

LEAD Action NEWS

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

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Call for Volcano Art Prize 2019 Entries

It's a fun way to contribute to lead poisoning prevention, and you could win an award, a cash prize, or your entry printed on one of 30 mugs!

The deadline is midnight at the end of the day on **Monday 22nd July 2019**, so there is still time to get creative....

You could just go through your photos and choose a landscape-orientation A4 (rectangular) photo that's 1-3MB in size and for which you can create a Lead-Safety Message (words to inspire others to stay or become lead-safe or protect the environment from lead), then head to www.volcanoartprize.com/submitentry/ to upload it! Photos of artworks (as below) and short films (after you've web-published it) can also be entered.

If you're an adult in an OECD country, entry only costs AU\$10 but for every child and all other adults, entry is free! Winners are announced during ILPPWA 2019* in *LEAD Action News*.



2017 Volcano Art Prize (VAP) Entry. Title of Image: It makes me happy to enter Volcano Art Prize.

Lead-Safety Message: I know I'm helping The LEAD Group to create a Lead Safe World, and I win a beautiful Pictureproducts mug with my image on it. Artist: **Noela Whitton.**

<http://volcanoartprize.com/portfolio-item/it-makes-me-happy-to-enter-volcano-art-prize/>

*Dates for your diary: **International Lead Poisoning Prevention Week of Action (ILPPWA) 2019** is Sunday 20th October to Saturday 26th October. Please send in your ideas for how else we should mark this important week globally.



Convocatoria de entradas al Premio Volcano de Arte!

Es una diversion contribuir a la prevención de la intoxicación con plomo y usted puede ganar una recompensa, un premio en efectivo, o ver su entrada impresa en una de 30 tazas!

La fecha límite es la media noche del día **Lunes 22 de Julio 2019**, de tal modo que aún hay tiempo para ser creativo/a...

Simplemente puede revisar sus fotos y elegir una de orientación horizontal A4 (rectangular) con un tamaño de 1 a 3 MB y para la cual puede crear un Mensaje de Seguridad contra el Plomo (palabras para inspirar a otros a permanecer, a estar a salvo o a proteger el medio ambiente de plomo), luego dirígete a www.volcanoartprize.com/submitentry/... ¡para subirlo !. También se pueden ingresar fotos de obras de arte (como a continuación) y cortometrajes (después de haberlo publicado en la web).

Si usted es un adulto de un país de la OECD, su entrada solo cuesta 10 dólares Australianos, pero para cada niño/a u otro adulto la entrada es gratuita. Los ganadores se anuncian durante la ILPPWA 2019 en LEAD Action News (“Noticias de la Acción sobre el Plomo”).



Premio Volcano de Arte (VAP) 2017 Entrada. Título de la Imagen: Estoy feliz de entrar al Premio Volcano de Arte. **Mensaje de Seguridad contra el Plomo:** Sé que estoy ayudando a crear un Mundo Seguro contra el Plomo, y gano una hermosa taza de “productos Picture” con mi imagen en ella. Artista: **Noela Whitton.** <http://volcanoartprize.com/portfolio-item/it-makes-me-happy-to-enter-volcano-art-prize/>

Fechas para su diario: **La Semana de Acción Internacional para la Prevención del Envenenamiento por Plomo (ILPPWA, por sus siglas en inglés) 2019** es el Domingo 20 Octubre a Sábado 26 de Octubre. Por favor envíe sus ideas para saber de qué otra manera debemos marcar esta importante semana a nivel mundial.



Appel à candidatures pour le Prix d'Art Volcano!

C'est amusant de contribuer à la prévention de l'empoisonnement par le plomb et vous pourriez gagner un prix, un prix en argent ou une participation imprimée sur l'une des 30 tasses!

La date limite est fixée au **Lundi 22 Juillet 2019** à minuit, en fin de journée, donc il est encore temps de faire preuve de créativité ...

Vous pouvez simplement parcourir vos photos et choisir une photo A4 (rectangulaire) à orientation paysage avec une taille de 1 à 3 Mo et pour laquelle vous pouvez créer un message sur la sécurité du plomb (mots pour inciter les autres à rester ou devenir à se protéger contre le plomb) puis dirigez-vous vers www.volcanoartprize.com/submitentry/ pour le télécharger ! Vous pouvez également saisir des photos d'œuvres d'art (voir ci-dessous) et des courts métrages (après leur publication sur le Web).

Si vous êtes adulte dans un pays de l'OCDE, l'entrée ne coûte que 10 dollars Australiens, mais l'entrée est gratuite pour tous les enfants et tous les autres adultes. Les gagnants sont annoncés lors de ILPPWA 2019 * dans *LEAD Action News*.



Prix d'Art Volcanique 2017 (VAP). Entrée. Titre de l'image: Cela me fait plaisir d'entrer dans le Volcano Art Prize. **Message de sécurité au plomb:** Je sais que j'aide le Groupe LEAD à créer un monde en sécurité, et je gagne une belle tasse de produits Picture avec mon image. Artiste: **Noela Whitton**. <http://volcanoartprize.com/portfolio-item/it-makes-me-happy-to-enter-volcano-art-prize/>

Dates de votre agenda: **La Semaine internationale d'action pour la prévention de l'intoxication par le plomb (ILPPWA) 2019** aura lieu le Dimanche 20 Octobre au Samedi 26 Octobre. S'il vous plaît envoyez-nous vos idées sur la manière dont nous devrions marquer autrement cette semaine importante dans le monde.



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Editorial, *LEAD Action News* volume 19 number 4, April 2019 – Call for Volcano Art Prize 2019 Entries

By Elizabeth O'Brien, instigator of ILPPWA, co-Founder of The LEAD Group Inc.

Mindful of International Lead Poisoning Prevention Week of Action (ILPPWA) 2019 coming up in the last full Sunday to Saturday week of October – we begin this issue with a Call for Volcano Art Prize (VAP) 2019 Entries, The LEAD Group's annual art competition now in its 8th year, because it is The LEAD Group's tradition since the inception of ILPPWA in 2013, to announce the VAP winners each year during ILPPWA. VAP is a valuable vehicle for getting your Lead-Safety Message out there, not just on www.volcanoartprize.com but also through other LEAD Group publications like *LEAD Action News*. Thanks to our volunteer translator Orlando Aguirre-Lopez, we have made the call for VAP entries (and other articles in this issue) also in Spanish and French.

Meanwhile, ILPPWA or the "Lead Week of Action" 2018 was so successful, and so many organisations sent us their reports for publication in *LEAD Action News*, (see Part 1: <http://www.lead safeworld.com/lanv19n2-the-6th-annual-lead-week-of-action-is-a-big-success/> and Part 2: <http://www.lead safeworld.com/lanv19n3-the-6th-annual-lead-week-of-action-is-a-big-success/>) that we have extended our reporting on last year's Events to one more article in this third issue of *LEAD Action News* (vol. 19 no. 4) covering the events, which could be subtitled: **The 6th annual Lead Week of Action 2018 is a big success! [Part 3]**

The final report from ILPPWA 2018 is from Egypt's Kenana and Sherouk Associations, on their excellent activities focussed on banning lead paint in Egypt, and the article is available as a summary in English, Spanish and French, followed by the full report (with photos) in Arabic.

The LEAD Group recommends that any governments, academics, NGOs or paint manufacturers or federation of paint manufacturers interested in reaching the WHO/UN goal of limiting lead in paint to 90 parts per million (90 ppm) should join the Global Lead Paint Alliance / Global Alliance to Eliminate Lead Paint (GAELP). To this end, we next publish The LEAD Group's application to formally join the Alliance, extracts of the acceptance letter (both translated into Spanish and French), followed by a list of Partners (up to mid December 2018) of the Global Lead Paint Alliance.

The LEAD Group runs the Lead Safe World Project and one of the GAELP partners – the Australian Paint Manufacturer's Federation (APMF) is a Lead Safe World Partner



with us so naturally we have contacted APMF to start a conversation about Australia meeting the 90ppm lead limit for new paints. Similarly, our colleagues in the United Kingdom, from Lead Safe World UK (LSW UK), have contacted another GAELP partner, the British Coatings Federation (BCF). This LSW UK/BCF activity, and three others undertaken by Lead Safe World UK make up the next four articles in this issue of *LEAD Action News*. Together these four articles are a tribute to the hard work of Lead Safe World UK, a project of The LEAD Group UK Branch. We will report more successes as they progress.

Next we have reprinted a letter to the editor of Environmental Health journal regarding lowering the US Centers for Disease Control's blood lead reference level for children. Then comes my Info Pack of Blood-taking hints for blood lead monitoring to help parents help children have blood taken without drama.

Always seeking solutions to serious health problems like lead poisoning, I have updated my Info Pack on Nutrition to fight lead poisoning (previously web-published in 2014 at <http://www.lead safeworld.com/nutrition-to-fight-lead-poisoning/>) and both Info Packs have been translated into Spanish and French.

This leads neatly into the first in what I hope will be a series of articles arising from The LEAD Group's Blood Lead Challenge (read about it in English, Arabic, Greek, French and Spanish at <http://www.lead safeworld.com/solutions/blood-lead-challenge-english-and-other-languages/>) whereby we encourage people to have a blood lead test and ask enquirers who report their blood lead levels to us to write their case history of what they did to bring down their blood lead level. I am very grateful to Richard Turnbull for supplying his case history about: **Lead detox with saunas, lemon, garlic, greens, etc after eradicating potential current lead exposure.**

Anyone else who'd like to contribute an article on this topic – especially with photos and the blood lead levels (which The LEAD Group will graph for you) – is most welcome!

It was with great sadness that I discovered recently that Wayne Askew passed away earlier this year. Wayne was a previous case history contributor, Volcano Art Prize 2017 Judge, and co-editor of *LEAD Action News vol 18 no 2 (LANv18n2) - Truth About Lead* (<http://www.lead safeworld.com/wp-content/uploads/2017/10/LANv18n2-Truth-about-lead.pdf>). The world is decidedly more lead safe for having had Wayne in it. His Obituary is followed by two Obituaries for Professor Lloyd Smythe – a co-author of the study which brought about the introduction of unleaded petrol into Australia in 1985.



To give a more complete history of The LEAD Group's follow-up campaign to eliminate leaded petrol in Australia (by 1st January 2002), I decided to web-publish a *Local Heroes* book launch talk I gave back in August 2002. You can read my whole chapter (the 1st chapter of the book) at <http://www.lead.org.au/lanv14n2/lanv14n2-11.html>

Leaded petrol has been a major contributor to soil contamination so I've chosen two extracts about how fungi protect forest trees from soil lead and how the lead found in old specimens of fungi and lichen can give a history of air lead levels and the sources of that air lead pollution (mainly leaded petrol).

We finish this issue of *LEAD Action News* with three articles about government policies or action on lead poisoning prevention: a fact sheet on protecting cattle from lead; some important questions about which government legislation actually protects children from lead in playground equipment and whether the lead sections of the Queensland Public Health Act have ever been implemented; and finally an analysis by Marianne Sullivan and Donna Green of lead education materials from three Australian lead mining or smelting towns. I look forward to further analysis of government policies on lead from these two fine researchers.

Kenana and Sherouk Associations in Upper Egypt mark ILPPWA 2018 successfully with wide local media coverage

On 27.10.2018, Kenana Association for Sustainable Development with support from IPEN network and in collaboration with Sherouk Association for social development in Upper Egypt marked a major event in the International Lead Poisoning Prevention Week. The event of the day was divided into three enriching activities as per the work plan.

1. Roundtable with directors and marketing managers of several paint companies in Sohag and Menia. The trainer, Dr. Momen Shaaban, spoke about lead in paints, its harms and how we can work toward a world with less lead in paints to ensure the implementation of SDGs and IPEN mission to have a world free from chemicals.
2. A visit to some painting works locations where Dr. Momen spoke about the suitable ways to dispose of paints after work and talked with the painters about the lead in paints, its harms and IPEN researches in this field and the findings of the research of the lead in paints conducted in Egypt last year, where it was found out that there are several paint products contain lead and there is an urgent need to apply the laws that limit the using of lead in paints and regulations related to imports.



3. The third activity as per the work plan provided to IPEN was to sign a commitment by the factories managers and marketing officers obliging them symbolically to not use lead in paints and let them promote awareness on the lead harms and how people can protect themselves from being exposed to it.

The event was attended by 22 participants, 14 of them decision-makers at paint factories. Moreover, 2 journalists from Al Masaa Al Arabi national newspaper attended the event and covered it in the issuance of the second day. Link to the news is on http://www.mesaaraby.com/view_news.php?id=42459

The List of the commitment signatories is in the detailed report in Arabic.

There follows some photos from the event and screen shot of the media coverage.

Las Asociaciones Kenana y Sherouk en el Alto Egipto califican exitosamente a ILPPWA 2018 con amplio cubrimiento de los medios locales

Resumen en Inglés traducido al Castellano por Orlando Aguirre-López, The LEAD Group, Australia

El 27 de Octubre, 2018, la Asociación Kenana para el Desarrollo Sostenible con el apoyo de la red IPEN y la colaboración de la Asociación Sherouk para el desarrollo social en el Alto Egipto, celebraron con éxito durante la Semana Internacional para la Prevención de la Intoxicación con Plomo. El programa del día estuvo dividido en tres actividades enriquecedoras según el plan de trabajo.

1. Mesa redonda con los directores y administradores de mercado de varias compañías de pintura en Sohag y Menia. El entrenador, Dr. Momen Shaaban, habló acerca del plomo en las pinturas, sus peligros y cómo podemos trabajar hacia un mundo con menos plomo en pinturas para garantizar la puesta en marcha de las misiones SDGS e IPEN de contar con un mundo libre de emisiones químicas.
2. Una visita a algunos lugares de trabajo con pinturas donde el Dr. Momen comentó acerca de las maneras aconsejables para el desecho de pinturas después del trabajo y habló con los pintores acerca del plomo en las pinturas, sus peligros y las investigaciones de IPEN en este campo y los resultados de la investigación sobre plomo en las pinturas llevada a cabo en Egipto en el último año, donde se encontró que hay varios productos de pintura que



contienen plomo y que hay necesidad urgente de aplicar las leyes que limitan el uso en pinturas y dar regulaciones relativas a las importaciones.

3. Una tercera actividad según el plan suministrado a IPEN fue la firma de un compromiso de los gerentes de fábricas y mercaderistas obligándolos simbólicamente a no utilizar plomo en pinturas y hacer que ellos promuevan conciencia acerca de los peligros del plomo y cómo puede la gente protegerse de estar expuesta a ello.

La Lista de los signatarios comprometidos está en el informe detallado en lengua Árabe.

Siguen algunas fotos del acontecimiento captura de pantalla de cubrimiento de los medios de comunicación.

En el suceso participaron 22 personas, 14 de ellos con facultad de decisión en las fábricas de pintura. Mas aún, 2 periodistas del diario nacional Al Masaa Al Arabi asistieron al acontecimiento y lo cubrieron en el segundo día de emisión. El vínculo a la noticia está en: http://www.mesaaraby.com/view_news.php?id=42459

Les associations Kenana et Sherouk en Haute-Égypte marquent l'ILPPWA 2018 avec une large couverture médiatique locale

Résumé en Anglais traduit en français par Orlando Aguirre-López, The LEAD Group, Australie

Le 27.10.2018, l'Association Kenana pour le développement durable, avec le soutien du réseau IPEN et en collaboration avec l'Association Sherouk pour le développement social en Haute-Égypte, ont marqué un événement majeur de la Semaine internationale de la prévention de l'intoxication par le plomb.

L'événement de la journée a été divisé en trois activités enrichissantes selon le plan de travail.

1. Table ronde avec les directeurs et les responsables marketing de plusieurs entreprises de peinture à Sohag et à Menia. Le formateur, Dr. Momen Shaaban, a parlé du plomb dans les peintures, de ses inconvénients et de la façon dont nous œuvrons pour un monde avec moins de plomb dans la peinture afin de garantir la mise en œuvre d'ODD et la mission d'IPEN visant à créer un monde sans produits chimiques.



2. Une visite dans des ateliers de peinture où le Dr. Momen a parlé des moyens appropriés pour éliminer les peintures après le travail et a discuté avec les peintres du plomb dans les peintures, de ses effets néfastes et des recherches de l'IPEN dans ce domaine, ainsi que des résultats de la recherche menée par le plomb dans les peintures réalisées en Egypte l'année dernière, où il a été découvert qu'il existe plusieurs produits de peinture contenant du plomb et qu'il est urgent d'appliquer les lois qui limitent l'utilisation de plomb dans les peintures et d'établir des réglementations relatives aux importations.
3. La troisième activité du plan de travail fourni à IPEN était de signer un engagement des directeurs d'usine et des responsables du marketing, les obligeant symboliquement à ne pas utiliser de plomb dans les peintures et à les laisser sensibiliser sur les méfaits du plomb et sur la manière dont les personnes peuvent se protéger de l'exposition à cela.

22 personnes ont assisté à l'événement, dont 14 étaient des décideurs dans les usines de peinture. En outre, 2 journalistes du journal national Al Masaa Al Arab ont assisté à l'événement et l'ont couvert lors de l'émission du deuxième jour. Lien vers les nouvelles est ici:

http://www.mesaaraby.com/view_news.php?id=42459

La liste des signataires de l'engagement figure dans le rapport détaillé en arabe. Suit quelques photos de l'événement et une capture d'écran de la couverture médiatique.

تقرير عن الاحتفال بالاسبوع العالمي لمكافحة التسمم بالرصاص



في اطار الاحتفال بالاسبوع العالمي لمكافحة التسمم بالرصاص من مواد الطلاء والدهانات اقامت مؤسسة كاتبة بالتعاون مع مؤسسة شروق تدرها توعويا للعاملين بمجال الدهانات وعددهم 13 من العاملين في هذا المجال واصحاب الشركات المصنعة والتي توع هذه المنتجات لتوعية بمخاطر الدهانات على الاطفال وكبار السن وعلى العاملين بمجال الدهانات شمل التدريب على:

1- محاضرة نقاشية عن الجهود المبذولة لتحقيق الاهداف الدولية الرامية إلى منع تعرض الاطفال للرصاص من الدهانات المحتوية عليه، وتقليل التعرض المهني للطلاء المحتوي على الرصاص. وهدفنا الرئيسي هو التشجيع على التخلص التدريجي من تصنيع وبيع الدهانات المحتوية على الرصاص، وصولاً إلى القضاء على المخاطر التي تشكلها هذه الدهانات. الرصاص هو واحد من عشر مواد كيميائية تشكل مصدر قلق رئيسي في مجال الصحة العامة وكان الحديث من خلال المدرب



(مؤمن شعبان) عن المخاطر واثرها وطرح العديد من الاسئلة على المشاركين عن مدى تعرضهم لعمل هذه الاعراض وكان النقاش ثريا بالافكار والاطروحات والتي جعلت النقاش مثمرا .

تدريب عملي من احد مواقع العمل على كيفية التخلص من بقايا الدهانات وكيفية تحقيق السلامة المهنية للطلاب المحتوى على الرصاص وفيه تم التدريب عمليا على كيفية التخلص من بقايا هذه المواد واطهر المشاركين تفاعلا مثمرا في ذلك.



وفي نهاية المحاضرة والتدريب العملي وقع المشاركون على تعهد بإذكاء الوعي بمسألة التسمم بالرصاص وتسلط الضوء على جهود البلدان والجهات الشريكة الرامية إلى منع تسمم الأطفال بالرصاص والحث على اتخاذ المزيد من الإجراءات للتخلص من مواد الطلاء المحتوية على الرصاص تحت شعار (معا لعالم أفضل معا لعالم خالي من



الرصاص المضر)





Request from The LEAD Group to be considered as a Partner in the Global Alliance to Eliminate Lead Paint

By Elizabeth O'Brien, The Lead Education and Abatement Design (LEAD) Group Inc. (environmental health charity), Australia www.lead.org.au - 10 September 2018

The LEAD Group Inc. endorses the goal and objectives of the Global Alliance to Eliminate Lead Paint (GAELP) and wishes to be considered a Partner in the work of the Lead Paint Alliance, as our Committee and Technical Advisory Board members Elizabeth O'Brien and Professor Mark Taylor attended (respectively) the inaugural 2010 GAELP meeting in Geneva and the 2012 GAELP meeting in Thailand.

We would like to continue to support the work of the Alliance as described below:

- Continue to run Volcano Art Prize www.volcanoartprize.com – an annual electronic art, photo and film competition where each entry includes a lead-safety message, to raise awareness of the health impacts of exposure to lead in paint (and other products, lead in people, other organisms and environmental media);
- Based on The LEAD Group's successful advocacy which saw a ban on the addition of lead to paint (household, automotive, marine and industrial) in Australia in 2010 (a global precedent), to serve as a non-government mentor to provide expertise and advice to other non-government organisations interested in advocacy to establish legal limits on lead paint in their own countries. See <http://www.lead.org.au/lanv18n2/lanv18n2-5.html> - "Australia's legislation banning lead compounds in paints and inks";
- Provide knowledge about the interpretation of laboratory analysis lead results of paint, dust, soil and water via LEAD Group Kits from www.lead.org.au/lanv18n2/lanv18n2-5.html - to NGO's in other countries, in order to allow them to advise local residents on how to reduce exposure to lead in paint.

I understand a copy of this letter requesting to become an Alliance partner and the name of The LEAD Group Inc. will be listed on the Lead Paint Alliance web site (www.unep.org/noleadpaint).



