Agency, Georgian National Section of Euro Science (ESGNS)
- 2 Distributing flyers, posters and information schools, health professionals and public by online.
3. Involved on the campaign the dissension makers and prominent persons from art / music.

Target audience for event:

Dissuasion makers, civil society

Start date:

23/10/2016

Green & Healthy Homes Initiative

Type of organization

Non-Profit Organization

City/Area:

Baltimore, Maryland

Country:

United States of America

Title of event:

Contractor Outreach Initiative

Brief description of event:

Contractor focused outreach, delivered in person to contractors at Habitat for Humanity's Restore.



End date:
29/10/2016

State of Tennessee (Government Agency)

City/Area:
Nashville, TN

Country:
United States of America

Title of event:
National Lead Poisoning Prevention Week Event

Brief description of event:
The Tennessee Department of Environment and Conservation (TDEC) will host a free event – featuring food, music and giveaways – to raise awareness of lead poisoning prevention for children on Oct. 25 at the Tennessee Tower in downtown Nashville. From 10 a.m.-2 p.m., TDEC's Lead Hazard Program will have informational resources available as well as games, food and entertainment for families.

This year's National Lead Poisoning Prevention Week theme, "Lead-free Kids for a Healthy Future", focuses on ways parents can reduce a child's risk to lead exposure, primarily from lead-based paint and drinking water. Children five and under are most at risk from lead exposure and its serious health effects. Lead can be found in paint, soil in yards or playgrounds, and drinking water.

Target audience for event:
Parents with children under five years old.

Start date:
25/10/2016

End date:
25/10/2016

US EPA, Region 8 and Colorado Department of Public Health and Environment Child Care and Schools Program (Government Agency)

City/Area:
Denver

Country:
United States of America

Title of event:
Release of the Child Care Lead Poisoning Prevention Infographic

Brief description of event:
In time for October's Children's Health Month and Lead Poisoning Prevention Week (October 23 -29), the US Environmental Protection Agency Region 8 Lead Program and Colorado Department of Health and Environment (CDPHE) Child Care and Schools Program completed a collaborative effort to create an infographic designed to help child care providers comply with Colorado's new health and sanitation regulations related to lead poisoning prevention. The infographic is now accessible on CDPHE's website. See link below.

Target audience for event:
Colorado Child Care Operators
Colorado Child Care Regulators
Colorado Families with Young Children

Start date:
24/10/2016

End date:
28/10/2016



West African Academy of Public Health

Type of organization

Consulting Health Development Organisation

City/Area:

Kaduna

Country:

Nigeria

Title of event:

What to Know About Lead Poisoning : A Twitterview with Dr. Francis Ohanyido

Brief description of event:

The West African Academy of Public Health (WAAPH) would be organising a 'twitterview' on lead poisoning titled "What to Know About Lead Poisoning : A Twitterview with Dr. Francis Ohanyido".

Dr. Francis Ohanyido, MD, FRSPH, FAPH would be interviewed on twitter for 1 hour on 29th October at 20hrs GMT on the dangers of lead poisoning and need to eliminate that environmental and public health threat, as a climax for the international lead poisoning prevention week. The handle to be used would be @TheWAAPH while his response handle would be @ohanyidof. The hashtag would be #ILPPW2016 for the twitterview.

Target audience for event:

Wests Africans as well as global audience on digital media.

Start date:

29/10/2016

End date:

29/10/2016

Childhood Lead Action Project (NGO)

City/Area:

Rhode Island

Country:

United States of America

Title of event:

Lead Poisoning Elimination Drive Social Media Campaign

Brief description of event:

The Childhood Lead Action Project will participate in a week-long social media campaign to raise awareness about lead hazards, resources for lead poisoning prevention, and opportunities for parents of lead poisoned children to get involved in a grassroots effort to eliminate lead poisoning. With our network of facebook followers, we are specifically highlighting the Find It, Fix It, Fund It Campaign, an effort spearheaded by the National Center for Healthy Housing aimed at eliminating lead poisoning in the United States in 5 years.

#leadfreekids #LPPW2016 #LeadSafeRI #FindFixFund

Target audience for event:

parents, grandparents, families, homeowners, tenants, workers, doctors, nurses, social service providers, lawyers, policymakers, environmental justice/housing/health advocates

Start date:

23/10/2016

End date:

29/10/2016



Vermont Department of Health Rutland District Office (Government Agency)

City/Area:
Rutland, VT

Country:
United States of America

Title of event:
Foster Parent training

Brief description of event:
training class for soon-to-be foster parents

Target audience for event:
foster parents and families

Start date:
27/10/2016

End date:
27/10/2016

Brief description of event:

Presentation @ monthly Vt. Dept. of Health District office staff meeting. Discussed briefly lead poisoning through the ages (ancient Rome, 1800 & early 1900's- probable impact on well known artists to 1960's - present. Discussion of past acceptable lead levels to current here in Vt. Review of current local WIC program practices as well as current local community support/need.

Target audience for event:
Local Vt. Dept. of Health public health staff.

Start date:
25/10/2016

End date:
25/10/2016

Asociación Nacional de Fabricantes de Pinturas y Tintas A.C. (NGO)

City/Area:
Mexico

Country:
Mexico

Title of event:
Social media

Brief description of event:
A social media package that includes social media posts for Facebook and twitter

Target audience for event:
General

Start date:
24/10/2016

Vt. Dept. of Health (Government Agency)

City/Area:
Brattleboro, Vt.