2018 Volcano Art Prize Entry. Artist: Global Alliance to Eliminate Lead Paint.
Title: International Lead Poisoning prevention Week 2018.
Lead-Safety Message: •Lead is a cumulative toxicant that affects multiple body systems and is particularly harmful to young children. • Lead in the body is distributed to the brain, liver, kidney and bones. It is stored in the teeth and bones, where it accumulates over time. Lead in bone is released into blood during pregnancy and becomes a source of exposure to the developing fetus. • There is no known



level of lead exposure that is considered safe. • Lead exposure is preventable. From 21 to 27 October 2018 the international lead poisoning prevention week of action will take place, with a particular focus on eliminating lead paint. Lead poisoning is preventable, yet the Institute for Health Metrics and Evaluation has estimated that, based on 2016 data, lead exposure accounted for 540 000 deaths and 13.9 million years lost to disability and death due to long-term effects on health, with the highest burden in developing regions. Of particular concern is the role of lead exposure in the development of intellectual disability in children. Even though there is wide recognition of this problem and many countries have taken action, exposure to lead, particularly in childhood, remains of key concern to health care providers and public health officials worldwide. Keywords: Eliminate Lead Paint, Ban Lead Paint, Lead free Environment, Keep Our Children Safe, Lead poisoning awareness week!
<http://volcanoartprize.com/portfolio-item/international-lead-poisoning-prevention-week-2018/>

Petición del Grupo LEAD para ser considerado como un Socio en la Alianza Mundial para Eliminar las Pinturas con Plomo

Por Elizabeth O'Brien, La Educación sobre el Plomo y el Diseño para su Reducción (LEAD) Group Inc. (fundación sin ánimo de lucro para la salud ambiental), Australia www.lead.org.au – 10 de Setiembre 2018. Traducido del Inglés por Orlando Aguirre-López, The LEAD Group.

El Grupo LEAD Inc. respalda la misión y los objetivos de la Alianza Mundial para Eliminar las Pinturas con Plomo (GAELP, por sus siglas en Inglés) y desea ser considerado como Socio de la Alianza de Pinturas con Plomo, ya que nuestros miembros del Comité y Junta Asesora Elizabeth O'Brien y el Profesor Mark Taylor asistieron (respectivamente) la reunión inaugural de GAELP en 2010 en Ginebra y la reunión de GAELP de 2012 en Tailandia.

Nos gustaría continuar apoyando el trabajo de la Alianza como se dice a continuación:

- Continuar la realización anual del Premio Volcano de Arte www.volcanoartprize.com – arte electrónico, fotografía y competición fílmica donde cada entrada incluye un mensaje de seguridad sobre plomo, para despertar consciencia sobre los impactos para la salud por la exposición al plomo en las pinturas (y otros productos, plomo en la gente, en otros organismos y en el medio ambiente);
- Con base en la exitosa defensa del Grupo LEAD que vio la prohibición de agregar plomo a la pintura (en hogares, automotores, la mar y lo industrial) en Australia en 2010 (un precedente mundial), servir como un mentor no gubernamental para el suministro de conocimiento y asesoría a otras organizaciones no gubernamentales interesadas en abogacía para establecer límites legales a la pinturas con plomo en sus propios países. Ver <http://www.lead.org.au/lanv18n2/lanv18n2-5.html> – “



Prohibición de la legislación Australiana a los componentes de plomo en pinturas y tintas”;

- Proveer conocimiento acerca de la interpretación de los resultados de plomo de las pinturas, el polvo y el agua según los análisis de laboratorio por medio de los Paquetes del Grupo LEAD en www.lead safeworld.com/shop - a ONGs en otros países, con el fin de permitirles el consejo a residentes locales sobre cómo reducir la exposición a plomo en pinturas.

Entiendo que una copia de esta carta de solicitud para ser un socio de la Alianza y que el nombre de “The LEAD Group Inc”. Serán listados en la página web de Alianza de Pintura con Plomo (www.unep.org/noleadinpaint).

Demande du groupe LEAD d'être considérée comme partenaire de l'Alliance mondiale pour l'élimination de la peinture au plomb

Par Elizabeth O'Brien, groupe LEAD (Lead Education and Abatement Design) (organisme de protection de l'environnement), Australie www.lead.org.au, 10 septembre 2018.

Traduit de l'Anglais vers le Français par Orlando Aguirre-López, groupe LEAD.

LEAD Group Inc. souscrit aux buts et objectifs de l'Alliance mondiale pour l'élimination de la peinture au plomb (GAELP) et souhaite être considéré comme un partenaire dans les travaux de la Lead Paint Alliance, en tant que membres de notre comité et du conseil consultatif technique Le professeur Mark Taylor a assisté (respectivement) à la réunion inaugurale du GAELP 2010 à Genève et à la réunion du GAELP 2012 en Thaïlande.

Nous aimerions continuer à soutenir le travail de l'Alliance tel que décrit ci-dessous:

- Poursuivre le lancement du Volcano Art Prize, www.volcanoartprize.com, un concours annuel de photos et de films artistiques électroniques où chaque message contient un message de sécurité destiné à sensibiliser le public aux incidences sur la santé de l'exposition au plomb dans la peinture (et autres produits, plomb chez l'homme, dans d'autres organismes et dans les milieux naturels).
- Sur la base du plaidoyer réussi du groupe LEAD, qui a vu l'interdiction d'ajouter du plomb à la peinture (domestique, automobile, marine et industrielle) en Australie en 2010 (un précédent mondial), afin de servir de mentor non gouvernemental pour établir des limites légales au plomb peindre dans leurs propres pays. Voir <http://www.lead.org.au/lanv18n2/lanv18n2-5.html> "Législation australienne interdisant les composés du plomb dans les peintures et les encres;



• Fournir des connaissances sur l'interprétation des résultats d'analyse de laboratoire relatifs à la peinture, à la poussière, à la terre et à l'eau via les kits du groupe LEAD de www.lead safeworld.com/shop

aux ONG d'autres pays, afin de leur permettre de conseiller les résidents locaux sur la manière de réduire l'exposition au plomb dans la peinture.

Je comprends qu'une copie de cette lettre demandant à devenir partenaire de l'Alliance et que le nom de The LEAD Group Inc. seront répertoriés sur le site Web de Lead Paint Alliance

(www.unep.org/noleadinpaint).

Recognition of the Lead Education and Abatement Design (LEAD) Group Inc, as a partner in the Global Alliance to Eliminate Lead Paint

[The following are relevant extracts of the response from WHO and the UN Environment to the above 10 September 2018 letter by Elizabeth O'Brien of The LEAD Group Inc – the only Australian partner of GAELP apart from the [Australian Paint Manufacturers' Federation Inc. \(APMF\)](#). The [full letter](#) in recognition of another organization becoming a GAELP Partner can be read on the UN Environment website.]

9th October 2018

World Health Organization

GENEVA 27, SWITZERLAND

www.who.int/ipcs/assessment/publichealth/gaelp/en/

United Nations Environment Programme

CHEMICALS AND HEALTH BRANCH, ECONOMY DIVISION

GENEVA, SWITZERLAND

www.unenvironment.org

Dear Ms O'Brien,

Thank you for your letter and the support expressed for the work of the Global Alliance to Eliminate Lead Paint. In accordance with the operational framework for the Global Alliance, the Lead Education and Abatement Design (LEAD) Group Inc will be included in a [listing of](#)



[partners](#) and will appear on the website of the Lead Paint Alliance together with a [copy of the letter of intent](#)....

We look forward to the Lead Education and Abatement Design (LEAD) Group Inc.'s active contribution to the Global Alliance to Eliminate Lead Paint and your engagement in the work of this joint UN Environment and WHO initiative....

Yours Sincerely,

Dr Maria Neira

Director,

Department of Public Health, Environmental and Social Determinants of Health,

World Health Organization (WHO)

Mr Jacob Duer

Chief,

Chemicals and Health Branch,

Economy Division,

United Nations Environment Programme

Reconocimiento del Grupo “Educación sobre el Plomo y Diseño para su Reducción” (LEAD) Group Inc, como un socio en la Alianza Mundial para la Eliminación de las Pinturas con Plomo.

[Los siguientes son los extractos relevantes de la respuesta de WHO (Organización Mundial de la Salud, por sus siglas en Inglés) y del Medio Ambiente de las Naciones Unidas a la mencionada carta del 10 de Setiembre 2018 por Elizabeth O’Brien de “The LEAD Group Inc” – el único socio Australiano de GAELP, aparte de [Australian Paint Manufacturers' Federation Inc. \(APMF\)](#). La [carta completa](#) en reconocimiento de otra organización que llega a ser Socio de GAELP puede leerse en la página web de Medio Ambiente de las Naciones Unidas.]

9 de Octubre 2018

Organización Mundial de la Salud

GINEBRA 27, SUIZA

www.who.int/ipcs/assessment/publichealth/gaelp/en/



Programa de las Naciones Unidas para el Medio Ambiente

DIVISION DE ECONOMIA, RAMA DE QUIMICOS Y SALUD

GINEBRA SUIZA

www.unenvironment.org

Apreciada Sra. O'Brien

Gracias por su carta y por el respaldo expresado para el trabajo de la Alianza Mundial para la Eliminación de la Pintura con Plomo. De acuerdo con el marco de referencia operacional para la Alianza Mundial la Educación sobre el Plomo y el Diseño para su Reducción "(LEAD) Group Inc" será incluido en la en una [lista de socios](#) y aparecerá en la página web de Alianza de Pintura de Plomo junto con la [copia de la carta de intención](#).

Esperamos la active contribución de Grupo para la Educación sobre Plomo y el Diseño para su Reducción "(LEAD) Group Inc" a la Alianza Mundial para la Eliminación del Plomo en las Pinturas y su compromiso in el trabajo de esta iniciativa de unión entre el Programa de las Naciones Unidas para el Medio Ambiente y la Organización Mundial de la Salud (WHO)

De usted, Sinceramente,

Dr. Maria Neira

Directora

Departamento de Salud Pública, Medio Ambiente y Determinantes Sociales de la Salud,
Organización Mundial de la Salud (WHO, por su sigla en Inglés).

Mr. Jacob Duer

Jefe

Rama de Quimicos y Salud

División Económica

Programa de las Naciones Unidas para el Medio Ambiente

Reconnaissance du groupe LEAD (« Lead Education and Abatement Design »), en tant que partenaire de « Global Alliance to Eliminate Lead Paint »



[Note de la rédaction: Voici des extraits pertinents de la réponse de l’OMS et de l’environnement des Nations Unies à la lettre susmentionnée du 10 septembre 2018 d’Elizabeth O'Brien de The LEAD Group Inc., le seul partenaire australien de GAELP, mis à part le [Australian Paint Manufacturers' Federation Inc. \(APMF\)](#). La [lettre complète en reconnaissance du fait qu'une autre organisation est devenue partenaire de GAELP est disponible sur le site Web de l'ONU pour l'environnement](#)

Traduit de l'anglais vers le français par Orlando Aguirre-López, du groupe LEAD.

9ème. Octobre 2018

Organisation Mondiale de la Santé

GENÈVE 27 SUISSE

www.who.int/ipcs/assessment/publichealth/gaelp/en/

Programme des Nations Unies pour l'environnement

DIRECTION GÉNÉRALE DES PRODUITS CHIMIQUES ET DE LA SANTÉ,

DIVISION DE L'ÉCONOMIE

GENÈVE, SUISSE

www.unenvironment.org

Chère Mme O'Brien,

Merci pour votre lettre et le soutien exprimé pour le travail de l'Alliance Mondiale pour Éliminer la Peinture au Plomb.

Conformément au cadre opérationnel de l'Alliance mondiale, le Groupe LEAD (Lead Education and Abatement Design) inc. Sera inclus dans une [liste de partenaires](#) et apparaîtra sur le site Web de la Lead Paint Alliance avec une [copie de la lettre de intention....](#)

Nous attendons avec intérêt la contribution active du groupe LEAD (Lead Education and Abatement Design) à l'Alliance Mondiale pour l'Élimination de la Peinture au Plomb et votre engagement dans les travaux de cette initiative conjointe des Nations Unies pour l'environnement et de l'OMS "

Cordialement,

Dr Maria Neira

Réalisateur



Département de la santé publique, déterminants environnementaux et sociaux de la santé,
Organisation mondiale de la santé (OMS).

M. Jacob Duer

Chef,

Direction des produits chimiques et de la santé

Division de l'économie

Programme des Nations Unies pour l'environnement

Global Lead Paint Alliance Partners Global Alliance to Eliminate Lead Paint (GAELP) Current Partners

[from <https://www.unenvironment.org/explore-topics/chemicals-waste/what-we-do/emerging-issues/global-alliance-eliminate-lead-paint-1> - accessed 13 December 2018]

The Global Alliance is made up of diverse members or “partners” committed to taking actions to support the goals of the Alliance, including governments, intergovernmental organizations, non-governmental organizations (NGOs), private industry, academia and interested individuals.

United Nations Environment and the World Health Organization jointly provide the secretariat support to the Global Alliance.

Global Lead Paint Alliance Partners: Governments

Brazil; Canada; Germany; Honduras; Israel; Kenya (Kenya National Cleaner Production Centre (KNCPC), Kenya Industrial Research and Development Institute (KIRDI), Kenya Bureau of Standards (KEBS)); Niger; Paraguay; Philippines; Republic of Cameroon (the Ministry of Environment); Republic of Moldova; Switzerland; Tanzania; Thailand; Uganda; United States of America (U.S. Environmental Protection Agency (EPA), U.S. Centers for Disease Control and Prevention (CDC)); Vietnam (Chemicals Agency).

Global Lead Paint Alliance Partners: Intergovernmental Organizations

UN Environment, Economy Division, Chemicals and Waste Branch; UNIDO; WHO



Global Lead Paint Alliance Partners: Non Governmental Organizations*

*Including, but not limited to medical, housing, and public health organizations; and environmental health organizations.

Architectural Association of Kenya (AAK)

AGENDA for Environment and Responsible Development (AGENDA)

American Bar Association Rule of Law Initiative

APROMAC Environment Protection Association

Armenian Women for Health and Healthy Environment (AWHHE)

Association des Familles Victimes du Saturnisme (AFVS)

BaliFokus Foundation

Centre for Environmental Justice (CEJ)

Center for Public Health and Environmental Development (CEPHED)

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

Children's Environmental Health Foundation (CEHF)

Eco Ethics Kenya (EEK)

Ecological Waste Coalition of the Philippines, Inc. (EcoWaste Coalition)

Environment and Social Development Organization (ESDO)

Greenwomen

Grupo GEA

Health and Environment Alliance (HEAL)

Inclusion Ghana

IndyAct

International Pediatric Association (IPA)

International POPs Elimination Network (IPEN)

Jeunes volontaires pour l'Environnement (JVE) Côte d'Ivoire



Lata Medical Research Foundation

The LEAD Group Inc.

LEADERS Nepal

Living Science Foundation

Nano Science and Electronic Communication (NASEC)

National Center for Healthy Housing (NCHH)

Occupational Knowledge (OK) International

Orissa State Volunteers and Social Workers Association (OSVSWA)

Pollution Control Association of Liberia (POCAL)

Pure Earth (formerly Blacksmith Institute)

RightOnCanada

Society for Advancement of Occupational and Environmental Health (SAOEH)

The Just Environment Charitable Trust (Toxics Link)

Toxisphera Environmental Health Association

Uganda Network on Toxic Free Malaria Control (UNETMAC)



Global Lead Paint Alliance Partners: Industry: Trade Associations and Manufacturing Companies

ABRAFATI Associacao Brasileira dos Fabricantes de Tintas

American Coatings Association (ACA)

Asociación Española de Fabricantes de Pintura y Tinta de Imprimir (ASEFAPI)

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

Association of Turkish Paint Industry (BOSAD)

AkzoNobel

Australian Paint Manufacturers' Federation Inc. (APMF)

British Coatings Federation Ltd (BCF)

Canadian Paint and Coatings Association (CPCA)

Fendwall Paints and Chemical Products

Federation Francaise des Industries des Peintures, Encres, Couleurs, Colles et Adhesifs, Preservation du Bois (FIPEC)

German Paint and Printing Ink Association (VdL)

International Paint and Painting Ink Council (IPPIC)

Jotun A/S

Malaysian Paint Manufacturers' Association

Pacific Paint (Boysen) Philippines, Inc.

Philippine Association of Paint Manufacturers (PAPM)

Portuguese Paint Association (APT)

Swiss Coatings Federation (VSLF)

Global Lead Paint Alliance Partners: Academics

Dr Scott Clark (University of Cincinnati)



Dr Paul Dargan (Medical Toxicology Office Guy's and St Thomas' NHS Foundation Trust)

Indira Gandhi Government Medical College

Loyola University Chicago Civitas ChildLaw Center

NYU Langone Health's Department of Pediatrics - Division of Environmental Pediatrics

University of Nairobi

Lead Safe World UK contacts the British Coatings Federation (BCF)

The [British Coatings Federation \(BCF\)](#) is the sole UK Trade Association representing the interests of the decorative, industrial and powder coatings, printing inks and wallcovering manufacturers. BCF's members represent 95% of the UK sales of coatings, inks and wallcoverings.

The BCF have been commendably responsible with regard to lead in old paint through their [Paint Safe](#) initiative. This focuses on some basic procedures to be taken when dealing with old paintwork that may contain lead. The PaintSafe web page - <https://www.coatings.org.uk/paintsafe.aspx> - also includes links to other guides on repainting and removal of lead paint for DIY, and professional, painters and decorators. A trifold leaflet has been produced and 20,000 copies have been distributed to trade paint outlets. The BCF also offered to provide us with some leaflets for free, but this was declined because of lack of distribution opportunities.

The BCF have been asked if they would consider recommending to their members that they add a link to the PaintSafe web site to containers and packaging. Their Technical & Membership Administrator has stated that they will discuss this with their members.

A typical warning on current containers is:

Special precautions should be taken during surface preparation of pre-1960s paint surfaces over wood and metal as they may contain harmful lead.

Some might suggest that their statement "Pre-1960s paintwork over wood or metal surfaces may contain harmful lead" could be revised. The 1960s saw the introduction of a voluntary labelling requirement for paint with more than 1.5% lead and lead



paint continued to be used as a primer on pre-formed doors and windows ([Hesaan Sheridan, 2018](#)). Lead paint can also be found on surfaces other than wood or metal, e.g. brick walls.

The BCF representative also commented that space can be short on smaller containers. The following revised stated was suggested:

Pre-1990s paint surfaces may contain harmful lead. For advice see paintsafe.org.uk. If in doubt consult a professional.

The decade '1990s' is used because the [European Union ban](#) on adding lead to paint was ratified in the [UK in 1992](#).



Graphic: Winner of the Tilnak photographic mini-shoot prize in 2018 Volcano Art Prize. Title: 2018 VAP Entry. Title: Distressed - Fashionably #Distressed or just #Distressing? **Lead-Safety Message:** Chalking and flaking paint can be a source of lead exposure for people, pets and wildlife. **Do your bit**

by removing lead-based paints. Artist: Lucinda Curran, Building Biologist, EcoHealth Solutions, Melbourne, Australia.

Garnering support for a UK ban on lead ammunition

Members of UK Parliament

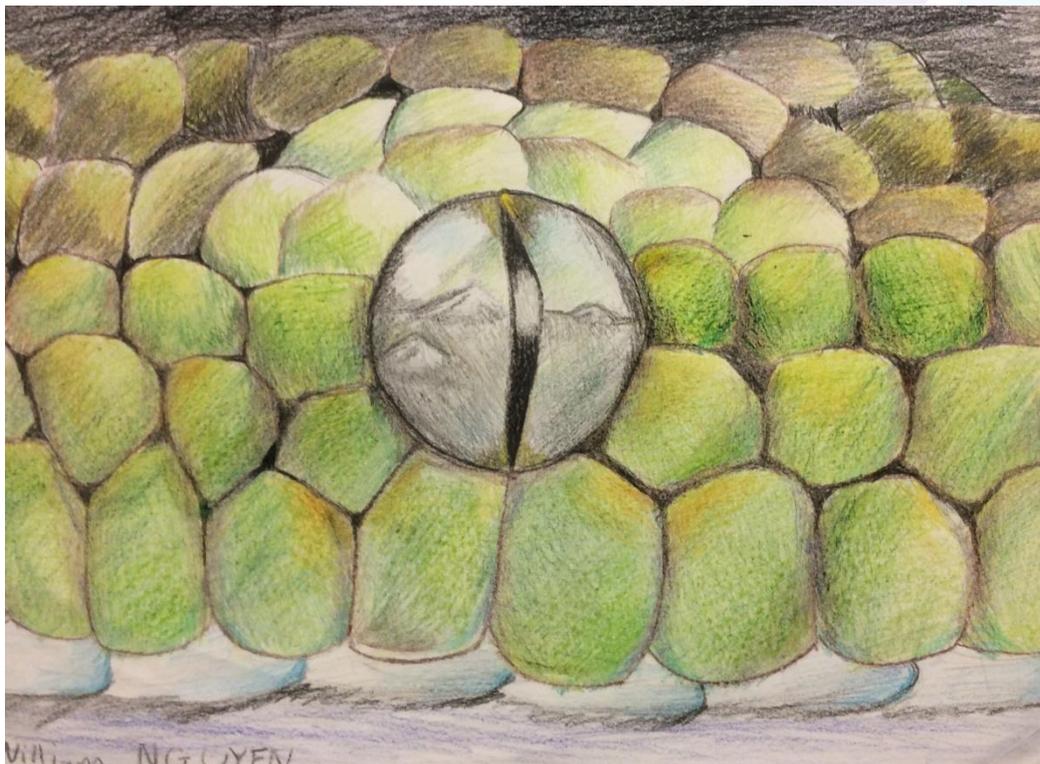
Several members of the UK Parliament (MPs) have sponsored or supported an 'early day motion' ([EDM #1963](#)) regarding banning lead ammunition. This focuses on the impact on wildlife. Early day motions rarely get into law, but are used to draw attention to issues.

This appeared to be an opportunity for us to try to obtain more support from these MPs. An email was sent to the sponsors and supporters of the bill – see below.



Most autoreply messages say that it is not parliamentary procedure to assist people who are not constituents of the MP. However, the Chief of Staff to Caroline Lucas says she will ensure Ms Lucas reads it. Caroline Lucas is a prominent public figure and leader of the Green Party in the UK.

We await further responses.



Volcano Art Prize 2018 Winner of one of 30

Pictureproducts Mugs printed with the entrant's image. Title: Reptile's Eye. **Lead-Safety Message:** Reptiles can be killed by ingesting lead shot, bullets, bullet fragments or prey contaminated with lead ammunition. Artist: William Nguyen, Creative Einstein tutoring school, Sydney, age 11.

<http://volcanoartprize.com/portfolio-item/reptiles-eye-creative-einstein-education-tutoring-school-age-11/>

eMail to Selected UK Members of Parliament

Subject: EDM #1963

To: Sponsors and Supporters of EDM #1963

From: Lead Safe World UK

As a volunteer with the "[Lead Safe World](#)" project I was very pleased to see [EDM #1963](#) regarding a ban on the sale, possession and use of lead ammunition and I thank you for sponsoring and supporting this.



While the impact of lead ammunition on wildlife is well known, we wonder if you are aware that there is also a significant health impact on people using lead ammunition in firing ranges ([Laidlaw et al, 2017](#)). For example, in the USA, the National Guard [stopped all public events](#) at indoor firing ranges because of lead exposure risks. You may also be surprised to learn that lead continues to be emitted into the environment, e.g. light aircraft still often use leaded petrol ([AVGAS](#)) and, as of 2008, this sector was the [single largest source](#) of lead emissions in the USA. This presumably, could also impact wildlife.

As MPs who are aware of the damage lead can do, we wonder if any of you would be interested in promoting lead toxicity prevention in the UK. As stated in the motion, lead has been banned in petrol, paint and water pipes, but much of the old lead remains and we have no idea about exposures now. We do know that lead toxicity is [preventable](#).

Some reasons why you might consider championing this include:

- The [NHS Long Term Plan](#) aims to reduce the prevalence of many conditions through prevention. However, the plan does not mention lead toxicity at all. Conditions listed in the plan, that have been suggested to be related to lead exposure, include the following. (References to evidence can be provided if required).
 - Stillbirth
 - Children and young people’s mental health
 - Autism
 - Learning disabilities
 - Heart attack
 - Stroke
 - Dementia
 - Mental illness
 - Depression
 - Anxiety
- Lead is also a health equality issue. As stated by the [Centres for Disease Control](#) “*children living at or below the poverty line who live in older housing are at greatest risk*”. Lead toxicity can result in lower IQ, decreased ability to pay attention and underperformance at school; all of which could be expected to limit life chances. Several studies have found that lead toxicity may also be associated with violent crime ([Boutwell et al, 2017, 2016](#); [Taylor et al, 2016](#); [Nevin, 2001](#); [Dietrich et al, 2001](#); [Naicker et al 2018](#)).



- In terms of prevalence, a recent study reported in The Lancet ([Lanphear et al, 2018](#)) found that around 29% of cardiovascular disease deaths and 37% of ischaemic heart disease deaths could be attributed to elevated lead exposure. Furthermore, they found that around 18% of all-cause mortality could be attributed to lead. We do not have any recent population data in the UK, but in the mid-1990s in Avon, it was found that [27% of toddlers](#) had blood lead levels high enough to cause harm and, on average, their performance at school was impacted ([Chandramouli et al, 2008](#)).
- The cost of lead toxicity is also high. In the USA, [Landrigan et al, 2002](#), estimated the total annual cost to be \$43Bn. In France, [Pichery et al, 2011](#), calculated the benefits of reducing blood lead levels to be up to €23Bn per year. This would equate to between £8Bn and £20Bn per year in the UK, but our environmental conditions are not the same as other countries. Our remaining lead exposure may be worse due to our long history of lead mining and working, coal use and old housing stock.
- In the USA lead poisoning prevention is a [top priority](#). For example, the [President's Task Force](#) on health and safety risks to children is currently [focussed on lead](#). It is estimated that in the USA [535,000 children](#) have lead toxicity at any one time. However, the 2018 "[Health Profile for England](#)" appears to contain no reference to lead poisoning prevention.

Population screening could inform environmental and public health policies, improve monitoring and regulation, and prompt a review of housing conditions. However, we failed to convince the [National Screening Committee](#) to recommend screening for lead in children. We then wrote to Duncan Selbie, Chief Executive of Public Health England (PHE). Our letter is attached, but with the names of signatories removed. These include academics and other lead experts. (It should be noted that one lead toxicity prevention advocate in the UK has received online abuse and death threats to their family so I try not to share names, including my own.)

[*Editor's note:* Our letter has (since this email was written) been read by Duncan Selbie himself, and] we have had responses from his office. These include references to two recent PHE reports – [LEICSS](#) and [SLiC](#). These report on children already identified with possible lead poisoning – many more will not be diagnosed. The reports combined contain 28 recommendations, but only four are being progressed to date.

If you would be willing to help, then there are two immediate actions that we would like to suggest:

- 1) Write to Duncan Selbie and ask him to read our letter himself



- 2) Also ask Duncan Selbie if, and when, the other recommendations in the LEICSS and SLiC reports are going to be implemented

This issue presents an exceptional opportunity and imperative to improve both the health and the finances of the country.

Please let us know if you need any more information.

Yours faithfully, Lead Safe World UK

Leaded consumer products purchasable in the UK

By a LEAD Action News Contributor, February 2019

BBC article on lead in consumer products purchasable in the UK

In December 2018 Lead Safe World UK were contacted by a BBC producer who was making a 10 minute piece on lead in consumer goods for 'Inside Out'. This is a regional current affairs programme for BBC South West of England and the piece was screened on Monday 4th March 2019. The broadcast was online (but only accessible to UK residents) for a week but the excellent article - which focussed on leaded drinking glasses (including photos) at <https://www.bbc.com/news/uk-england-devon-47405409> - remains online.

We provided information (see below in this edition of *LEAD Action News*) on products that have been found to contain lead and are also available in the UK. Where possible the country of origin was identified. Several were from China (Hevea Baby Bottle and Children's Musical Instruments) and one was a product (Children's Musical Instruments) that has been recalled by the Food and Drug Administration (FDA) in the USA.

Although some products have been identified online as containing lead they have not all been subject to tests to determine whether lead migrates out of them at toxic levels in normal use. Depending on the item this could include leach tests such as those described in the European Union directive [Directive 2009/48/EC](#) or the USA FDA bulletin [DFS/ORO/ORO No. 4126](#). If ceramicware or stoneware is used to store acidic foods, e.g. with vinegar, lead could come out but you would need to test it according to:

- [Ceramic Articles in Contact with Food \(England\) Regulations 2006](#)
 - The leach test limit is 4.0 mg/L
 - How much lead would come out is unknown, even if you know the lead level in parts per million (ppm) or milligrams per gram (mg/g)



However, there is no known reason why new products should contain toxic amounts of added lead.

The initial contact from the BBC was regarding lead paint on drinking glasses and asked for introductions to experts in the fields of lead paint and the impact of lead on human health. This soon broadened to other consumer goods known to contain detectable lead.

In addition to sharing the names of UK contacts, the BBC were also given the following information.

Short list of leaded consumer products available in the UK

The process was to identify current consumer products that have been found to contain lead, then check if they are available in the UK, and finally try to identify the country of origin.

Here are the products that were found. This is not at all comprehensive. There was no need to continue looking once these were found.

Hevea Painted 5 oz Baby Bottle



Figure 1

Non-Toxic Munchkin, Los Angeles USA

- Lead?
 - [Older, 5 oz bottle manufactured in China turned colour-change kit pink](#) (Non-Toxic Munchkin)
- UK?
 - [On sale in the UK on Amazon - be sure to only buy newer 4 oz \(non-painted therefore non-leaded\) bottle manufactured in Germany](#) (Hevea)
- Origin?



- [Older, leaded, bottle was manufactured in China. Hevea USA is offering to replace any Chinese-manufactured 5 oz Hevea bottle with a German-manufactured 4 oz Hevea bottle \(Non-Toxic Munchkin\)](#)

Fidget Spinners



Figure 2

Live Science

- Lead?
 - [Some parts of some toys can contain lead](#) (Live Science)
- UK?
 - [Found to be not 'CE' marked as required in the EU](#) (Daily Record) ["CE" originated in 1985 as an abbreviation of **Conformité Européenne**, meaning **European Conformity**. **CE marking** is a [certification mark](#) that indicates conformity with health, safety, and environmental protection standards for products sold within the [European Economic Area](#) (EEA).]
- Origin?



- Often unbranded with no country of origin

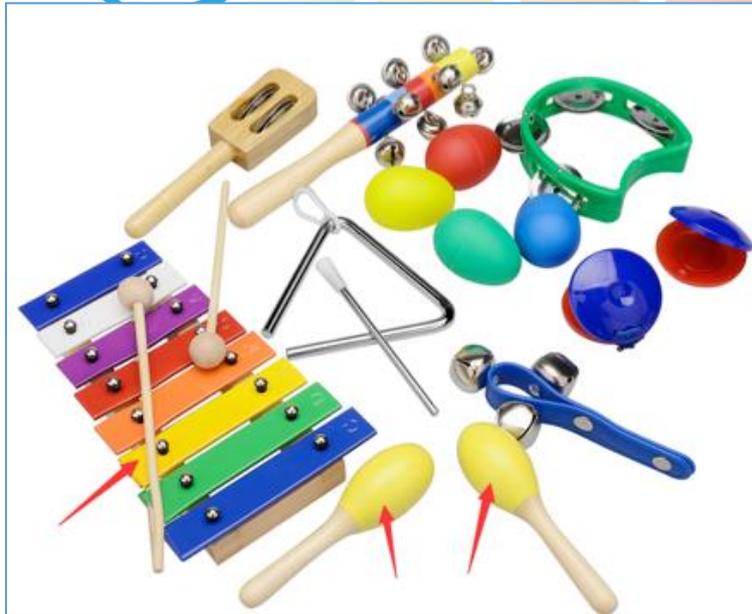
Magnetic Putty



Figure 3

Northampton Chronicle and Echo

- Lead?
 - [Found in Northamptonshire](#) (Northampton Chronicle and Echo)
 - 2 times permitted level for lead
- UK?
 - [Same brand available for shipping to the UK](#) (DH Gate)
 - Described as 'non-toxic'
- Origin?
 - No country of origin mentioned, but the writing on the instruction leaflet may give it away.



Children's Musical Instruments

“Paint on the maracas, xylophone and carrying case contains levels of lead that exceed the federal lead paint ban” (US Consumer Product

Safety Commission (CPSC))

Figure 4
CPSC

- Lead?
 - [Listed as a recall \(October 26, 2018\) for lead by the USA Consumer Product Safety Commission](#) (CPSC)
- UK?
 - [Listed on Amazon UK](#) (ToyMyToy)
 - “safe and non-toxic, no harm to your kids.”
- Origin?
 - CPSC list this as being made in China.



Contextual information about lead health policy in the UK

To put the information above in context the following information was also forwarded to the BBC.

What is the risk?

- [535,000](#) children over six have elevated blood lead levels in the USA
 - Would equate to > 100,000 in the UK

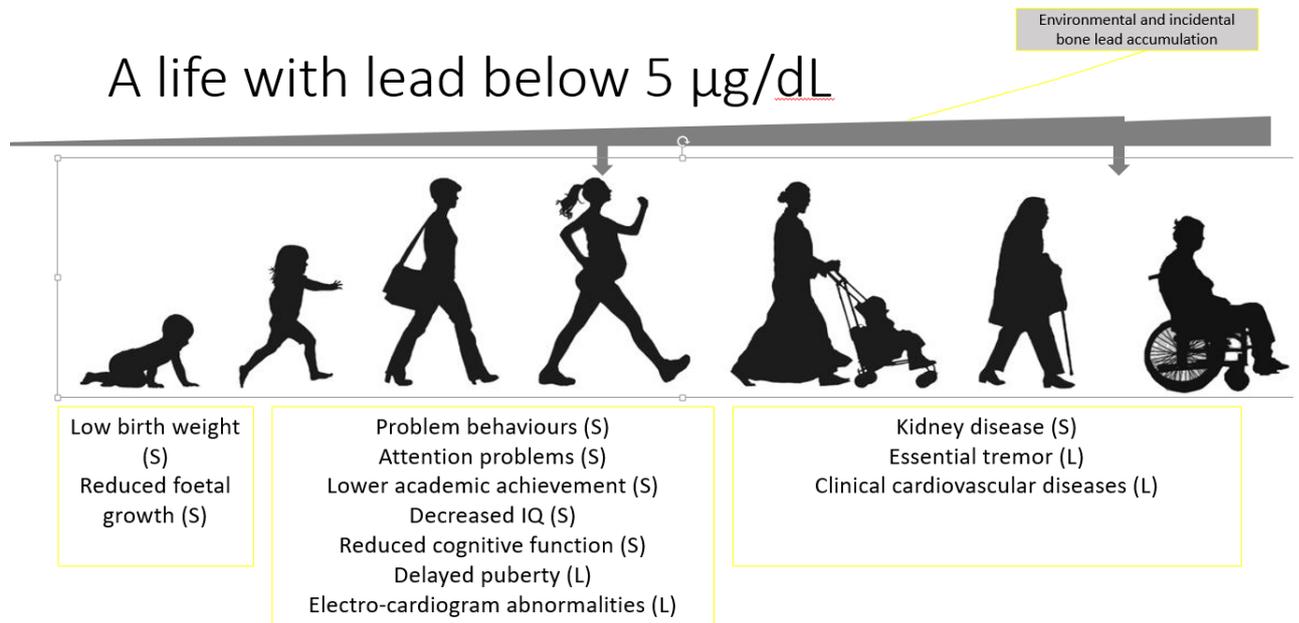
- In the mid 1990's [27% of toddlers in Avon](#) had elevated lead levels
 - Enough to impact educational achievement, cause antisocial behaviour and hyperactivity
 - No UK epidemiological studies since then

- [Impacts](#) on children
 - Diminished reading and learning abilities
 - School drop out rate 7 times peers
 - Hearing loss
 - Speech delay
 - Aggressive, even violent, behaviour

- Long term impacts on kidneys, heart and brain:
 - [The Lancet](#)
 - 18% of deaths,
 - 29% of cardiovascular disease,
 - 37% of ischaemic heart disease



Lifetime Impacts of Lead Toxicity



US National Toxicology Program. Health Effects of Low-level Lead. 2012 - Sufficient (S) and limited (L) evidence

Figure 5

We acknowledge Andrew Allen for preparation of the figure. [Katharina Simon, A & Holländer, Georg & McMichael, Andrew. \(2015\). Evolution of the immune system in humans from infancy to old age. Proceedings. Biological sciences / The Royal Society. 282. 10.1098/rspb.2014.3085.](#)

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Health Effects of Low-Level Lead, June 2012

https://ntp.niehs.nih.gov/ntp/ohat/lead/final/monographhealtheffects/lowlevellead_newissn_508.pdf

Sufficient Evidence of an Association:

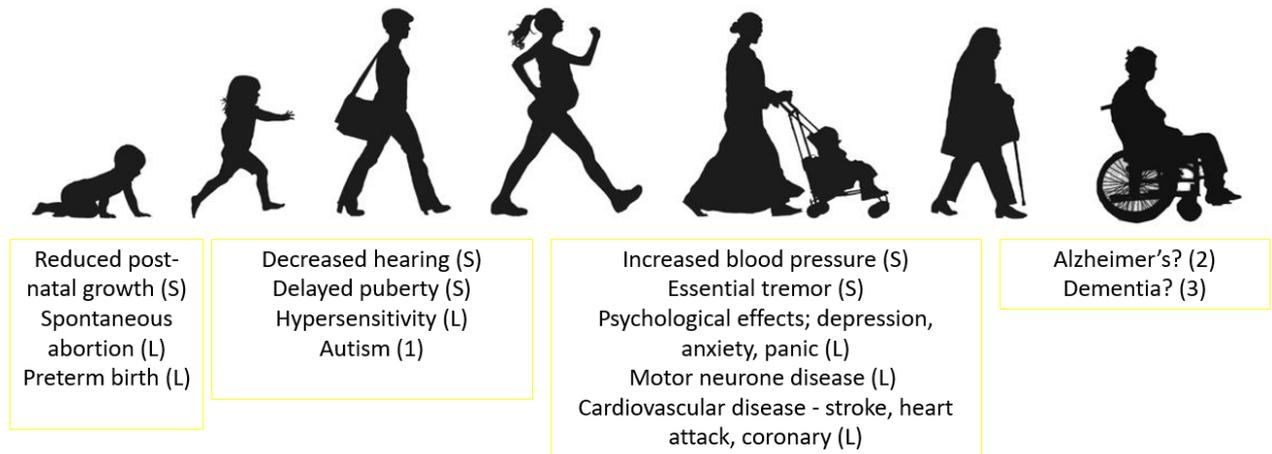
An association is observed between the exposure and health outcome in studies in which chance, bias, and confounding could be ruled out with reasonable confidence.

Limited Evidence of an Association:

An association is observed between the exposure and health outcome in studies in which chance, bias, and confounding could not be ruled out with reasonable confidence.



A life with lead between 5 and 10 $\mu\text{g}/\text{dL}$



US National Toxicology Program, Health Effects of Low-level Lead, 2012
 (1) Kim K.N. et al, 2016
 (2) Hegazi I, 2014
 (3) Rosin A, 2009

Figure 6

1) Kim KN, Kwon HJ, Hong YC. Low-level lead exposure and autistic behaviors in school-age children. *Neurotoxicology*. 2016 Mar;53:193-200 <https://www.ncbi.nlm.nih.gov/pubmed/26877220>

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Top lead exposure pathways

- Dust
 - From old paint
 - Walked in from outside
- Drinking water
 - Lead pipes (laid years ago)
 - Leaded brass tapware and other brass inline fittings (installed in the past 1-3 years)
- Soil
 - Around buildings that have or had lead paint
 - Near roads from when lead was used in petrol
 - Near industrial facilities, e.g. smelters, mines, lead flashing manufacturers, coal-burning power stations, crematoria, etc.

Where are leaded consumer products being produced?

- China and elsewhere
 - [China Has a History of Selling Dangerous Products to U.S. Consumers](#)
 - [Lead in Toys: Could It Be Lurking in Your Home?](#)
 - [Last year, 440 products notified to the EU as potentially dangerous - 48 per cent of the total - originated in China](#)

Why are they being sold here (UK)?

- Lack of compliance to regulations
- Presumably not detected by Trading Standards
- Article in [The Scotsman](#)
 - “There is no system for testing any toy before it is sold in Britain”
 - “The number tested from the shelves is a tiny fraction”
- ‘CE’ mark is a self-declaration and testing is required from only a sample of products.



What legislation is there to protect consumers?

- [EU directive 2009/48/EC](#) “on the safety of toys, as regards lead”
 - Migration limits
 - Dry, powder-like or brittle - 2 mg/kg (2ppm by weight)
 - Liquid, sticky - 0.5 mg/kg
 - Scraped off - 23 mg/kg
 - Brought in UK law 19th August 2011 - [S.I. 2011 no.1881](#)
 - Includes second-hand toys
 - Should have ‘CE’ marking
 - Toy manufacturers, importers and distributors: [your responsibilities](#)

Why this matters

- Lead poisoning prevention is a [top priority](#) in the USA
- NHS is to focus on [prevention](#), but lead is not mentioned
- [Health Profile for England](#), no mention of lead poisoning prevention
- Annual health care costs for paediatric lead poisoning (not including the costs of pain and suffering or the costs of late complications for which etiologic associations are poorly quantified) are estimated to be [\\$43Bn in the USA](#). “The costs of pediatric environmental disease are high, in contrast with the limited resources directed to research, tracking, and prevention”)
- The annual avoided costs (ie benefits) of implementing paediatric lead poisoning control measures are estimated to be [€23Bn in France compared to lead abatement costs of up to less than €3Bn/year](#). “Costs of pollutant exposure control [to bring all blood lead levels of 1-6 year olds below 1.5 micrograms per decilitre ($\mu\text{g}/\text{dL}$)] were partially estimated in regard to homes lead-based paint decontamination, investments aiming at reducing industrial lead emissions and removal of all lead drinking water pipes.” That’s a cost benefit ratio of €3Bn to €23Bn!
- [Blood lead screening is currently not recommended by the UK National Screening Committee \(NSC\)](#), mainly because of lack of data, ie not enough doctors ordering blood lead tests
- The November 2018 publication of the 2017 Annual Report from [Lead Exposure in Children Surveillance System \(LEICSS\)](#) states that “in 2017 there were 50 cases of lead exposure [$\geq 10\mu\text{g}/\text{dL}$] in children notified to Public Health England (PHE)” and that “the number of cases detected was lower than the expected incidence of lead exposure”, yet does not recommend any



plan for increasing the number of children referred for blood lead testing. The LEICSS report does recommend that: “clinicians should be aware of important sources of lead exposure, children most at risk...” but Lead Safe World UK have found no plan online for implementing their recommendations

- The October 2018 publication of the [SLiC](#) studies on lead in children, states that: “SLiC has collected data on 46 confirmed cases of children with raised blood lead concentrations [$\geq 10\mu\text{g}/\text{dL}$] across the UK and the Republic of Ireland over 24 months (2010 -12).” The recommendations of the SLiC report are to be carried out by some body or other, not stated (although it does say in the introduction to the recommendations in the SLiC report that they will require a collaborative approach). And although SLiC acknowledges that “Many children with raised blood lead concentrations have no symptoms, or non-specific symptoms, and may not present to clinicians” SLiC only recommends: “**Review the need** for targeted screening to identify children at high-risk of lead toxicity” instead of simply recommending targeted screening and a government-funded education campaign to educate doctors on how to implement targeted screening. In similarity with the LEICSS report, there is no plan found online for implementing the SLiC recommendations - which took nearly 6 years to write!

Lead Safe World UK’s letter to Duncan Selbie, Public Health England

After we failed to convince the [National Screening Committee](#) of the value of screening children for elevated blood lead levels we wrote Duncan Selbie, Chief Executive, Public Health England (PHE). Our letter is below. His office replied. It would appear that our letter had not been read by Mr Selbie himself, but his office was then asked how we could get more attention. [21st February 2019 update: Lead Safe World UK received an email from a Correspondence and Public Enquiries Officer at Public Health England. This not only confirmed that their Chief Executive, Duncan Selbie has read our letter, but also includes an invitation to meet with the Lead Exposure in Children Surveillance System (LEICSS) group.]