Country:
United States of America

Title of event:
Historical perspective of lead poisoning & positive impact of public health



End date:
28/10/2016

The Mombasa Lead Alliance

Type of organization

A coalition of National and County Governments, Academia, NGO, Industry and Community

City/Area:
Mombasa

Country:
Kenya

Title of event:

Building commitment among stakeholders towards the establishment of national standards to eliminate lead in paint

Brief description of event:

Our goal is to initiate the County of Mombasa into the lead alliance by collaborating with the County Government and key stakeholders in awareness, advocacy and capacity building for the adoption of national standards and best practices in lead poisoning prevention, response and recovery

Target audience for event:

Mombasa Paint Artisans, Brain Youth Group, Pwani University, University of Nairobi, Technical University of Mombasa, County Government of Mombasa, Eco Ethics Kenya, CEJAD, Fort Jesus-NMK, Kenya Red-Cross, KIRDI, MoH, UNEP, KEBS, KNH, NEMA, AAK, KCS, Crown Paints, MTTI, Media and Bamburi Cement

Start date:
24/10/2016

End date:

29/10/2016

Green & Healthy Homes Initiative

Type of organization

Non-Profit Organization

City/Area:

Baltimore, Maryland

Country:

United States of America

Title of event:

"Baltimore Children's Health Fair" Event w/ EPA, Baltimore City, and Morgan State University

Brief description of event:

Environmental justice event with multiple partners scheduled to tie in to the end of lead week. Working to tie outcomes (how the event affects the community) to the event, not just focused on the output. Also to include workshops from various participants.

Target audience for event:

Baltimore City students, parents, children, schools, community organizations, and residents throughout the entire city.

Start date:

29/10/2016

End date:

29/10/2016



SRM MEDICAL COLLEGE HOSPITAL & RESEARCH CENTER-SRM/Stratus, Center for Medical Simulation, (Academic institution)

City/Area:
Chennai

Country:
India

Title of event:
Lead Poisoning prevention

Brief description of event:
Posters on Lead Poisoning prevention displayed in vantage areas in Medical college & Hospital including, Nursing College, Pediatrics Department, ER, Library and Notice Boards of Dean, ProVc, MS and Deputy MS. Email of Indian Scenario in Lead poisoning with WHO Posters as attachment sent to Admin heads, faculties and students

Target audience for event:
Faculties, Students of Medical and Nursing Colleges, admin Heads, patients and OP registrants including Pregnant women and Children

Start date:
25/10/2016

End date:
29/10/2016

Country:
United States of America

Title of event:
LEAD AWARENESS WEEK

Brief description of event:
Display of materials relevant to Lead Poisoning and ways to prevent it. Lead Pipes and fittings on display to raise awareness of what to look for.

Target audience for event:
General Public visiting the McCormack Building in Post Office Square that includes lawyers and their clients going to the Court Rooms within the building.

Start date:
24/10/2016

End date:
28/10/2016

Environmental Protection Agency EPA Region 1, New England (Government Agency)

City/Area:
Boston, MA

Young Volunteers for the Environment, Nigeria (NGO)

Type of organization
NGO

City/Area:
Ibadan, Oyo state

Country:
Nigeria



Title of event:

School and community Lead Poisoning Awareness Day

Brief description of event:

This event is organized to sensitize students and communities' on the chemical related issues especially as it relates to lead.

The event would enable the participants get to know more about the dangers associated with lead.

Target audience for event:

Students, communities and invited non governmental organizations

Start date:

22/10/2016

End date:

22/10/2016

meeting

Publication of information on environmental health problems related to lead in WHO European Region on WHO Europe web-site

Target audience for event:

representatives of government, institutions and non-governmental organizations

Start date:

24/10/2016

End date:

28/10/2016

WHO European Center for Environment and Health, WHO Regional Office for Europe (IGO)

City/Area:

Bonn

Country:

Germany

Title of event:

Awareness raising campaign

Brief description of event:

Distribution of WHO International Lead Poisoning Prevention Week of Actions materials among participants of the WHO Regional Office for Europe meeting on sustainability of health systems scheduled on 24-25 October and briefinf on the Week during the

Massachusetts Department of Labor Standards (Government Agency)

City/Area:

Massachusetts

Country:

United States of America

Title of event:

Outreach

Brief description of event:

Blog post to 10,000 plus subscribers

Target audience for event:

Public

Start date:

27/10/2016

End date:

27/10/2016



Pollution Control Association of Liberia (NGO)

City/Area:
Monrovia

Country:
Liberia

Title of event:
Awareness Raising Campaign

Brief description of event:
The event will start with a newspaper publication describing the activities that will be carried out. The second activity will be an indoor program in an elementary school in the Sinkor, Monrovia area. The third activity will be community awareness thru poster distributions in the Redlight area in Paynesville city.

Target audience for event:
Target audience include students, the general reading public, community leaders, teachers etc

Start date:
26/10/2016

End date:
29/10/2016

Childhood Lead Action Project (NGO)

City/Area:
Pawtucket, RI

Country:
United States of America

Title of event:
Lead Poisoning Prevention Week Press Conference

Brief description of event:
Press conference with Pawtucket, RI Mayor Grebien, U.S. Senator Whitehouse, U.S. Congressman Cicilline, and state officials to raise awareness about lead hazards and the importance of prevention; announce the success of collaborative local efforts to protect homeowners, tenants, and workers from lead; and call for the implementation of the Find It, Fix It, Fund It campaign, a national effort to eliminate lead poisoning in the U.S. in 5 years. Jointly planned by the Childhood Lead Action Project and City of Pawtucket.

#leadfreekids #LPPW2016 #LeadSafeRI #FindFixFund

Target audience for event:
Media, parents, homeowners, tenants, workers, educators, policymakers

Start date:
26/10/2016

End date:
26/10/2016



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