Mr Selbie’s office noted recent reports regarding the Lead Exposure in Children Surveillance System ([LEICSS](#)) and Surveillance of Elevated Blood Lead in Children ([SLiC](#)). We have been asking for these reports to be finished and published.

It should be noted that these reports document identified lead poisoning cases, but not the prevalence of elevated blood lead levels.



The reports include several recommendations and PHE have been asked if/when they will be implemented. Several of the recommendations are regarding internal procedures, but others would do a lot to advance lead toxicity prevention in the UK including:

- Consider the evidence and arguments for lowering the public health action level and laboratory reporting BLC (blood lead count) to $\geq 0.24\mu\text{mol/L}$ ($5\mu\text{g/dl}$)
- Develop a broader group of consulting stakeholders including clinical and lay (parent and guardian) representatives
- Be aware that there is likely a large variation in clinician awareness, testing and reporting practice for lead exposure in children
- Educate parents/guardians of children at risk about prevention of lead exposure consider lead exposure as a potential diagnosis in children presenting with symptoms/signs of acute or chronic lead exposure
- Update the advice and guidance for the public, healthcare and environmental health professionals on lead hazards and risks, and prevention or mitigation of environmental exposures
- Review the evidence for making homes in the UK and the Republic of Ireland (RoI) 'lead safe', for example by removing sources of lead in homes and preventing exposure, particularly in at-risk groups
- Update advice and guidance for paediatricians, general practitioners, and other clinicians on the diagnosis, investigation and clinical management of raised blood concentrations
- Consider analysis of the costs of investigation and management of raised blood levels in children in the UK and the RoI, and the potential costs and benefits of prevention, in order to provide evidence for the most cost-effective strategy

Lead Safe World UK are now considered as stakeholders and we are told that we will be invited to contribute to the LEICSS steering group in the spring.

Harassment by Lead Users

Lead poisoning prevention campaigners, in the UK and other countries, have experienced resistance from people in lead-using industries, and others, for example, online abuse. This experience is very rare, and other factors may have aggravated the harassment, but to try to avoid it, where possible, personal names are not used and our communications are from organisational identities such as Lead Safe World UK.

Where appropriate, Lead Safe World UK communications include statements containing the following sentiments:



It should be noted that we do not believe that it is helpful to try to identify or blame any companies, organisations or individuals for the past use of lead. We want to understand where we are and move forward with collective resolutions.

“Let us not seek to fix the blame for the past, let us accept our own responsibility for the future.” – John F. Kennedy



2018 VAP Entry.
Title: Medical Medium Anthony Williams Heavy Metal Detox Smoothie.
Lead-Safety Message: Drinking this delicious Heavy Metal Detox Smoothie nearly every day

in 2018 has definitely brought my blood lead level down. Collage Artist: Elizabeth O'Brien.
<http://volcanoartprize.com/portfolio-item/medical-medium-anthony-williams-heavy-metal-detox-smoothie/>



Letter and Email to Duncan Selbie, Chief Executive, Public Health England

11th December 2018 Lead Safe World UK

Duncan Selbie
Chief Executive
Public Health England
Wellington House
133-155 Waterloo Road
London SW1 8UG

Dear Mr Selbie,

Lead Poisoning Prevention – Who’s Job Is It?

Key Points

Lead poisoning is a #1, top priority in the USA

Around 29% of CVD, and 37% of IHD, mortality can be attributed to lead

The NSC decided to not recommend screening children for lead

There has been no survey of lead exposure in the UK since the early 1990s

More needs to be done to address the continuing risks from lead

We exchanged correspondence with you last year, via Cheryl Gillan MP, about lead poisoning prevention (LPP) in England. Since then, and even before, we have been in contact with several UK government agencies including DEFRA, DoH, NSC, CRCE and others in PHE. The common theme in responses has been agreement that there is a problem, but that it is not within each agency’s remit to take more action.

This letter explains why we think the time is now long overdue to pay more attention to LPP.

Recent Activities

Screening

One recent activity was to submit evidence to the National Screening Committee (NSC) for their review¹. The committee decided not to recommend the introduction of screening. Their main reason was that there has been no recent study of the prevalence of elevated blood lead levels (BLL) in England. A study in the 1990s found 27% of toddlers² and 14% of pregnant women³ had damaging levels of lead⁴. The NSC said they would support a BLL study and advised us to contact the NIHR. The



NIHR said that they do not fund epidemiological studies and suggested we contact the Medical Research Council, but for funding, not to perform a study.

International Lead Poisoning Prevention Week of Action

We were pleased to see the CRCE present information on the risks of lead at the New Scientist Live event in 2017 and it was suggested that they did the same this year. We also noted an article on the BUMPS web site⁵. However, this seems to be the extent of the PHE support for last year's International Lead Poisoning Prevention Week of Action⁶ supported by the WHO. We had hoped to see more activity this year.

Public Health Matters Blog Entries

Some recent PHE blog entries are relevant in the context of LPP, but make no mention of lead poisoning:

Prevention and the NHS long-term plan

In your recent blog entry titled *'Prevention and the NHS long term plan: 3 ways we can save more lives'*⁷ you mention several conditions that are known to be related to elevated blood lead levels including heart disease, stroke, kidney disease and hypertension. A recent study in the Lancet⁸ found that, in the USA, 28.7% (95% CI 15.5–39.5) of cardiovascular disease mortality and 37.4% (95% CI 23.4–48.6) of ischaemic heart disease mortality, could be attributed to lead. In addition, the National Toxicology Program⁴ (NTP) found that *"There is sufficient evidence that blood Pb levels <5 µg/dL are associated with adverse effects on kidney function in adults"*. They also found that levels of *"<10 µg/dL are associated with increased blood pressure and hypertension"*. These levels would be considered below the top of the reference range in England⁹.

One major area related to lead exposure is mental health. The NTP monograph⁴ reports evidence that lead exposure is associated with psychiatric symptoms including anxiety, depression, decreased academic achievement, ADHD, problem behaviours and decreased cognitive function. Other findings in the monograph include spontaneous abortion, reduced foetal growth, delayed puberty and essential tremor. Even a low level of lead exposure has health impacts throughout life. The annual costs are estimated to be \$43 billion in the USA²⁰ and €23 billion in France²¹.

Should not addressing lead poisoning be part of achieving your aspiration to *"ensure we are preventing the conditions that pose the greatest threat to our NHS, social care services and ultimately the success of our economy and wealth and health of our people"*?

Health Inequalities

In a recent PHE blog entry²², Gina Radford stated *"Preventing ill health can play a vital role in reducing health inequalities"*. LPP has a direct impact on this.



The US Centre for Disease Control (CDC) state that “children living at or below the poverty line who live in older housing are at greatest risk”²³. Lead poisoning can result in lower IQ, decreased ability to pay attention and underperformance at school; all of which could be expected to limit life chances. Furthermore, lead poisoning is associated with violent crime²⁴.

Health Profile for England

The 2018 ‘Health Profile for England’ has recently been published²⁷. This appears to contain no reference to LPP. It seems unbelievable that, when senior figures in the USA call LPP a number 1, top priority (see below), it is not considered relevant at all in England despite our countries’ similar use of lead. Some other countries have more robust LPP policies, e.g., virtually all lead products are prohibited in Denmark²⁸; in France, houses built before 1949 must be tested for lead paint²⁹.

Comparison with the USA

In comparison with the USA, England seems far behind in addressing risks from lead. Some examples are:

The President’s Task Force on Environmental Health Risks and Safety Risks to Children is currently focussed on lead poisoning¹⁰. They note that “Lead exposure remains a **significant health concern for children in the United States.**”

The Environmental Protection Agency have stated “Lead poisoning: **number one environmental health threat to children ages six and younger**”²⁵.

Head of the Department of Housing and Urban Development, Dr Ben Carson, has called for “lead prevention and treatment to become a **top priority across the country**”²⁶.

Children on Medicaid are screened for elevated BLLs³¹, but several states now screen **all, or at risk, children** including Maryland¹¹, New York¹², Massachusetts¹³ and New Hampshire³².

Former EPA administrator Scott Pruitt hosted a meeting of US leaders and stated “Lead exposure poses a **significant health threat to hundreds of thousands of American children**”¹⁴.

The EPA have stated “it is essential that childhood **lead exposures be reduced**”³⁶.

The New Your City Housing Authority is to **spend \$1.2 billion** over 5 years – addressing lead risks being a large part of this³⁰.

The Department of Housing and Urban Development (HUD) has awarded **\$127 million** to protect children and families in **low-income housing**¹⁵.

The City of New York is to **spend \$80 million** to inspect 130,000 public housing units for lead¹⁶.



Our Decent Homes Standard³³ does not mention lead, but the US National Healthy Housing Standard³⁴ refers to lead extensively and the National Center for Healthy Housing aims to “**eradicate childhood lead poisoning within five years**”³⁵.

What We Would Like To See

There are many actions that could be taken to progress LPP in England. Some that we like to see from PHE include:

Establish a working party, task force, or at least an assigned individual, to focus on LPP.

Commission a study into the current prevalence of elevated BLLs.

Place warning leaflets in doctor’s surgeries and/or DIY shops, e.g. from Defra (with updates)¹⁷ or the British Coatings Federation¹⁸.

Establish a lead hot-line and web site - like the EPA in the USA¹⁹.

Yours sincerely,

Lead Safe World UK

info@leadsafeworld.org.uk

PS. It should be noted that we do not believe that there is any value in trying to identify and blame any companies, organisations or individuals for the past or current use of lead. We want to understand where we are and move forward with collective resolutions.

Endorsed by:

Names removed for data protection purposes

CC:

Names removed for data protection purposes

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Volcano Art Prize 2017 Entry.
Title: Heart, **Lead Safety**
Message: Protect your heart,
Protect yourselves from Lead.
Artist: Sophea Wang, Age: 6.

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Letter to the editor re: the CDC blood lead reference value for children

Perry Gottesfeld and

Deborah A. Cory-Slechta²

Letter to the Editor, Environmental Health Journal,

<https://ehjournal.biomedcentral.com/articles/10.1186/s12940-019-0472-8>

Open Access

Environmental Health 2019 **18**:32

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Lead

Blood lead

To the Editor:



Although we completely agree with Paulson and Brown that primary prevention to eliminate sources of exposure is the best long-term approach to childhood lead poisoning, it is not a strategy that can replace the need to prioritize individuals and communities that are over-exposed. They argue that the CDC should reject the advice of two of its' scientific advisory committees that called on the agency to lower the blood lead reference value for children in the U.S. because it would put clinicians in an untenable position as there is no prescribed clinical response [1]. However, by not informing parents that their children are being exposed to lead at levels well in excess of the median, we are preventing parents from recognizing the need to take precautions to reduce environmental lead exposures.

The CDC blood lead reference value serves a dual purpose to inform individual cases (i.e. parents) that a child's exposure exceeds the norm and it serves as a public health benchmark to inform the public when their communities are over-exposed. This was the criteria that alerted both physicians and the general public in Flint, Michigan and East Chicago, Indiana that there was reason to be concerned about exposures to lead in these communities. Reports of children's BLLs above levels previously considered acceptable, resulted in governmental responses to address lead in drinking water at the former and to vacate public housing located on a former industrial site at the later. Paulson and Brown do not explain how these situations would have come to light if the CDC had not adopted the reference value approach in 2012 to identify individuals and communities with the highest exposures.

The authors' main concern is how the reference value will complicate the role of Pediatricians as the messenger charged with informing parents that a child has an elevated blood lead level for which there is no effective clinical response. But this is not a new role for physicians who are often tasked with communicating public health information derived from epidemiological studies to advise individual patients to consider life style responses. Pediatricians already discuss a range of environmental risk factors with parents including screen time, nutrition, and car seats for which they can offer no treatment or cure.

Paulson and Brown suggest that the blood lead reference value triggers clinical "interventions" but fails to explain that the only response recommended by the CDC is to call for more frequent blood lead testing of the individual child and a nutritional assessment to include testing for iron deficiency. Additional actions including environmental inspections and public health case management are not the responsibility of physicians, but are carried out by public health authorities in some jurisdictions.

Although Paulson and Brown raise legitimate concerns about the reproducibility of laboratories and clinical testing equipment for blood lead levels at 3.5 µg/dl, these potential errors will have minimal impact on the interpretation of individual or aggregate community results. Moreover, efforts are already underway to enhance reproducibility of blood lead testing. In practice, it will make little difference to a parent if their child is above the 97.5th, 90th or even 60th percentile of the NHANES blood lead distribution. Concerns around the reporting of false positive results, do not change the fact that even with some laboratory error, children with reported levels > 3.5 µg/dl from a confirmed venous puncture are experiencing exposures that are elevated in relation to the U.S. population



median (0.86 $\mu\text{g}/\text{dl}$) [2]. Similarly, potential testing errors will not impede communities from acting on aggregate blood lead testing data to investigate and identify possible sources of lead exposure.

Our greatest concern is that the article incorrectly states that “the recommended interventions have not been shown to reduce blood lead levels once they are elevated” when there are multiple studies that demonstrate that lead abatement reduces exposures over time [3, 4, 5, 6]. The evidence provided for this statement refers to an outdated set of recommendations that called for “controlling” lead hazards in housing (at levels we now understand were inadequate) to prevent exposures instead of eliminating such hazards with a permanent response referred to as abatement.

We fully agree with Paulson and Brown that ideally children should not be used to identify lead hazards and that we should minimize environmental exposures. However, it is also important to recognize that a national primary prevention strategy cannot be implemented overnight and therefore CDC should follow the advice of its independent expert committees and adopt a new reference value for this interim period before lead hazards are eliminated. Without tracking BLLs as “elevated” (or not) in relationship to the population norm, communities would never be able to identify the next Flint, Michigan and parents would miss an opportunity to recognize and respond to lead hazards in their homes.

Sincerely,

Perry Gottesfeld.

Deborah A. Cory-Slechta.

Note: The authors co-chaired the subcommittee to advise the Centers for Disease Control and Prevention (CDC) Advisory Committee on Childhood Lead Poisoning Prevention (ACCLPP) on revising the childhood lead poisoning prevention guidelines from 2010 to 2012.

Declarations

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Authors' contributions

Both authors contributed to the letter. Both authors read and approved the final manuscripts.

Competing interests

The authors declare that they have no competing interest.

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[LEAD Action News Editor's Note: non-applicable Declarations have been deleted]

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Info Pack - Blood-taking "hints" for blood lead monitoring and management

By Elizabeth O'Brien, The Lead Education and Abatement Design (LEAD) Group Inc. (environmental health charity), Australia www.lead.org.au – 23 March 2019

At any age after a baby starts to crawl, a blood lead test (with or without dry-sanding of lead paint having ever occurred) is a fantastic investment in your child reaching his/her future IQ and learning behaviour potentials, and even in his/her longevity potential as well as your best effort to reduce his/her risk of getting dementia so, as a parent, I'd like to convey to you that the fantastic potential benefit of a blood lead test on your child is far greater than any "cost".

The best paediatric phlebotomists can be found at children's hospitals or general hospitals and at some private pathology blood collection centres so all you need do is ask the GP for a blood lead referral (asking for one for you and your partner is fantastic too) and to phone your local collection centre to ask when their best paediatric phlebotomist is on duty, then turn up with your referral and your child and the following pain-free blood-taking strategies:

- "know" that it will go well
- dress your child for warmth (for good blood flow) ie, an extra layer of clothing than normal for the day's weather
- ensure your child has had plenty to eat and drink beforehand
- take a "guaranteed" distraction – something your child loves - for the moment when the needle is going in eg a favourite book or toy or food (breastfeeding is perfect if you're still breastfeeding)



- take a “treat” as a reward after the blood is taken

- for extra precautionary preparation, you can purchase an EMLA Patch over-the-counter (without a prescription) from the pharmacy, and ensure this anaesthetic-impregnated-bandaid is applied (over the vein in the crook of the elbow) at least one hour (maximum 4 hours) prior to the blood-taking. A generic-brand anaesthetic cream called Numit 5% is now available over-the-counter too, and could be applied, and then band-aided over securely, to create-your-own EMLA Patch. See:

<https://www.nps.org.au/medicine-finder/emla-patches> and/or

<https://www.nps.org.au/medicine-finder/numit-5-cream>

There are more handy hints for infants and older children, at

http://www.massgeneral.org/children/assets/pdf/needle_insertion_pain_parent_handout.pdf ; for children from 12 months to 12 years at

<http://www.aboutkidshealth.ca/En/HealthAZ/TestsAndTreatments/Procedures/Pages/Blood-Work-Helping-Your-Child-Get-Ready.aspx> and for older children having blood taken,

children with whom you can have “the conversation” beforehand or who might benefit by

colouring-in drawings of children having blood tests, at

<http://www.questdiagnostics.com/home/patients/prepare-for-test/prepare-child.html>

Ask the doctor to give you a print-out of the result/s and scan and email the result to The LEAD Group so that I can answer your questions about management to bring the blood lead level down (if it is above the limit of detection) and possible long-term impacts.

Info Pack - Blood-taking "hints" for blood lead monitoring and management

Por Elizabeth O’Brien, La Educación sobre el Plomo y el Diseño para su Reducción (LEAD) Group Inc. (fundación sin ánimo de lucro para la salud ambiental), Australia www.lead.org.au – 23 Marzo 2019. Traducido del Inglés por Orlando Aguirre-López, The LEAD Group.

En cualquier edad después de que un niño empieza a gatear, una prueba de plomo en la sangre (haya o no ocurrido alguna vez un lijado en seco de pintura con plomo) es una inversión fantástica para el alcance del bebé en su QI y para el aprendizaje de sus potenciales de comportamiento, y aún en longevidad potencial, igual en el esfuerzo suyo por reducir el riesgo del bebé de tener demencia; así, como una madre, que me gustaría transmitir a usted que ese fantástico beneficio potencial de una prueba de sangre para su bebé es mayor que cualquier costo.



Los mejores flebotomistas pediátricos pueden encontrarse en los hospitales de niños o en hospitales generales y en algunos centros privados de recolección de sangre de patología, de forma que todo lo que usted necesita hacer es pedir a su médico una remisión de plomo en la sangre (y solicitar también uno para usted y su compañero es estupendo también) y telefonar a su centro de colección local inquiriendo cuándo sus mejores flebotomistas están de turno; luego ir con su remisión y su hijo/a y las siguientes estrategias de toma de sangre sin dolor:

-“Sepa” que todo saldrá bien

=vista a su hijo para el calor (para buen flujo de sangre) es decir, una capa adicional de ropa de lo normal para el clima del día.

-asegúrese que su niño/a haya comido y bebido bastante con anticipación.

=lleve una distracción “garantizada” – algo que su hijo ame- para el momento en que la aguja esté entrando, por ejemplo, un libro, un juguete o un alimento favorito (la lactancia materna es perfecta si aún está amamantando).

-lleve un “premio” como recompensa después de que la sangre se haya tomado.

-como preparación extra preventiva adicional usted puede comprar un parche EMLA (sin receta médica) en la farmacia, y asegurarse de que se aplique este curita anestésica impregnada (en la vena en la curva del codo) al menos una hora (máximo 4 horas) antes de la extracción de sangre. Está ahora también disponible en las farmacias una crema anestésica de marca genérica llamada Numit 5% y podría aplicarse, y luego con banda sobre segura para crear su propio Parche EMLA. Ver:

<https://www.nps.org.au/medicine-finder/emla-patches> and/or

<https://www.nps.org.au/medicine-finder/numit-5-cream>

Ask the doctor to give you a print-out of the result/s and scan and email the result to The LEAD Group so that I can answer your questions about management to bring the blood lead level down (if it is above the limit of detection) and possible long-term impacts.

Hay más sugerencias útiles para infantes y niños mayores, en:

http://www.massgeneral.org/children/assets/pdf/needle_insertion_pain_parent_handout.pdf ;

para niños desde los 12 meses a 12 años en:

<https://www.aboutkidshealth.ca/Article?contentid=36&language=Spanish> ; accesible por medio de:

<http://www.aboutkidshealth.ca/En/HealthAZ/TestsAndTreatments/Procedures/Pages/Blood-Work-Helping-Your-Child-Get-Ready.aspx>



y para niños de más edad a quienes se les esté tomando la sangre, niños con los cuales usted puede tener "la conversación" antes o quienes podrían beneficiarse coloreando o trazando durante las pruebas de sangre, en:

<http://www.questdiagnostics.com/home/patients/prepare-for-test/prepare-child.html>

Info Pack - "Conseils" pour la prise de sang pour la surveillance et la gestion de la plombémie

Par Elizabeth O'Brien, groupe LEAD (Lead Education and Abatement Design Design) (association de promotion de la santé environnementale), Australie www.lead.org.au - 23 mars 2019. Traduit de l'Anglais par Orlando Aguirre-López

À tout âge, dès que le bébé commence à ramper, une analyse de la plombémie (avec ou sans ponçage à sec de peinture au plomb) est un investissement fantastique pour que votre enfant atteigne son futur QI et son potentiel d'apprentissage, et même dans son potentiel de longévité ainsi que dans vos meilleurs efforts pour réduire son risque de développer une démence, alors, en tant que parent, je voudrais vous faire comprendre le formidable avantage potentiel d'un test de plombémie dans votre enfant est de loin supérieur à tout "coût".

Les meilleurs phlébotomistes pédiatriques se trouvent dans les hôpitaux pour enfants ou les hôpitaux généraux et dans certains centres de collecte de sang pour pathologies privées. téléphonez à votre centre de collecte local pour demander quand leur meilleur phlébotomiste pédiatrique est en service, puis présentez-vous avec votre référence et votre enfant et les stratégies de prise de sang gratuites suivantes :

- "know" that it will go well

- "savoir" que ça ira bien

- habillez votre enfant contre la chaleur (pour une bonne circulation sanguine), c'est-à-dire une couche de vêtement supplémentaire par rapport

- être sur/e que votre enfant a déjà mangé et bu suffisamment

prenez une distraction "garantie" - quelque chose que votre enfant aime pour le moment où l'aiguille entre, par exemple, un livre, un jouet ou un aliment préféré (l'allaitement est parfait si vous êtes toujours en allaitement maternel).

- prendre une "friandise" en récompense après le prélèvement de sang

- pour une préparation plus prudente, vous pouvez acheter un timbre EMLA au comptoir (sans ordonnance) auprès de la pharmacie et vous assurer de la mise en place de cette bandelette



imprégnée d'anesthésique (sur la veine du coude) au moins une heure (maximum 4heures) avant la prise de sang.

Une crème anesthésique de marque générique appelée Numit 5% est désormais disponible au comptoir également. Elle pourrait être appliquée puis collée de manière sécurisée pour créer votre propre correctif EMLA. Voir:

<https://www.nps.org.au/medicine-finder/emla-patches> et/ou

<https://www.nps.org.au/medicine-finder/numit-5-cream>

Il existe d'autres astuces utiles pour les nourrissons et les enfants plus âgés, à l'adresse:

http://www.massgeneral.org/children/assets/pdf/needle_insertion_pain_parent_handout.pdf ; pour les enfants de 12 mois à 12 ans à:

<https://www.aboutkidshealth.ca/Article?contentid=36&language=French>; accessible via:
<http://www.aboutkidshealth.ca/En/HealthAZ/TestsAndTreatments/Procedures/Pages/Blood-Work-Helping-Your-Child-Get-Ready.aspx>

et pour les enfants plus âgés ayant une prise de sang, les enfants avec lesquels vous pouvez avoir "la conversation" à l'avance ou qui pourraient bénéficier de la coloration des dessins pour les enfants ayant des analyses de sang, à :

<http://www.questdiagnostics.com/home/patients/prepare-for-test/prepare-child.html>

Demandez au médecin de vous donner une impression du résultat, puis numérisez-le et envoyez-le par courriel au groupe LEAD afin que je puisse répondre à vos questions sur la gestion afin de réduire le

taux de plombémie (s'il dépasse la limite de détection) et les impacts possibles à long terme.

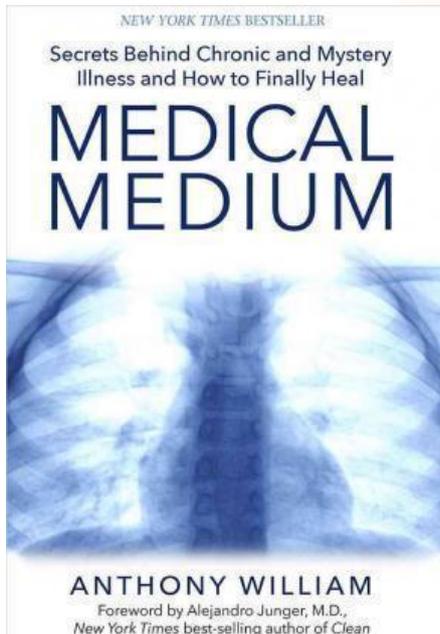
Info Pack - Nutrition to fight lead poisoning / detox heavy metals

By Elizabeth O'Brien, The Lead Education and Abatement Design (LEAD) Group Inc. (environmental health charity) www.lead.org.au , Manager, Lead Safe World Project (LSWP) www.lead safeworld.com , Founder, Volcano Art Prize (VAP) www.volcanoartprize.com

The “standard” Vitamins and Minerals that are important “for lead detox” are: Vit C (a natural chelator), Vit D, iron (best as food), calcium, zinc, magnesium, and phosphorus. Recently, a new article also found an association between higher dietary zinc, calcium and nickel and lower blood lead levels in Children. See **“Dietary zinc, calcium and nickel are associated with lower childhood**



blood lead levels” (Gulson et al, online October 2018) at:
<https://www.sciencedirect.com/science/article/pii/S0013935118305620>



I've recently read Anthony William's book **"Medical Medium: Secrets Behind Chronic And Mystery Illness And How To Finally Heal"** because a client recommended it for people aiming to detox their heavy metals. (Front cover at left)

Please find below some relevant text from pages she photographed from the book:

"REMOVING TOXIC HEAVY METALS FROM YOUR GUT [page 242]

In our modern era, it's virtually impossible not to take in a certain amount of toxic heavy metals, such as mercury, aluminium, copper, cadmium, nickel and lead. These heavy metals often accumulate in your liver, gall bladder and/or intestines. Since heavy metals tend to be heavier

than the water that's inside your digestive system and blood, they sink down and settle into the intestinal tract – just like gold settles at the bottom of a river bed.

"Toxic heavy metals are poisonous, and if they begin to oxidise, their chemical runoff will mutate and damage whatever cells are nearby. However, the biggest issue with heavy metals is that they are prime food for bad bacteria, viruses, fungi, parasites and worms...

"Once the pathogens I mentioned above settle in, they'll start inflaming your gut – eg saturating the linings of your intestines or colon. They'll release poisons in your gut directly via neurotoxins they produce, and indirectly via their waste and toxic corpses. This is how most people develop illnesses and disorders such as IBS, Crohn's Disease (an inflammation of the gastro-intestinal tract), and colitis (an inflammation of the colon – which is typically a chronic infection of the shingles virus described in Chapter 11 coupled with *Streptococcus* bacteria).

"Under a microscope, these by-products of dead viral matter and cast-off viral castings often look like parasitical activity. This throws off many analyses of stool samples and results in numerous misdiagnoses, which means that it's often a mistake when someone is diagnosed with a parasite. This is a huge confusion in gut health today."

Anthony William's book goes on to describe foods for heavy metal detox and he also has published another book called: **"Medical Medium: Life-Changing Foods"**, which lists heavy metal detox as an outcome of eating many of the 50 life-changing foods identified. Just as a taster in case you are not sure about buying **"Medical Medium: Life-Changing Foods"**, I have also selected around 35 conditions which Anthony William says will be helped by eating his chosen 50 life-changing foods – though his book lists hundreds of conditions and



symptoms – and included the foods he recommends for heavy metal detox, in a table. Please contact me if you'd like a copy.

And while reading a third book published recently, called “**Medical Medium: Thyroid Healing**” which includes a 30 day heavy metal detox diet, I've completed blood lead testing before and during following Anthony William's 30 day heavy metal detox diet (eating mostly raw, preferably organic fruits and vegetables and a delicious wild blueberry and coriander smoothie each day), and my blood lead level has started to fall! My blood lead level went from 3.1 micrograms per decilitre (ug/dL) on 9th February 2018, down to 2.7 ug/dL (a fall of 0.4 ug/dL or a decrease of 10%) on 19th April 2018 – a period of 69 days or nearly a third of the way through the 3rd round of the 30 day heavy metal detox diet.

Because I am post-menopausal and post-menopausal women typically have a RISING blood lead level (due to bone demineralisation leaching stored lead from bones), I've decided that I'll continue the Anthony William heavy metal detox diet and repeat the blood lead testing approximately two to three-monthly until my blood lead level reaches The LEAD Group's recommended target level of below 1.0 ug/dL. At the current rate of fall, my blood lead level could reach the target level by 24th February 2019! I guess it makes sense that it would take more than a year to detox over 60 years of lead intake!!

I will update this Info Pack, so please keep in touch! I may also update the The LEAD Group's list of Lead Detox Foods because Anthony William lists Heavy Metal Detox Foods in all three of his books, which are available from www.medicalmedium.com and if my blood lead level continues to fall (when it should by rights be rising), then reading those three books may become my only recommendation. In the meantime, if more people of differing ages were to test their blood lead, then trial the 30 day heavy metal detox diet (or any other diet you think might reduce your blood lead level) and retest their blood lead level, then that recommendation may be able to be made earlier than next February!

From the Medical Medium website, you can download for free (if you register to receive e-newsletters) "Special Report: Top 10 Super Healing Foods" by Anthony William, and six of the ten foods (celery, wild blueberries, cilantro, sprouts, garlic and leafy greens), he lists in his books as being heavy metal detox foods. So reading the Special Report and eating the super foods would be a good start to your heavy metal detox journey. If you do decide to detox lead using food, please send in your blood lead results before and after, so that we can start some citizen science through our Blood Lead Challenge (see below).

A useful list of Lead Detox Foods from the older version of this Info Pack is online at: [http://www.lead safeworld.com/solutions/foods-for-lead-detox/;](http://www.lead safeworld.com/solutions/foods-for-lead-detox/)
[http://www.lead.org.au/fs/fst86.html;](http://www.lead.org.au/fs/fst86.html) and
<http://www.lead.org.au/fs/Foods for Lead Detox A-Z 20150214.pdf>



If the blood lead results show a “less than” sign (<), then they are below the limit of detection for that lab. In response to blood lead levels above the limit of detection - either 1 or 2 micrograms per decilitre (1 or 2 ug/dL but at some labs, even lower), or above 1 ug/dL, we recommend a two-pronged approach:

1. identify the lead source/s and remove the person from the source/s or the source/s from their environment; and
2. institute nutritional intervention by following the advice in this Info Pack.

If anyone in the family has a blood lead above 5 ug/dL the Dept of Health should step in and send out their own lead assessor (at no cost to you) to your house. If they don't send someone, purchasing one of our DIY-Sampling lab-analysis lead test kits (see <http://www.lead safeworld.com/solutions/lead-group-diy-sampling-lab-analysis-lead-test-kits/>) is your best option, as the samples are collected by you but posted to a lab for analysis (the cost of analysis and an interpretive report is included in the kit price). You can test lead in your drinking water using 2 sample containers from the 8-sample Comprehensive Kit or, if you only want to test lead in drinking water, you can just buy the 2-sample Water Kit. If a child or adult has a blood lead level above the limit of detection, the Comprehensive Kit should be used – you can even ask a professional to use the Kit to collect the samples.

The most usual exposure pathway for lead poisoning in young children is ingestion (from the fingers or objects that go in the mouth) of dust or soil, so dust wipe samples and soil samples from areas in the home and yard that are accessed by the child/ren, are the best samples to test for lead. But for adults, the most usual exposure pathway (excluding lead-contaminated medicines, beverages, food or cosmetics) is inhalation - most often during renovation or demolition activities on older buildings, but also during many hobby and occupational exposure scenarios. You should go through all the sources and pathways of lead poisoning that we have managed to list (it is by no means including ALL lead sources as new sources are created regularly) at <http://www.lead.org.au/lasn/lasno06.html> before determining what to test (if anything needs testing once you get the blood lead test results).

Our old Info Pack 23 on "Nutrition to Fight Lead Poisoning" is online! For the full newsletter on the topic (including links to all references) please go to:

- A. LEAD Action News Vol 10 No 2 (LANv10n2) Food, Nutrition and Lead Absorption - newsletter including articles on veganism and nutrition to fight lead poisoning (including all references):
<http://www.lead.org.au/lanv10n2/LEAD Action News vol 10 no 2.pdf>

AND

- B. Fact sheet: Nutrients that reduce lead poisoning (a summary of the above newsletter article):



[http://www.lead.org.au/fs/Fact_sheet-Nutrients that reduce lead poisoning June 2010.pdf](http://www.lead.org.au/fs/Fact_sheet-Nutrients_that_reduce_lead_poisoning_June_2010.pdf)

There is some basic nutrition information in [https://www.lead.org.au/fs/lead safe/Lead Your Health & the Environment-English.pdf](https://www.lead.org.au/fs/lead_safe/Lead_Your_Health_&_the_Environment-English.pdf) by the NSW EPA (Environment Protection Authority), and some detailed nutrition advice in <http://www2.epa.gov/sites/production/files/documents/nutrition.pdf> by the US EPA.

A more recent addition to this Info Pack, is “Garlic Beats Drug in Detoxifying Lead Safely From Body” at <http://www.greenmedinfo.com/blog/garlic-beats-drug-detoxifying-lead-safely-body-1> and you can follow the link on that page, to [Natural Agents for Lead Poisoning](#) for more info on garlic (and sauna) and other natural agents for the treatment of lead poisoning.

Garlic every day for the rest of your life is a great antidote to the lead you took in every day that you were alive during the leaded petrol era (1935 to 2002 in Australia). In the USA, it is estimated that 1 in 10 people alive during the leaded petrol era (1921 to 1995 in the USA), will have their life cut short by lead (mainly through heart attack or stroke). The most concerning health impact of lead exposure for humans is that lead raises your blood pressure. People with hypertension should particularly be aiming to completely avoid further exposure to lead, and to remove lead from their bodies, in order to live a longer, healthier life.

Nutrition-oriented pages on our new [Lead Safe World website](#) include:

[Take the quiz by nutritionist Anthony Power, re heavy metals & other toxics in your body.](#)



Anthony Power Nutrition – located at Hawthorne, in Brisbane, Queensland 4171 Australia. Anthony’s great strength lies in the fact that he spends quality time with his patients to understand why they are not well. He has a great deal of experience in helping patients with hard-to-treat illnesses find out the root cause of their illness. He will prioritise the tests and changes that need to be implemented immediately and schedule those that can be done at a later date.



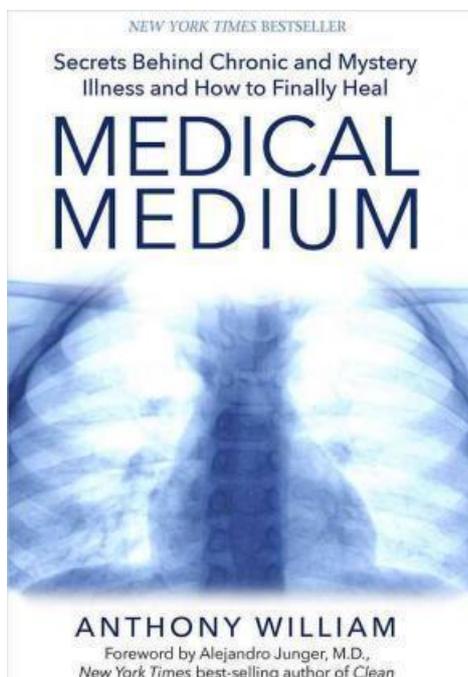
Paquete de Información. Nutrición para combatir la intoxicación con plomo / Desintoxicación de metales pesados.

Por Elizabeth O'Brien, "The Lead Education and Abatement Design" (LEAD) Group Inc. (Organización sin ánimo de lucro para la salud ambiental), www.lead.org.au, Gerente, "Lead Safe World Project (LSWP) www.lead safeworld.com, Fundadora, "Volcano Art Prize" (VAP) www.volcanoartprize.com

Traducido al Castellano por Orlando Aguirre-López

Las Vitaminas "estándar" y los Minerales que son importantes para "desintoxicación por plomo" son: Vitamina C (un quelante natural), Vitamina D, el hierro (mejor como alimento), el calcio, el zinc, el magnesio y el fósforo. Recientemente, un nuevo artículo encontró también una asociación entre una mayor dieta de zinc, calcio y níquel y menores niveles de plomo en la sangre de los Niños.

Véase "El Zinc para dieta, el calcio y el níquel están asociados con menores niveles de plomo en la sangre en la niñez" (Gulson y otros, en la red Octubre 2018) en: <https://www.sciencedirect.com/science/article/pii/S0013935118305620>



En el 2018 leí el libro de Anthony Williams "**Medium Médico: Secretos tras de las Enfermedades Crónicas y Misteriosas y Como Curarse Finalmente**" porque un cliente lo recomendó para las personas que quieren desintoxicarse de metales pesados. (Observe la portada a su izquierda).

Por favor encuentre abajo algunos textos sobresalientes de las páginas que el cliente fotografió del libro:

"ELIMINACION DE METALES TOXICOS PESADOS DE SU INTESTINO [página 242] En nuestra moderna era, es prácticamente imposible no ingerir una cierta cantidad de metales tóxicos pesados, tales como mercurio, aluminio, cobre, cadmio, níquel y plomo. Estos metales pesados se acumulan con frecuencia en su

hígado, vesícula biliar y/o los intestinos. Como estos metales tienden a ser más pesados que el agua que hay dentro de su sistema digestivo y su sangre, se



profundizan y localizan dentro del tracto intestinal – exacto como el oro se asienta en el fondo del lecho de un río.

“Los metales tóxicos pesados son venenosos y, si empiezan a oxidarse, su escorrentía química mutará y dañará cualesquiera células que estén en la proximidad. Sin embargo, el mayor problema con los metales pesados es que son comida de primera para bacterias malas, virus, hongos, parásitos y gusanos...

Una vez que los agentes patógenos que mencioné anteriormente se hayan establecido, comenzarán a inflamar su intestino, por ejemplo, saturando los revestimientos de dichos intestinos o del colon. Soltarán tóxicos en su intestino directamente a través de las neurotoxinas que ellos producen, e indirectamente a través de sus residuos y materia tóxica muerta. Así es como la mayoría de la gente desarrolla enfermedades y trastornos como el SII, la enfermedad de Crohn (una inflamación del tracto gastrointestinal), y la colitis (una inflamación del colon – que es típicamente una infección crónica del virus de la culebrilla, descrito en el Capítulo 11, junto con la bacteria estreptococo.

“Bajo microscopio, estos subproductos de la materia viral muerta y fundiciones virales parecen frecuentemente como actividad parasitaria. Esto sale de muchos análisis de muestras de heces y da como resultado numerosos diagnósticos erróneos, lo que significa que hay frecuentemente error cuando alguien es diagnosticado con un parásito. Hay una gran confusión en la salud intestinal hoy en día”.

El libro de Anthony William continúa con la descripción de la desintoxicación de metales pesados y él ha publicado también otro libro titulado: “**El Medium Médico: Alimentos para Cambio de Vida**”, que lista los desintoxicantes de metales pesados como un resultado de ingerir muchos de 50 alimentos identificados para un cambio de vida. Solo como un catador, en caso de que usted no esté seguro/a de comprar “**El Medium Médico: Alimentos para un Cambio de Vida**”, he seleccionado también 35 condiciones que, dice Anthony William, será de ayuda si se ingieren 50 alimentos para el cambio de vida – aunque su libro lista cientos de condiciones y síntomas – e, incluidos los alimentos que él recomienda para desintoxicación de metales pesados, en la tabla. Por favor, contácteme si deseara usted una copia.

Y mientras leo un tercer libro publicado recientemente, llamado “**El Medium Médico: Curación de la Tiroides**”, que incluye una dieta de 30 días para la desintoxicación de metales pesados, he realizado una prueba de sangre antes y durante la dieta para desintoxicación de metales pesados de 30 días de Anthony William (comiendo principalmente en crudo, preferiblemente frutas y vegetales orgánicos y batido de arándanos y cilantro cada día), y mi nivel de plomo en la sangre ha empezado a caer!. Mi nivel de plomo en la sangre descendió de 3.1 microgramos por decilitro (ug/dL) el 9 de Febrero, 2018, a 2.7 ug/dL (una caída de 0,4 ug/dL, ó descenso del 10%) el 10 de Abril, 2018 – un período de 69 días ó casi una tercera parte del camino de la tercera ronda de 30 días de dieta para desintoxicación de metales pesados.



Como soy una mujer post-menopáusica y las mujeres post-menopáusicas tienen un nivel de plomo en la sangre ELEVÁNDOSE (debido al plomo almacenado de los huesos por desmineralización ósea, con lixiviación), he decidido que continuaré la dieta de Anthony William para desintoxicación de metales pesados y repetiré las pruebas de plomo en la sangre aproximadamente dos o tres por mes hasta que el nivel de plomo en la sangre alcance el objetivo recomendado por el "LEAD Group" de estar por debajo de 1.0 ug/dL. A la tasa actual de caída, mi nivel de plomo en la sangre podría alcanzar el objetivo hacia el 24 de Febrero 2019!. Creo que tiene sentido que ello tomaría más de un año para desintoxicar más de 60 años de ingesta de plomo.

Actualizaré este Paquete de Información ("Info Pack"), así que por favor manténganse en contacto! También actualizaré la lista de "LEAD Group" de Alimentos para Desintoxicar porque Anthony Williams lista los Alimentos para Desintoxicación de Metales Pesados en todos sus tres libros, la cual está disponible en www.medicalmedium.com y si mi nivel de plomo en la sangre sigue bajando (cuando sería correcto que subiera), entonces la lectura de esos tres libros puede llegar a ser mi única recomendación. Mientras tanto, si más personas de diferentes edades fuesen a probar su nivel de plomo en la sangre, entonces ensayen la dieta de 30 días para desintoxicación de metales pesados (o cualquiera otra dieta que ustedes crean podría reducir su nivel de plomo en la sangre) y probar de nuevo dicho nivel, tal que la recomendación pueda ser hecha antes del próximo Febrero!

Del sitio Web del Medium Médico, usted puede bajar gratis (si usted se registra para recibir "e-newsletters") "Informe Especial: Diez Principales Alimentos de Super Curación", por Anthony William, y seis de los diez alimentos (apio, arándanos, cilantro, coles, ajo y verduras de hoja verde), lista él en sus libros por ser alimentos desintoxicantes de metales pesados. Así, leer el Informe Especial e ingerir los super alimentos sería un buen comienzo para su jornada de desintoxicación de metales pesados. Si usted decide de verdad desintoxicarse por medio de alimentos, por favor envíe su resultado de nivel de plomo en la sangre antes y después, de tal modo que podamos iniciar una ciencia ciudadana a través de nuestro Desafío de Plomo en la Sangre (leer en la parte inferior de la página).

Una lista útil de Alimentos para Desintoxicación de Plomo tomada de la versión antigua de este Paquete de Información (Info Pack) está en línea en:

[http://www.lead safeworld.com/solutions/foods-for-lead-detox/;](http://www.lead safeworld.com/solutions/foods-for-lead-detox/)
[http://www.lead.org.au/fs/fst86.html;](http://www.lead.org.au/fs/fst86.html) and
<http://www.lead.org.au/fs/Foods for Lead Detox A-Z 20150214.pdf>

Los resultados de plomo en la sangre muestran un signo "menor que" (<) cuando están por debajo del límite de detección para el laboratorio. En respuesta a niveles de plomo en la sangre por encima del límite de detección – 1 ó 2 microgramos por decilitro (1 or 2 ug/dL, pero en algunos laboratorios, aún menores), o por encima de 1 ug/dL, recomendamos un enfoque de dos puntas:



1. Identificar la/s fuente/s de plomo y retirar a la persona de esa/s fuente/s ó la/s fuente/s de su medio; y
2. Institucionalizar la intervención nutricional siguiendo lo aconsejado este Paquete de Información.

Si alguien en la familia tiene plomo en la sangre por encima de 5 ug/dL, el Departamento de Salud debería intervenir y enviar sus asesores sobre plomo (sin costo para usted) a su casa. Si no mandan a alguien, el comprar uno de nuestros paquetes “DIV-Sampling lab-analysis lead test kit” (Paquete de muestreo-DIV para prueba de plomo para análisis de laboratorio) es su mejor opción, ver: <http://www.lead safeworld.com/solutions/lead-group-diy-sampling-lab-analysis-lead-test-kits/>); como las muestras son coleccionadas por usted pero enviadas por correo al laboratorio para análisis (el costo del análisis y del informe interpretativo está incluido en el precio del paquete).

Usted puede probar en su agua potable utilizando 2 recipientes de muestra del total de 8 del Paquete Integrado o, si usted solo quiere probar si hay plomo en el agua potable, puede justo comprar el Paquete para Agua de doble muestra. Si un niño o adulto tiene nivel de plomo en la sangre por encima del límite de detección, el Paquete Integral deberá utilizarse – usted puede aún pedir a un profesional el empleo del Paquete para coleccionar las muestras.

La vía más corriente de exposición para intoxicación por plomo en niños pequeños es la ingestión (de los dedos u objetos que van a la boca) o polvo o suelo, así que muestras de limpieza de polvo y muestras del suelo, son las mejores para probar para plomo. Pero para los adultos, la vía más corriente de exposición (excluyendo medicinas contaminadas con plomo, bebidas, alimento o cosméticos) es la inhalación – más frecuentemente durante las actividades de demolición o renovación de construcciones antiguas, pero también durante actividades de afición y escenarios de trabajo. Usted debería observar todas las fuentes y caminos de envenenamiento por plomo que hemos logrado listar (en modo alguno incluye TODAS las fuentes ya que algunas de éstas se crean regularmente) en : <http://www.lead.org.au/lasn/lasn006.html> antes de determinar qué prueba hacer (si alguna cosa requiere prueba una vez que usted tenga los resultados de la prueba de plomo en la sangre).

Nuestro antiguo Paquete de Información 23 sobre “Nutrición para Combatir la Intoxicación por Plomo” está en la red! Para la completa hoja de noticias sobre el tema (incluyendo vínculos a todas las referencias) vaya por favor a:

“LEAD Action News Vol 10 No 2 (LAN v10n2)” “Alimento, Nutrición y Absorción de Plomo” – Hoja de noticias incluyendo artículos sobre vegetarianismo y nutrición para combatir la intoxicación por plomo (incluyendo todas las referencias):



[http://www.lead.org.au/lanv10n2/LEAD Action News vol 10 no 2.pdf](http://www.lead.org.au/lanv10n2/LEAD%20Action%20News%20vol%2010%20no%202.pdf)

Y

Hoja B de Hechos: Nutrientes que reducen la intoxicación por plomo (un resumen del artículo de hoja de noticias mencionada):

[http://www.lead.org.au/fs/Fact_sheet-Nutrients that reduce lead poisoning June 2010.pdf](http://www.lead.org.au/fs/Fact_sheet-Nutrients_that_reduce_lead_poisoning_June_2010.pdf)

Hay alguna información básica sobre nutrición en:

[https://www.lead.org.au/fs/lead safe/Lead Your Health & the Environment-English.pdf](https://www.lead.org.au/fs/lead_safe/Lead_Your_Health_&_the_Environment-English.pdf) por EPA, NSW (Autoridad Para la Protección del Ambiente, por sus siglas en Inglés, de Nueva Gales del Sur), y alguna sugerencia detallada sobre nutrición en:

<http://www2.epa.gov/sites/production/files/documents/nutrition.pdf> by the US por EPA, EE.UU.

Una más reciente adición a este Paquete de Información es “El Ajo vence a la Medicina en la Desintoxicación de Plomo del Cuerpo con Seguridad” está en at <http://www.greenmedinfo.com/blog/garlic-beats-drug-detoxifying-lead-safely-body-1> y puede usted seguir el vínculo en esa página a: [Natural Agents for Lead Poisoning](#) para más información sobre el ajo (y sauna) y otros agentes naturales para el tratamiento del envenenamiento por plomo.

El ajo cada día por el resto de su vida es un gran antídoto para el plomo que usted recibió cada día que usted vivió durante la era de la gasolina con plomo (1935 a 2002 en Australia). Se estima que en EE.UU. una de cada diez personas vivientes durante la era de la gasolina con plomo (1921 a 1995 en EE.UU.), tendrá su vida recortada por el plomo (principalmente por infarto o derrame). El impacto más preocupante para la salud de la exposición al plomo para los humanos es que le plomo aumenta su tensión arterial. La gente con hipertensión debería en especial tener como objetivo el evitar completamente exposición posterior al plomo, y quitar el plomo de sus cuerpos, para vivir más largo y con mejor salud.

Las páginas orientadas a la nutrición en nuestro [Lead Safe World website](#) incluyen:

“Tome el examen de Anthony, Poder Nutricionista, sobre metales pesados y otros tóxicos en su cuerpo”.



anthony
power
nutrition

nutritional advice for life

El Poder de la Nutrición, por Anthony – localizado en Hawthorne, en Brisbane, Queensland 4171, Australia. La gran fortaleza de Anthony está en el hecho que él gasta tiempo de calidad con sus pacientes con el fin de entender por qué ellos no están bien. Tiene una gran experiencia en ayudar a los pacientes con enfermedades difíciles de tratar y buscar la causa raíz de sus enfermedades. Él da prioridad a las pruebas y cambios que deben ponerse en práctica inmediatamente y hace la programación de aquellos que pueden hacerse en fecha posterior.

Info Pack - Nutrition pour lutter contre l'intoxication par le plomb et la détoxification des métaux lourds

Par Elizabeth O'Brien, Groupe LEAD (Lead Education and Abatement Design) (organisme de protection de l'environnement) www.lead.org.au, Gestionnaire, Lead Safe World Project (LSWP), www.leadsafeworld.com, Fondateur, Volcano Art Prize (VAP)

www.volcanoartprize.com

(Converti en Français par Orlando Aguirre-López)

The “standard” Vitamins and Minerals that are important “for lead detox” are: Vit C (a natural chelator), Vit D, iron (best as food), calcium, zinc, magnesium, and phosphorus. Recently, a new article also found an association between higher dietary zinc, calcium and nickel and lower blood lead levels in Children. See “**Dietary zinc, calcium and nickel are associated with lower childhood blood lead levels**” (Gulson et al, online October 2018) at: <https://www.sciencedirect.com/science/article/pii/S0013935118305620>

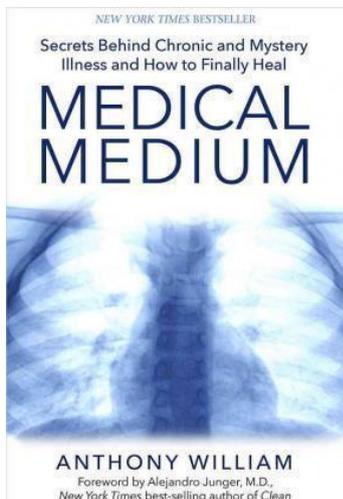
Les vitamines et minéraux «essentiels» qui jouent un rôle «important dans la détoxification au plomb» sont les suivants: Vit C (un chélateur naturel), Vit D, fer (meilleur comme un aliment), calcium, zinc, magnésium et phosphore. Récemment, un nouvel article a également révélé une association entre une teneur élevée en zinc, en calcium et en nickel dans l'alimentation et une baisse des taux de plomb dans le sang chez les enfants. Voir:



"Le zinc, le calcium et le nickel alimentaires sont associés à des concentrations plus faibles de plomb dans le sang chez les enfants »

" (Gulson et al, en ligne, octobre 2018) en :

<https://www.sciencedirect.com/science/article/pii/S0013935118305620>



J'ai récemment lu le livre d'Anthony William intitulé "Médium médical: les secrets de la maladie chronique et mystérieuse et de la guérison définitive", car un client l'avait recommandé aux personnes souhaitant désintoxiquer leurs métaux lourds. (Couverture à gauche)

S'il vous plaît, trouver ci-dessous un texte pertinent tiré des pages photographiées dans le livre:

"ENLEVER LES MÉTAUX LOURDS ET TOXIQUES DE VOTRE INTESTIN » [page 242]

À notre époque, il est pratiquement impossible de ne pas prendre une certaine quantité de métaux lourds toxiques, tels que le mercure, l'aluminium, le cuivre, le cadmium, le nickel et le plomb. Ces métaux lourds s'accumulent souvent dans le foie, la vésicule biliaire et / ou les intestins. Puisque les métaux lourds ont tendance à être plus lourds que l'eau qui se



trouve dans votre système digestif et votre sang, ils s'enfoncent dans le tractus intestinal - tout comme l'or se dépose au fond du lit d'une rivière.

« Les métaux lourds toxiques sont toxiques et s'ils commencent à s'oxyder, leurs écoulements chimiques muteront et endommageront les cellules à proximité. Cependant, le plus gros problème avec les métaux lourds est qu'ils sont le principal aliment des mauvaises bactéries, virus, mauvais champignons, parasites et vers...

Une fois que les agents pathogènes que j'ai mentionnés ci-dessus se sont installés, ils libèrent des poisons dans votre intestin via les neurotoxines qu'ils produisent et indirectement via leurs déchets et leurs cadavres toxiques. C'est ainsi que la plupart des gens développent des maladies et des troubles tels que le SCI, la maladie de Crohn (une inflammation du tractus gastro-intestinal) et la colite (une inflammation du côlon - qui est typiquement une infection chronique du virus du zona décrite au chapitre 11 couplé avec la bactérie Streptocoque).

Au microscope, ces sous-produits de matière virale morte et de castings viraux ressemblent souvent à une activité parasitaire. Cela rejette de nombreuses analyses d'échantillons de selles et donne lieu à de nombreux diagnostics erronés, ce qui signifie que c'est souvent une erreur de diagnostiquer un parasite. C'est une énorme confusion dans la santé de l'intestin aujourd'hui.

Le livre d'Anthony William décrit ensuite les aliments pour la désintoxication des métaux lourds. Il a également publié un autre ouvrage intitulé "**Médium médical: des aliments qui changent la vie**", qui décrit la désintoxication des métaux lourds comme le résultat de la consommation de la plupart des 50 aliments identifiés. En guise de dégustateur au cas où vous ne seriez pas sûr d'acheter «**Médium médical: des aliments qui changent la vie**», j'ai également sélectionné environ 35 affections qui, selon Anthony William, seront aidées en mangeant ses 50 aliments qui changent la vie énumère des centaines de conditions et de symptômes - et inclut les aliments qu'il recommande pour la désintoxication des métaux lourds, dans un tableau. S'il vous plaît, contactez-moi si vous souhaitez une copie.

Et en lisant un troisième livre publié récemment, intitulé: «**Médium médical: guérison de la thyroïde**», qui comprend un régime de désintoxication aux métaux lourds de 30 jours, j'ai effectué un test de plombémie avant et pendant le traitement suivant principalement des fruits et des légumes crus, de préférence biologiques, et un délicieux smoothie aux bleuets sauvages et à la coriandre chaque jour), et que le niveau de plomb dans le sang ait commencé à baisser ! Ma plombémie est passée de 3,1 microgrammes par décilitre



(ug / dL) le 9 février 2018 à 2,7 ug / dL (une baisse de 0,4 ug / dL ou une diminution de 10%) le 19 avril 2018 - une période de 69 jours ou presque le tiers du troisième cycle du régime de désintoxication aux métaux lourds de 30 jours.

Parce que je suis ménopausée et que les femmes ménopausées ont généralement un taux de plomb dans le sang QUI MONTE (en raison du lessivage de la déminéralisation osseuse du plomb stocké dans les os), j'ai décidé de poursuivre le régime de désintoxication en métaux lourds d'Anthony William test sanguin de plomb environ deux à trois mois jusqu'à ce que le niveau de plomb dans le sang atteigne le niveau cible recommandé par le groupe LEAD, inférieur à 1,0 µg / dL. Au taux de chute actuel, mon taux de plomb dans le sang pourrait atteindre le niveau cible d'ici le 24 février 2019! Je suppose qu'il est logique qu'il faudrait plus d'un an pour désintoxiquer plus de 60 ans de consommation de plomb!!

Je mettrai à jour ce Pack d'Informations, alors restez en contact! Je peux également mettre à jour la liste des aliments contenant du plomb Detox du groupe LEAD, disponibles auprès de www.medicalmedium.com et si mon taux de perte de sang continue de baisser (alors que le taux devrait augmenter), la lecture de ces trois livres peut devenir ma seule recommandation. Entre-temps, si plus de personnes de différents âges testent leur plombémie, testez le régime de désintoxication aux métaux lourds sur 30 jours (ou tout autre régime susceptible de réduire votre plomb sanguin) et testez à nouveau leur plombémie, puis cette recommandation peut être faite avant le mois de février prochain !

À partir du site Web Médium Médical, vous pouvez télécharger gratuitement (si vous vous inscrivez pour recevoir les bulletins électroniques) "Rapport spécial: Les 10 meilleurs aliments de guérison" d'Anthony William et six des dix aliments (céleri, bleuets sauvages, coriandre, chou, ail et feuilles vertes), cite-t-il dans ses livres comme étant des aliments de désintoxication en métaux lourds. Donc, lire le rapport spécial et manger les super aliments serait un bon début pour votre voyage de désintoxication de métaux lourds. Si vous décidez de désintoxiquer le plomb en utilisant de la nourriture, veuillez nous envoyer vos résultats avant et après, afin que nous puissions commencer une science citoyenne par le biais de notre « Défi de la Plombémie »

(regardez la page en bas, s'il vous plaît)

Une liste utile des aliments contenant de la détox au plomb de l'ancienne version de ce Pack d'Informations est en ligne à l'adresse :

[http://www.lead safeworld.com/solutions/foods-for-lead-detox/;](http://www.lead safeworld.com/solutions/foods-for-lead-detox/)

[http://www.lead.org.au/fs/fst86.html;](http://www.lead.org.au/fs/fst86.html) and

<http://www.lead.org.au/fs/Foods for Lead Detox A-Z 20150214.pdf>



Si les résultats de la plombémie montrent un signe "moins de" (<), ils sont alors inférieurs à la limite de détection de ce laboratoire. En cas de plombémie dépassant la limite de détection - 1 ou 2 microgrammes par décilitre (1 ou 2 $\mu\text{g} / \text{dL}$ mais, dans certains laboratoires, même inférieure), ou supérieure à 1 $\mu\text{g} / \text{dL}$, nous recommandons une approche à deux volets:

1. Identifiez la ou les sources principales et retirez la personne de la ou des sources ou de la ou des sources de leur environnement. et
2. Installez une intervention nutritionnelle en suivant les conseils de ce Dossier d'Information.

Si un membre de votre famille a une plombémie supérieure à 5 $\mu\text{g} / \text{dL}$, le ministère de la Santé doit intervenir et envoyer son propre auditeur principal (sans frais pour vous) à votre domicile. S'ils n'envoient pas quelqu'un, achetez l'un de nos kits de test de sonde d'analyse de laboratoire DIY- échantillonnage :

(voir : <http://www.lead safeworld.com/solutions/lead-group-diy-sampling-lab-analysis-lead-test-kits/>) est votre meilleure option, car les échantillons sont collectés par vous mais envoyés à un laboratoire pour analyse. rapport est inclus dans le prix du kit). Vous pouvez tester le plomb dans votre eau de boisson à l'aide de 2 récipients d'échantillons du kit complet de 8 échantillons ou, si vous souhaitez uniquement tester le plomb dans de l'eau potable, vous pouvez simplement acheter le kit d'eau à 2 échantillons. Si un enfant ou un adulte a un taux de plomb sanguin supérieur à la limite de détection, vous devez utiliser le kit complet. Vous pouvez même demander à un professionnel d'utiliser le kit pour collecter les échantillons.

La voie d'exposition la plus courante à l'intoxication par le plomb chez vos enfants est l'ingestion (par les doigts ou des objets pénétrant dans la bouche) de la poussière ou du sol. Par conséquent, la poussière doit effacer les échantillons et les échantillons de sol des zones de la maison et du jardin accessibles à l'enfant / sont les meilleurs échantillons pour tester le plomb. Mais chez les adultes, la voie d'exposition la plus courante (à l'exclusion des médicaments contaminés par le plomb, les boissons, les aliments ou les produits cosmétiques) est l'inhalation - le plus souvent lors d'activités de rénovation ou de démolition dans des bâtiments anciens, mais également lors de nombreux scénarios d'exposition professionnelle ou de loisir. Vous devez passer en revue toutes les sources et voies d'intoxication au plomb que nous avons réussi à répertorier (il n'inclut en aucun cas TOUTES les sources de plomb car de nouvelles sources sont créées) au <http://www.lead.org.au/lasn/lasnoo6.html> avant de déterminer ce qu'il faut tester (si quoi que ce soit nécessite un test une fois que vous avez obtenu le résultat de tests sanguins).



ET :

Notre ancien pack d'informations 23 sur "**La nutrition pour lutter contre l'empoisonnement au plomb**" est en ligne! Pour la lettre d'information complète sur le sujet (y compris les liens vers toutes les références), veuillez consulter:

A. LEAD Action News Vol 10 No 2 (LANv10n2) **Alimentation, nutrition et absorption du plomb** - Bulletin contenant des articles sur le véganisme et la nutrition pour lutter contre l'intoxication par le plomb (avec toutes les références):

http://www.lead.org.au/lanv10n2/LEAD_Action_News_vol_10_no_2.pdf

B. Fiche d'information: Éléments nutritifs qui réduisent l'intoxication au plomb (résumé de l'article susmentionné du bulletin) :

http://www.lead.org.au/fs/Fact_sheet-Nutrients_that_reduce_lead_poisoning_June_2010.pdf

Il existe des informations de base sur la nutrition dans:

https://www.lead.org.au/fs/lead_safe/Lead_Your_Health_&_the_Environment-English.pdf - par le NSW EPA (Environment Protection Authority, selon les initiales anglaises) contient des informations nutritionnelles de base dans _, ainsi que des conseils nutritionnels détaillés dans

<http://www2.epa.gov/sites/production/files/documents/nutrition.pdf> par l'US EPA.

A more recent addition to this Info Pack, is "Garlic Beats Drug in Detoxifying Lead Safely From Body" at <http://www.greenmedinfo.com/blog/garlic-beats-drug-detoxifying-lead-safely-body-1> and you can follow the link on that page, to [Natural Agents for Lead Poisoning](#) for more info on garlic (and sauna) and other natural agents for the treatment of lead poisoning.

Un ajout plus récent à cet ensemble d'informations, intitulé "**Ail Beats, drogue dans Détoxification du plomb sans danger du corps**" au

<http://www.greenmedinfo.com/blog/garlic-beats-drug-detoxifying-lead-safely-body-1> et vous pouvez suivre le lien sur cette page, au [Natural Agents for Lead Poisoning](#) pour plus d'informations sur l'ail (et le sauna) et d'autres agents naturels pour le traitement de l'intoxication au plomb.

L'ail tous les jours pour le reste de votre vie est un excellent antidote à la direction que vous avez prise chaque jour où vous étiez en vie à l'époque de l'essence au plomb (de 1935 à 2002 en Australie). Aux États-Unis, on estime que 1 personne sur 10 en vie au cours de l'ère de l'essence au plomb (1921 à 1995 aux États-Unis) verra sa vie abrégée par le plomb (principalement par crise cardiaque ou accident vasculaire cérébral). L'impact le



plus préoccupant sur la santé de l'exposition au plomb chez l'homme est que le plomb augmente votre pression sanguine. Les personnes hypertendues devraient notamment avoir pour objectif d'éviter complètement toute exposition supplémentaire au plomb et de retirer le plomb de leur corps afin de vivre plus longtemps et en meilleure santé.



anthony
power
nutrition

nutritional advice for life

Les pages axées sur la nutrition dans notre nouvelle [Lead Safe World website](#) publication incluent :

[Répondez au questionnaire du nutritionniste Anthony Power sur les métaux lourds et autres substances toxiques dans votre corps.](#)

Anthony Power Nutrition - situé à Hawthorne, à Brisbane, Queensland 4171 Australie.

La grande force d'Anthony réside dans le fait qu'il passe du temps de qualité avec ses patients pour comprendre pourquoi ils ne vont pas bien. Il a beaucoup d'expérience à aider les patients atteints de maladies difficiles à traiter à découvrir la cause première de leur maladie. Il priorisera les tests et les modifications à mettre en œuvre immédiatement et planifiera ceux qui peuvent être effectués à une date ultérieure.

Deleading with healthy lifestyle interventions Lead detox with saunas, lemon, garlic, greens, etc after eradicating potential current lead exposure

By Richard Turnbull

As with most individuals, I have a medical check once a year and during June 2017 I decided to ask my GP to include serum lead which to our surprise came back quite high – 10.4 micrograms per decilitre (ug/dL) or, more than twice the notification-to-government level of 5 ug/dL - as can be seen in Table 1. The NSW Government Department of Health, (Western NSW Local Health District) contacted me by phone informing me of the elevated blood lead level basically letting me know the dangers of lead and that I should have my family also tested. Other than that I had no other correspondence from them except my calling them in Dubbo with questions which they really could not satisfactorily answer. I realized that their knowledge about lead was very limited.



After some research I managed to locate Elizabeth O'Brien at The LEAD Group in Sydney who was most helpful giving me heaps of background information about lead and also Elizabeth suggested I try to find out if I was currently being exposed to lead. I first called The LEAD Group charity on 8th June 2017. This is when I decided to test the surroundings of my house in Orange (Table 2) and my son's house in Wagga Wagga (Table 3) with a LEAD Group Kit. Blood lead tests were also carried out on my wife, my son, my daughter-in-law and grandson. All their blood results came back well below 5 ug/dL. My wife's blood test came back the highest at 2.5 ug/dL. I as well as my GP had no answers as to why my lead levels should be so high. My thought was that it must obviously be in my bones where lead accumulated during my early life and working in lead contaminated areas and now as I am aging there may be a continuous slow leaching into the blood.

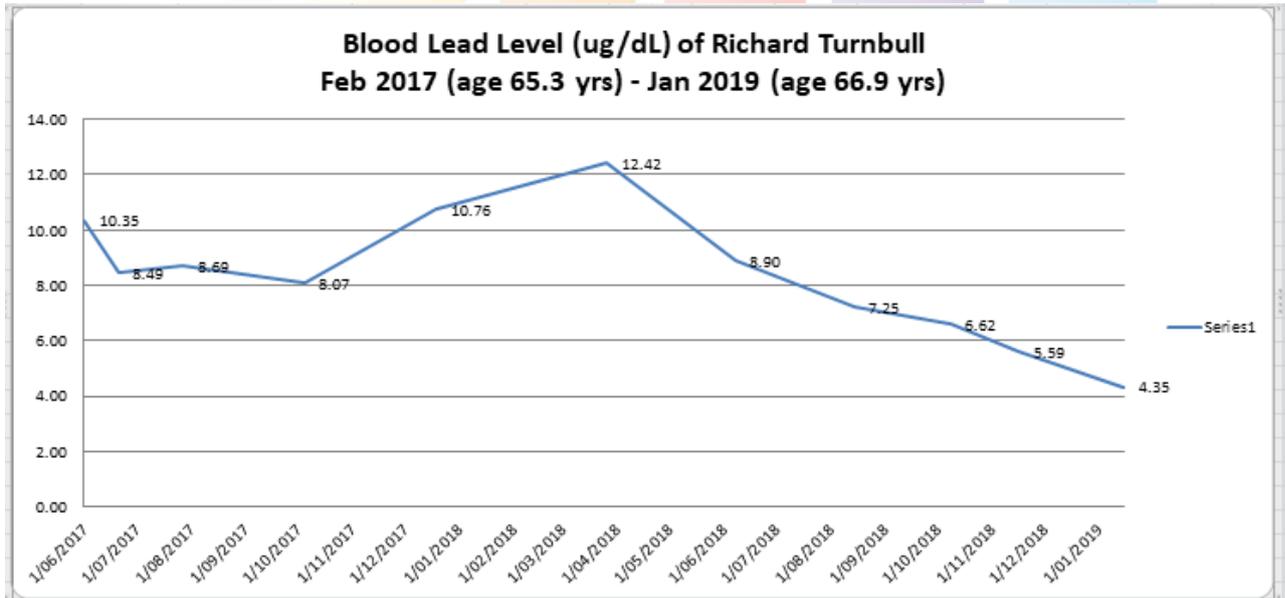


2013 Volcano Art Prize Entry.
Title: Lead in Bones in Lead. Lead-Safety Message: As the lead stored in your bones leaches into your blood as you age, so you get closer to the grave. Description: Animal bones found in the bush, safely set in molten lead. Artist: Tony Lennon, Sculptor.

<http://volcanoartprize.com/portfolio-item/lead-in-bones-in-lead/>

I should mention that I have never done any renovation or lead-based hobby however I had as a young boy placed air-gun lead pellets into my mouth while target-shooting and had swallowed a few over time. This may or may not have contributed to an increase in bone lead levels. I also worked on two various gold mines (above ground) in South Africa from 1982 until April 1985 (3 1/2 years).

After discovering an increase in my blood lead levels I became determined to reduce my blood lead levels slowly through natural means as possible so I then decided to follow my own protocol. I certainly was not sure if this was possible nor were those I spoke to. Below is a graph of the data in Table 1, showing how my blood lead levels have changed over time.



Note that labs in Australia usually give the results (and notification range) in two different units. For example, my first result of 0.5 micromoles per litre (umol/L) is equivalent to 10.4 micrograms per decilitre (ug/dL), but most of the literature about lead uses the ug/dL units.

Table 1

DATE	LABORATORY	RESULT	NON-NOTIFIABLE RANGE	Time of day blood was drawn
01/06/2017	Lavery	0.50 umol/L 10.4 ug/dl	<0.24 umol/L <5.0 ug/dL	8:49
20/06/2017	Melbourne Pathology	0.41 umol/L 8.5 ug/dl	<0.24 umol/L <5.0 ug/dL	10:29
27/07/2017	Lavery	0.42 umol/L 8.7 ug/dl	<0.24 umol/L <5.0 ug/dL	9:44
04/10/2017	Lavery	0.39 umol/L 8.2 ug/dL	<0.24 umol/L <5.0 ug/dL	11:38



Holiday in Africa during this period. Returned Mid November 2017				
18/12/2017	Douglass Hanly Moir	0.52 umol/L 10.8 ug/dL	<0.24 umol/L <5.0 ug/dL	07:05
26/03/2018	Laverty	0.60 umol/L 12.5 ug/dl	<0.24 umol/L <5.0 ug/dL	10:50
03/05/2018	Urine challenge test	4x250mg DMSA	Once off.	
<p>Replaced Utility Vehicle battery and cleaned up battery corrosion. Introduced garlic and lemon drink mix. Also commenced with healthy diet of reduced carbohydrates, no sugar or processed foods. Only real foods consumed. Commenced with regular exercise and Sauna.</p>				
07/06/2018	Laverty	0.43 umol/L 8.9 ug/dl	<0.24 umol/L <5.0 ug/dL	12:30
14/08/2018	Laverty	0.35 umol/L 7.3 ug/dl	<0.24 umol/L <5.0 ug/dL	12:30
08/10/2018	Douglass Hanly Moir	0.32 umol/L 6.7 ug/dL	<0.24 umol/L <5.0 ug/dL	08:09
16/11/2018	4Cyte Pathology	0.27 umol/L 5.6 ug/dL	<0.24 umol/L <5.0 ug/dL	10:00
15/01/2019	Laverty	0.21 umol/L 4.3 ug/dl	<0.24 umol/L <5.0 ug/dL	09:23

Table 2 - LEAD Group Kit lead results for Orange residence



Chain of Custody/Sample Collection Log

Lead Analysis Required for All Samples

Blood lead results of anyone who could be impacted by any lead in these samples and has already had a blood lead test: please list their age (yrs, mths), sex and blood lead results (number and unit): 64yrs 4 month male, blood test result 10.4ug/dl 1 June 17. Building was built: in the 1980s. I have a vegetable/herb garden, pets, chickens (for their eggs) that may be exposed to the sources of these samples.

SAMPLE NO.	SAMPLE TYPE (eg soil, vacuum dust, dust wipe, first flush or flushed drinking water, paint chip, etc)	SAMPLE COLLECTION LOCATION (eg front yard, ceiling, lounge room, baby's room, etc). For all indoor samples, state type of flooring eg carpet, rug, timber, lino, slate, etc. For first flush drinking water, please state TIME since the tap was last used (in hours, days, weeks or months)	DETAILED DESCRIPTION OF SAMPLE SOURCE (eg chalking paint/flaking paint; soil from veggie garden/near step; rainwater from concrete/steel/plastic tank; dust from window sill/floor near door; etc. For Dust Wipes include Dimensions of Wipe Area: length_cm x width_cm.)	RESULT
201706118A	First Flush drinking water.	Kitchen @ 7am. 12 hrs since use.	Kitchen sink - chrome tap.	<0.001mg/L
201706118B	First Flush from Jug Filter drinking Water	Kitchen @ 7am. 12 hrs since use.	Located on the side of kitchen sink.	<0.001mg/L
201706118C	House Vacuum Dust	Carpets & kitchen tiles	Bed Rooms, lounge.	29mg/kg
201706118D	Soil	Vegetable garden	Located at side of house.	10mg/kg
201706118E	Dust wipe	Work Shed	Work bench 30 x 30cm	360ug/m2
201706118F	Raw Buckwheat	Bought at Woolworths	Macro Organic	<0.1mg/kg
201706118G	Dust Wipe	Ute	Dashboard 30 x 30cm	22ug/m2
201706118H	Turmeric	Bought at Woolworths	Kitchen cupboard.	<0.1mg/kg

[NB: After filling in columns 2, 3 & 4 above, please save & then email this Chain of Custody to info@lead.org.au & note that once you receive the emailed results back, you only need to print and sign this Chain of Custody form if you require the results for some legal purpose.] By signing below, I acknowledge that the sampling has not been performed by a licensed professional. This may cause my results to vary. I agree not to hold Sydney Analytical Laboratories or The LEAD Group responsible for any results that may be in error. I agree that my results may be sent to me via email or through the mail.

Signature _____ Date _____

Richard Turnbull
PO Box 8288
Orange 2800
bodvdy@optusnet.com.au

Sampled by: _____ Date: _____ Laboratory: Sydney Analytical Laboratories

Sent by: _____ Date: _____ Lab contact: Lance Smith

Date of Samples: 26/06/17
Posted: 26/06/17

Received by: L.Smith Date: 27/6/17 SAL Job Number: SAL26277T



told does not contain lead.

Photo:

My Work Bench top dust measured the most lead around the property, as can be seen by the results in Table 2. I spoke to a Lead Researcher at Macquarie University who reassured me that the amount measured would not raise blood lead levels unless, "one places ones food directly onto the desk top dust and eats it". I am not sure why lead here tested the highest. I did on two occasions (for about 2 hours on each occasion) weld galvanised piping which may be a reason. The other welding was done on square tubing of iron or steel which I was



Table 3 – LEAD Group Kit lead results for Wagga Wagga residence

Chain of Custody/Sample Collection Log
Lead Analysis Required for All Samples

Blood lead results of anyone who could be impacted by any lead in these samples and has already had a blood lead test: please list their age (yrs, mths), sex and blood lead results (number and unit): **64yrs 5 month male, blood test result 10.4ug/dl 1 June 17. Building was built in the 1930s. We are planning a vegetable/herb garden, pets, chickens (for their eggs) that may be exposed to the sources of these samples.**

SAMPLE NO.	SAMPLING DATE AND SAMPLE TYPE (eg soil, vacuum dust, dust wipe, first flush or flushed drinking water, paint chip, etc)	SAMPLE COLLECTION LOCATION – Type of building (residential / commercial / industrial); sample site (eg front yard, ceiling, lounge room, baby's room, etc); for first flush drinking water, please state TIME since the tap was last used (in hours, days, weeks or months) If flushed sample, state the number of seconds the tap was run / flushed before collecting the sample	DETAILED DESCRIPTION OF SAMPLE SOURCE (eg chalking paint/flaking paint); soil from vegie garden/near step; rainwater/mains water from [brand of] tap installed [date] with [brand of] pump installed [date] from concrete/steel /plastic tank; dust from window sill/floor near door; etc. For Dust Wipes include Dimensions of Wipe Area: length_cm x width_cm & type of flooring eg carpet, rug, timber, lino, slate, etc)	RESULT
201707001A	First Flush drinking water.	Kitchen @ 7am 8 hrs since use.	Kitchen sink – chrome tap.	<0.001mg/L
201707001B	House vacuum dust	Lounge carpet	Lounge	60mg/kg
201707001C	Air conditioner	Passage	Passage ceiling	67ug/m2
201707001D	Paint	Sunroom	Window	3.5%
201707001E	Soil	Back garden	Right and left side	10mg/kg
201707001F	Soil	Park next to Clinic	30m from side gate.	14mg/kg
201707001G				
201707001H				

[NB: After filling in columns 2, 3 & 4 above, please save & then email this Chain of Custody to info@lead.org.au & note that once you receive the emailed results back, you only need to print and sign this Chain of Custody form if you require the results for some legal purpose.] By signing below, I acknowledge that the sampling has not been performed by a licensed professional. This may cause my results to vary. I agree not to hold Sydney Analytical Laboratories or The LEAD Group responsible for any results that may be in error. I agree that my results may be sent to me via email or through the mail.

Priority please.

Signature _____ Date _____

Name, Email & Address goes here: Richard Turnbull
PO Box 8288
Orange 2800
beebyrn@optusnet.com.au

Sampled by: _____ Date: _____ Laboratory: Sydney Analytical Laboratories

Sent by: _____ Date: _____ Lab contact: Lance Smith

Received by: L.Smith _____ Date: 28/7/17 _____ SAL Job Number: SAL26423E

Date of Samples: 27 July 17. Posted 27 July 17

As can be seen in Table 1 my lead levels started rising again from December 2017 to March 2018 which made me decide to take the once-off Urine Chelation Challenge test on the 1st May 2018 as reflected in Table 1. That is the only Chelation medication taken and then only for the challenge test, which is designed to determine whether I had sufficient levels of any chelatable toxic metals to do a full chelation treatment regime.

The results of the challenge test can be seen in Table 4.



Table 4 – Urine Chelation Challenge Test Results

Essential Elements, Urine Spot			
Creatinine, Spot Urine	2.7 *L	6.5 - 15.0	mmol/L
Chromium, Urine Spot	<DL (a) *L	0.55 - 4.83	ug/gCR
Cobalt, Urine Spot	0.24	< 5.00	ug/gCR
Copper, Urine Spot	76.91 *H	1.45 - 60.00	ug/gCR
Iron, Urine Spot	53.73 *H	2.20 - 45.00	ug/gCR
Manganese, Urine Spot	6.55 *H	< 4.50	ug/gCR
Molybdenum, Urine Spot	5.92 *L	9.70 - 100.00	ug/gCR
Selenium, Urine Spot	23.29	12.00 - 90.00	ug/gCR
Vanadium, Urine Spot	<DL (a)	< 1.40	ug/gCR
Calcium, Urine Spot	31 *L	55 - 400	mg/gCR
Magnesium, Urine Spot	70	12 - 150	mg/gCR
Zinc, Urine Spot	0.53	0.06 - 0.78	mg/gCR
Germanium, Urine Spot	0.44	0.00 - 1.50	ug/gCR
Lithium, Urine Spot	4.85	< 175.00	ug/gCR
Strontium, Urine Spot	79.91	< 200.00	ug/gCR
Toxic Metals, Urine Spot			
Aluminum, Urine Spot (Al)	7.72	< 40.00	ug/gCR
Antimony, Urine Spot (Sb)	<DL (a)	< 1.00	ug/gCR

* Result outside normal reference range (H) Result is above upper limit of reference rang (L) Result is below lower limit of reference ra

Arsenic, Urine Spot (As)	6.29	< 15.00	ug/gCR
Barium, Urine Spot (Ba)	3.85	< 5.70	ug/gCR
Beryllium, Urine Spot (Be)	<DL (a)	< 1.20	ug/gCR
Bismuth, Urine Spot (Bi)	<DL (a)	< 0.15	ug/gCR
Cadmium, Urine Spot (Cd)	<DL (a)	< 0.80	ug/gCR
Lead, Urine Spot (Pb)	56.12 *H	< 5.00	ug/gCR
Mercury, Urine Spot (Hg)	1.12 *H	< 1.00	ug/gCR
Nickel, Urine spot (Ni)	4.62 *H	< 3.00	ug/gCR
Platinum, Urine Spot (Pt)	0.00	< 0.60	ug/gCR
Silver, Urine Spot (Ag)	<DL (a)	< 1.40	ug/gCR
Thallium, Urine Spot (Tl)	0.63 *H	< 0.60	ug/gCR
Tin, Urine Spot (Sn)	0.57	< 2.00	ug/gCR

It was also during this time that I noticed that my Utility vehicle’s lead acid battery was corroding which is located on the same side as the driver. I then started suspecting that lead particles from the battery flowing from the engine through the air vent into the cabin may have been one reason for increased blood lead levels although battery companies I spoke to said that that was not possible - which I question. Once I cleaned up the battery during May 2018 by painting the surroundings and ensuring that the battery was clean - together with other factors I introduced - may have been one reason for the steady drop in my blood lead levels. During this time I also stopped welding in my Shed and have not done any welding



since then. I spend much time in the Utility vehicle and every 2nd week I travel 800km and either the air-conditioner or the heater is on. I have been doing this for the past 6 years



Photo: Ute's battery on same side as driver. New sealed battery. Note the damage on underside of bonnet from the previous corroded battery.

**Lifestyle change
Interventions that may also
be contributing to a steady
drop in my blood lead levels**

Nutrition:

During December 2017 I stopped consuming all sugars from my diet with the exception of occasional 85% dark chocolate. My general food intake involves real food and no processed foods. I consume high healthy fat such as avocado, olive oil, butter, coconut and meat fat in moderation. Protein is eaten in moderation - up to 1.7g per kg of body weight - and carbohydrates are relatively low: about 120g per day. (I don't suffer from the metabolic syndrome or diabetes otherwise my carbohydrates would be much lower). Sardines are eaten 1 to 2 times a week, I avoid large fish because of the possibility of high mercury content. I eat as many green colour foods as I like with less of the yellow colours and even less of the white colours with the exception of cauliflower, turnips, parsnips and cabbage. The reason is because most white colours such as pasta, rice, white potato etc are high in carbohydrates and I believe that excessive carbohydrate, elevate blood sugar levels to an unacceptable level which may have an inflammatory effect on the body. There is too much constant production of insulin when consuming high levels of carbohydrates.



Graphic: 2018 Volcano Art Prize winner of one of 30 Pictureproducts mugs printed with the entry. Title: Oh Island, in a manner of speaking, in the sun! **Lead-Safety Message:** Vitamin D from the sun helps you live longer despite your past lead exposure. Artists: Noela Whitton (watercolour) & Neill (cartoon of Evan Whitton). <http://volcanoartprize.com/portfolio-item/Oh-Island-in-a-manner-of-speaking-in-the-sun/>

I also take one multi-vitamin, vitamin D and vitamin B per day as supplementation as well as 30g (one scoop) of Professional Whey Powder. The main reason I take the Whey Powder is that it contains Cysteine and Glycine which Glutathione is made up of. Glutathione is a potent antioxidant and assists with metal detoxification. I also consume high amounts of garlic, onions and lemon juice and lemon rind – which contains a lot of detoxifying agents.

Herewith the recipe I use below in order to easily increase these “lead-detox foods”.

- 15 garlic cloves
- 3 whole organic lemons (the peel and pips included)
- 750 ml of filtered water.

Place the lemons, garlic and water into the blender and blend. Bring the liquid to beginning boiling point then allow to cool. Once cool, drain through a sieve, bottle and refrigerate. Take 30 to 40ml once a day for 3 weeks then stop for one week and repeat.



No more than two fruits are eaten daily, or one fruit and a cup of berries as well as various nuts the size of the palm of my hand. The only exception is that I don't eat cashews or peanuts which are higher in carbohydrates and Lectins.

When first diagnosed with elevated lead levels in June 2017 I did try black seed oil and milk thistle tablets until March 2018 however in my case they did not seem to have any positive effect on my lead levels so I stopped taking them.

I do make myself a Fresh green vegetable juice (250 to 300ml) with turmeric and ginger added - 2 to 3 times a week. The vegetables vary depending on what I can get (preferably organically grown). Generally the juice would contain kale, spinach, cucumber, broccoli, celery, coriander, blueberries and one other fruit for taste with or without coconut milk.

Exercise

A moderate intensity, 30 to 45 min weight training session performing 3 sets of 12 to 15 repetitions is done 2 to 3 times a week. The resistance is such that I am starting to strain a little at the 12th repetition, rest periods between sets are 30 seconds and I select 8 exercises to cover all major muscle groups. I also walk at a moderate pace (able to put on a conversation) for 4 to 5 km 3 to 4 times a week. Occasionally over week-ends I may join a group and walk between 15 and 20km.

Sauna

A Sauna for 20 minutes 2 to 3 times a week after a weight training session and drinking 800ml of filtered water whilst in the sauna. I make sure that I sweat well. Generally it is not advisable to sauna after exercise because of fatigue and possible dangers that go with it but my exercises are moderate in intensity without much sweating. Also, after weight training the muscles are well flushed with blood and together with a sauna more toxins may be excreted.

Conclusion, why my blood lead level appears to be gradually dropping

1. The utility vehicle's lead acid battery is no longer corroding and the engine is washed once a week to ensure no metal dust remains.
2. A healthy diet definitely is a positive contributor. Organic where possible.
3. Exercise is very important. It is possible that my bone density has increased thus retaining the lead and not releasing as much lead into the blood stream as before. This is debatable.
4. Regular Saunas are important for sweating toxics out of the body and the immediate showering (luke-warm to cold water) after ensures any toxins in the sweat is not reabsorbed through the wet skin.
5. Regular vacuuming of carpets is I believe another good way to get rid of toxics although The LEAD Group recommends eradicating carpets and only wet-mopping (no sweeping or vacuuming) of hard floors and wet-wiping (no dry "dusting") of hard surfaces in homes and vehicles.



Finally it should be noted that the literature does appear to show that some individuals do find it more difficult to detox metals than others and so a closer look at ones genetic make-up and how certain genes affect the ability to effectively detox metals or chemicals may be worth pursuing in the future. However one cannot ignore the importance of how the environment impacts on genes (Epigenetics) and thus affecting health outcomes and so it is recommended that one follows a healthy lifestyle to assist in changing the way genes express themselves.

I will only be satisfied with my blood lead levels once they reach below 2ug/dL.

Richard Turnbull is an accredited Exercise and Sports Physiologist with Exercise and Sports Science Australia.

Further information on www.bodydynamicshealth.com.au

Obituary of Wayne Jeffrey Askew

A collage of three images: a large blue ship at sea, a portrait of Wayne Jeffrey Askew in a black leather jacket, and a close-up of the ship's deck with various equipment.

In Memory of
Wayne Jeffrey Askew
1959 - 2019

Add Photo

Light Candle

Add Condolence

Wayne Askew of Willseyville, formerly of Grand Island, NY, went Home to be with The Lord on Wednesday, January 30th, 2019, after a courageous battle with cancer. He passed away at home with his loving family present with him. He was predeceased by his parents, William and Carole (Shea) Askew, and son, Adam Askew. He is survived by his wife, Maria (“Mary”) Askew and son Kyle Askew, both of Willseyville, NY. Other surviving family include his siblings Susan Axtell of Gwinn, MI, Diane (Joseph) Scalzi of St. Clair Shores, MI, William Askew, Jr., of Melbourne Beach, FL, Barbara Titterington of Newfield, NY and



their families. Wayne was born in Buffalo, NY. He joined the Navy as a young man, the third generation of his family serving our country at sea. After leaving the service, he became a historic home restoration specialist and later served as a fierce advocate for lead poisoning awareness. Wayne was a light in this world, always doing his best to help others in any way that he could. He will be missed dearly. The family will receive friends Saturday, February 2, 2019 from 10:00 a.m. to 11:45 a.m. at St. Mark's Episcopal Church, 17 Main St., Candor, NY with a funeral mass following at 12:00 Noon. Interment will follow in the spring, where Wayne will be laid to rest next to his son, Adam, at the Smith Valley Cemetery. In lieu of flowers, donations in Wayne's memory can be made to the Candor Food Pantry, Guthrie Cancer Center, or St. Mark's Episcopal Church. Condolences may be made to Wayne's family at www.emfaheyfuneralhome.com

https://emfaheyfuneralhome.com/tribute/details/696/Wayne-Askew/obituary.html?fbclid=IwAR1H5bsRG5EprWmzX7kwMWGf8EqIpgUodoDsPS4ItfAk_hRNj9KUUuSG2dI#tribute-start

OBITUARY: Lloyd Smythe – co-author of the “end-of-leaded-petrol-in-Oz” study

Obituary - Emeritus Professor Lloyd Earle Smythe: Distinguished analytical chemist

See the full Obituary by Paul R Haddad, on page 30, Chemistry in Australia, January/February 2019, at

https://chemaust.raci.org.au/sites/default/files/pdf/2019/CiA_Jan%3AFeb%202019.pdf – extracts appear below:



“Lloyd Smythe was born in Suva, Fiji, on 15 June 1922...

“He was involved in two very high-profile research projects. The first was a comprehensive study of the lead burden of Sydney schoolchildren. Blood from 1200 Sydney area schoolchildren was analysed over a three-year period and showed that the lead levels were unacceptably high and could result in severe neurological damage. This lead was due primarily to air pollution from the exhausts of vehicles and Smythe's study eventually led to the reduction and later removal of lead in Australian petrols,



despite a long battle with the 'lead lobby'.

“In 2001, Smythe was awarded a Member of the Order of Australia ‘for service to science through education and research, particularly the development of the discipline of analytical chemistry’. He died aged 96 on 3 September 2018 at his home at Mt Eymard in Bowral and his wife of 73 years died five days later on 8 September. They were buried together at Bowral Cemetery.

“Lloyd Smythe made a profound impact on Australian chemistry and he can be credited with the establishment of analytical chemistry as an accepted subdiscipline of chemistry in this country. He was an ‘old school’ professor: very distinguished looking, always wore a suit and tie, and always a true gentleman who was caring and polite to his staff and students. He leaves a great legacy to us all, especially those who were fortunate enough to work with him.”

Additional notes by Elizabeth O'Brien, Editor, LEAD Action News:

“Smythe’s study” referred to by Haddad (above), was *Lead Burden Of Sydney School Children*, by Garnys, VP; Freeman, R and Smythe, LE, published by The University of NSW - Dept of Analytical Chemistry in 1979. This study was pivotal and marked the beginning of the end of leaded petrol in Australia. The study was used by advocates who preceded The LEAD Group, in the policy processes which saw:

the introduction of unleaded petrol in Australia in 1985,

legislation making unleaded petrol the only-fuel-permitted for new cars sold as of 1986, as well as

a reduction in the maximum amount of lead permitted in leaded petrol in various states from the early 1980s.

The Garnys et al (1979) “school children lead study” was also my introduction to the neurological impacts of lead, as I wrote in [Chapter 1 of “Local Heroes”](#):

“...I remembered from my teaching days a blood lead survey of the children in the school at which I taught [Gardeners Road Public School in Rosebery] showed they all had high levels of lead. ‘That’s why they’re all so stupid and so difficult to teach’, one of the teachers told me.”

Inspired by this study and my own children’s lead poisoning (including by lead from vehicle exhausts that still filled the air and settled in house dust and on soil in the mid-1980s when my first child was born), I have worked to make the world lead-safe since 1990 – and I am truly thankful to fine researchers such as Dr Vyt Garnys, Dr Ronald Freeman and the late Emeritus Professor Lloyd Smythe for getting me started.

OBITUARY - PROFESSOR LLOYD SMYTHE

*By Dr Vyt Garnys,
Managing Director and
Principal Consultant,
CETEC Pty Ltd*





www.cetec.com.au (pictured)

I learnt not to split my infinitives when Professor Lloyd Smythe reviewed my Ph.D. Thesis on “Lead Burden of Sydney Schoolchildren” in 1980. Despite being Head of the School of Chemistry and the Head of The Department of Analytical Chemistry at the University of New South Wales, he still made time to closely interact with his large research group. As a mature age student who had returned from 8 years in industry, with management roles, I was impressed particularly at his ability to recognize the large social issues of the time and apply his research management skills for creating important solution contributions.

Sydney had developed as the smog capital of Australia, predominantly due to pollution from motor vehicles using leaded fuel. He recognized that the solution to emissions pollution problems using catalytic converters could not be solved using leaded fuel. But most pressingly, from overseas research, lead emissions into the environment were affecting the physical and mental health of children so he obtained a NHMRC grant to mount a major study on the “Lead Burden of Sydney Schoolchildren”. I was fortunate to be selected to run the project as part of my Ph.D studies and hence work closely with Professor Smythe, his department and his extensive networks. Children at Gardeners Road, Mosman and Winmallee Primary schools were surveyed to demonstrate the blood lead burden associated with vehicle emissions. Despite intense debate and expenditure from the lead, motor, oil industries and State health regulators, unleaded petrol became available in 1985.

My wife Halina and I were fortunate to meet and socialize with him and his wife Anne who provided the background strength needed for his various roles. His innate impish humour and knowledge of good vintages made him personable and great social company.

Professor Smythe, the first Chair of Analytical Chemistry in Australia, created and left a legacy of studies and specialists in advanced measurement for providing factual data on issues critical to Australia, such as transforming the health and environment of Australia by removing lead from petrol. I have been proud to have joined with Professor Smythe in achieving this environmental milestone.

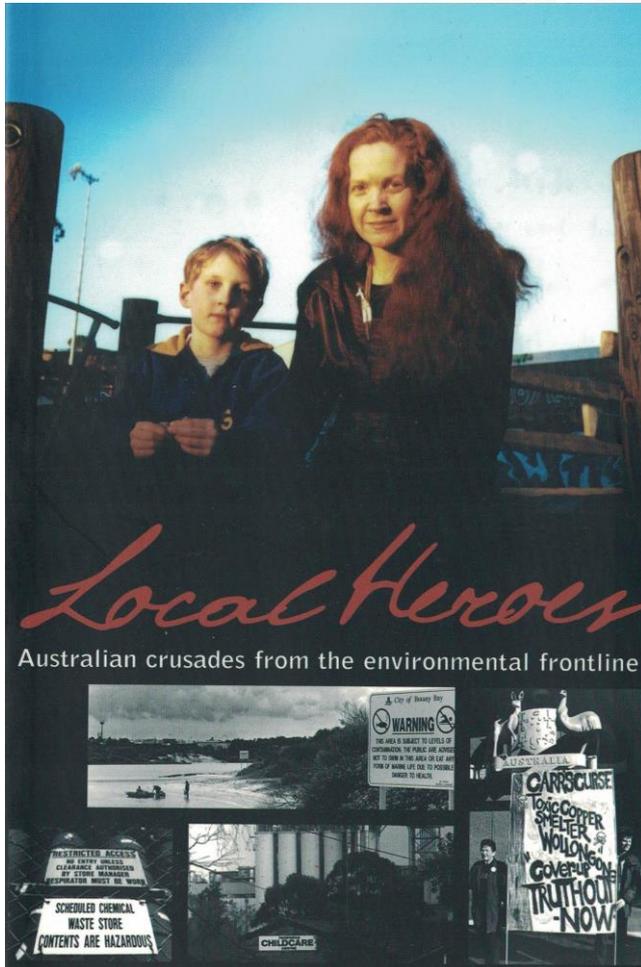
Vale, Lloyd Smythe.

“Local Heroes” book launch speech from 2002

Speech given by Elizabeth O'Brien at Berkelouw Books, 70 Norton St Leichhardt, 6:30pm, Wednesday 7th August 2002. Photo on front cover of book, of Elizabeth with son Harrison



You'll have to read the book to find out my story – it's in chapter one [at <http://www.lead.org.au/lanv14n2/lanv14n2-11.html>]. I decided to just talk about some of the interactions that have happened along the way and tell you a bit about some of my favourite people.



My favourite local hero of all, Theresa Gordon, couldn't be here tonight – she wrote chapter two about her successful campaign to reduce emissions from the lead smelter that cast a pall over the community Theresa grew up in - Boolaroo just outside of Newcastle. One of the highlights of the campaign for lead poisoning prevention in Australia was the very first trip Theresa and I took to Canberra together in 1992 to demand a ban on leaded petrol from the policy advisors of the then Environment Minister Ros Kelly. Being from two small single-issue community groups Theresa and I of course had to take a big gun with us, who happened to be Lynette Thorstensen, at that time she was yet to be the head of Greenpeace.

When we finally got the Lead Roundtable meeting out of Ros Kelly in June 1993, we were determined to prepare the Australian public for a ban by first reducing the market for leaded

petrol with a 5 cent per litre price increase above the price of unleaded petrol. The Roundtable meeting involved hundreds of government, corporate and community representatives with only 40 having positions at the table.

Theresa represented Greenpeace and I represented Consumers Health Forum.

Ros Kelly had obviously had training so advised us all before we went in – “the cameras will be on all day so don't fall asleep and don't pick your nose”. In a private moment she took the time to tell me “usually it's best if your clothing is not more interesting than what you have to say”. I knew then I had to be on my toes as my outfit had at least 10 colours to it. I was terrifically relieved that night to be watching the evening news in which Ros Kelly made a statement, the camera cut to me correcting her from across the table, and then she thanked me and went on to announce the two cent price increase for leaded.

We learned a big lesson that day. Despite our belief that all the action was going on at



the table, it was only the smiles on the petrol company managers faces in the corridor at the end of the meeting and Theresa's careful observation that the ACF representative returned in the lift with Ros and the petrol heads from the afternoon tea break with looks on their faces which said they had "done a deal together" that gave us a hint of the true story. The petrol companies had got off lightly and to our great shame (and a small amount of pride) it was not until 1st January this year [2002] that leaded petrol was finally banned in Australia. We did well but like all campaigners, we wanted to do better.

Ros Kelly also taught me one other thing at a later meeting in Sydney. Her training had obviously taught her to aggressively take the space when talking to people. While chatting over drinks I became keenly aware that she was leaning towards me like a cobra flaring and after taking tiny steps backwards in a pathetic effort to make the space between us "comfortable" I finally realized, before it was too late and the conversation was over, that the correct response was equal aggression in closing the space. I had survived my first head to head with a politician, but obviously Ros didn't have all the answers as she did not survive her encounter with the whiteboard.

It's been fascinating learning how media personalities function too. Karl Kruszelnicki, the man who dubbed me the Lead Queen of Australia, is amazing to watch. He starts with an excellent base of understanding of science, medicine, the environment and how people think and learn. Then, at about 100 miles an hour, he does a fast-learn before the camera starts rolling or before the live-to-air broadcast begins. In every encounter with him he has fired off a dozen searching questions at me (about lead of course) and then moments later delivered an explanation to the audience that made complete sense and was easy to understand. This is a great gift that he has.

I have several people to thank for still being in this game after nearly a dozen years. My family supported my work for the first five years before The LEAD Group received any government grants and my children are a constant source of inspiration to me and very supportive, despite having had to give up their bedrooms and move into the lounge room since the Lead Advisory Service lost its government grant and the office had to move back into our house. Apart from some of our very long-term callers to the Lead Advisory Service, it is my children who most often remind me of how noble our aim is – to eliminate lead poisoning and protect the environment from lead. When the personal and especially financial cost of pursuing this aim becomes nearly overwhelming – I really appreciate their kind words.

We have also had some funding from CTI Consultants and a fabulous amount of management support from the members of the LEAD Group Committee – Fred Salome, Carol Bodle, Roger Kilburn, Michelle Calvert, Karen Johnston, Rosemary Ayoub and Dr Ben Balzer. Our largest private donor is Professor John Ward and the people that give the most valuable technical advice and have done so consistently for years are Professor Brian Gulson, Jason Bawden-Smith, Carol Bodle, Dr Ben Balzer and Dr Neville Gibson. I could not do without the incredible support and advice from my parents Noela and Evan Whitton and I count Noela as the best media clipping service as well as the best friend a daughter ever had.



Another mother who cannot go unmentioned is Kate Hayter who should have had her own chapter in this book. Being a kick-boxer and almost totally unafraid, when the rough necks of the Boolaroo lead smelter community that Theresa Gordon constantly had to deal with, took on Kate Hayter, after her child became lead poisoned, they got decked. Kate demonstrated the kind of courageous campaign tactics that meek campaigners such as myself only dream of. Like the time she told the secretary of the Chief Public Health officer that his niece needed to talk to him urgently because she was tired of no answers to her letters and his refusal to take her phone calls. Of course, Kate became his niece for a moment because he took the call.

I've made a number of friends among toxics campaigners along the way and I'd especially like to thank the most inspirational groups and people – Theresa Gordon of No-LEAD, Kate Hayter



of the Hunter LEAD Group, Mariann Lloyd-Smith of National Toxics Network (photo at left: Mariann & Elizabeth), Jeff Angel, Herbert Beauchamp, Jo Immig and Ben Cole of the Total Environment Centre, James Whelan of URGE and later of Queensland

Smogbusters (and right now, relaxing in Ottawa instead of coming to his own book launch), David Gilmore, Olive Rodwell and Helen Hamilton of IRATE (Illawarra Residents Against Toxic Environments), Anna Priest of ASOMAT (Australasian Society for Oral Medicine and Toxicology), Dr Peter Brotherton of ACF, Mark Oakwood, Matt Ruchel and Michael Bland of Greenpeace and Colleen Hartland of HazMAG or Hazardous Materials Action Group. It's an honour to be among this fellowship working hard for a less toxic environment.

There have also been some wonderful women among my staff over the years and each has added her own specialty to the work – Patricia Parkinson (environmental law), Joanne Dodd (agricultural science), Margaret Johnston and Helen Escreza (information), Michelle Calvert (politics), Robin Mosman (writing), Susy Retnowati (computing), Ann Gethin (social



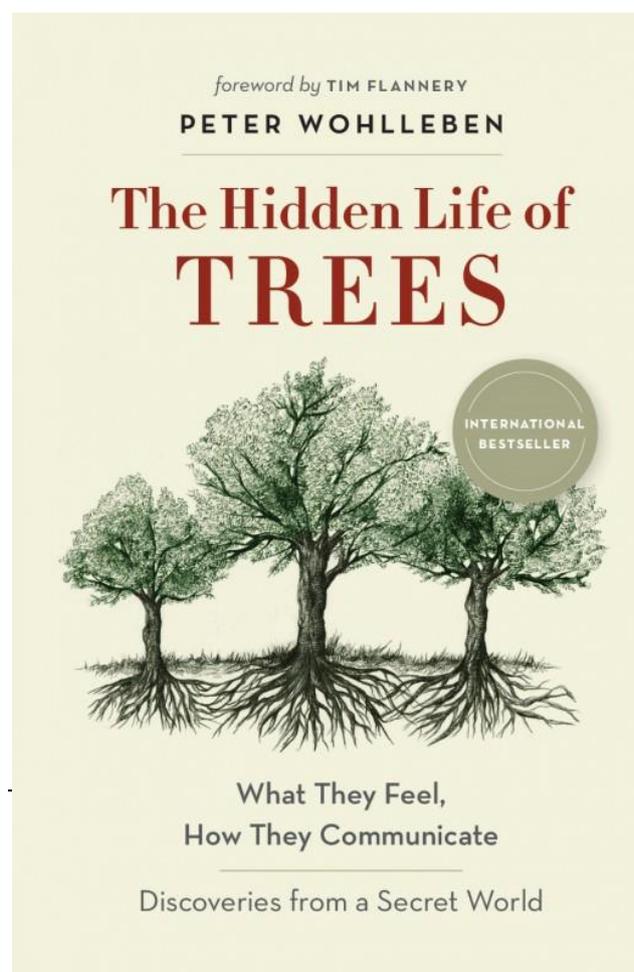
science) and Carol Bodle (environmental health), but I'd especially like to acknowledge the nearly 10 years that David Ratcliffe has put in as our office manager and webmaster. David is entirely responsible for our website which has over 1000 visitors every week and has brought in enquiries from over 40 countries to the Global Lead Advice and Support Service.

Finally I'd have gone mad many years ago if I did not have a spiritual and creative outlet that is my weekly holiday from all things lead so I would like to thank the members of both my choirs, many of whom are here, for their comradeship over the years and the many happy memories of singing together for a better world.

Enjoy the evening and enjoy the book. It represents decades of environmental struggle for the eleven authors and it's worth celebrating.

Note: The Local Heroes book is available for purchase from The LEAD Group's Lead Safe World Online Shop at <http://www.lead safeworld.com/product/local-heroes-book/>

Fungi protect trees by removing heavy metals from soil



In these amazing extracts from *The Hidden Life of Trees: What they Feel, How they Communicate – Discoveries from a Secret World* by German forester and author Peter Wohlleben (book published by Black Inc, 2015), we learn how fungal mycelium protects tree roots from heavy metals in the soil, and much more!!

Chapter 9: *United we Stand, Divided we Fall*

From *The Hidden Life of Trees*, translated from German into English by Jane Billingham.



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<https://www.blackincbooks.com.au/books/hidden-life-trees>

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...Fungi are amazing...

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Fungi are in between animals and plants. Their cell walls are made of chitin – a substance never found in plants – which makes them more like insects. In addition they cannot photosynthesize and depend on organic connections with other living beings they can feed on.

Over decades, a fungus's underground cottony web, known as mycelium, expands. There is a honey fungus in Switzerland that covers almost 120 acres and is about a thousand years old. Another in Oregon is estimated to be 2,400 years old, extends for 2,000 acres, and weighs 660 tons. That makes fungi the largest known living organisms in the world.

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The fungus not only penetrates and envelops the tree's roots, but also allows its web to roam through the surrounding forest floor. In so doing, it extends the reach of the tree's own roots as the web grows out toward other trees. Here, it connects with other trees' fungal partners and roots. And so a network is created, and now it's easy for the trees to exchange vital nutrients... and even information – such as an impending insect attack.

This connection makes fungi something like the forest Internet. And such a connection has its price.... Therefore, they [fungi] demand payment in the form of sugar and other carbohydrates, which their partner tree has to deliver.... They demand up to a third of the tree's total food production in return for their services....

In exchange for the rich sugary reward, the fungi provide a few complimentary benefits for the tree, such as filtering out

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heavy metals, which are less detrimental to the fungi than to the tree's roots. These diverted pollutants turn up every fall in the pretty fruiting bodies we bring home in the form of porcini, cèpe, or bolete mushrooms. No wonder radioactive cesium,



which was found in soil even before the nuclear reactor disaster in Chernobyl in 1986, is mostly found in mushrooms.

Medical services are also part of the package. The delicate fungal fibers ward off all intruders, including attacks by bacteria or destructive fellow fungi. Together with their trees, fungi can live to be many hundreds of years old, as long as they are healthy. But if conditions in their environment change, for instance, as a result of air pollution, then they breathe their last.

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If things become dire for the fungi and their trees despite all this support, then the fungi can take radical action, as in the case of the pine and its partner *Laccaria bicolor*, or the bicolored deceiver. When there is a lack of nitrogen, the latter releases a deadly toxin into the soil, which causes minute organisms such as springtails to die and release the nitrogen tied up in their bodies, forcing them to become fertilizer for both the trees and the fungi...

Lead petrol pollution history traced through Australian lichens & fungi – ABSTRACT

The following is the abstract and key results figure 2 of *Insights into past atmospheric lead emissions using lead concentrations and isotopic compositions in historic lichens and fungi (1852-2008) from central and southern Victoria, Australia*, by Liqin Wu, Mark Patrick Taylor, Heather K. Handley, Brian L. Gulson, published in *Atmospheric Environment* 139 (2016) 46e55. © 2016 Elsevier Ltd. All rights reserved.

<https://www.infona.pl/resource/bwmeta1.element.elsevier-oc0850a8-ef72-38a2-b29b-742a38e1a8a2>

ABSTRACT

Lead concentrations and lead isotopic compositions were determined in historic central and southern Victoria, Australia lichen* (*Cladonia* and *Usnea*) and fungi (*Trametes*+) samples collected between 1852 and 2008 to evaluate long-term atmospheric lead contamination sources. The data are grouped into four time intervals of 1850-1931, 1932-1984, 1985-2001 and 2002-2008 corresponding to the history of leaded petrol use in Australia. Elevated lichen and fungi lead concentrations and relatively high isotopic compositions from the period 1850-1931 are attributed to lithogenic sources, gold mining activities and early industrialisation. Significant increases in lichen and fungi lead concentrations and concomitant lower lead isotopic compositions correspond to the marked increase in lead emissions from leaded petrol use after 1932. Following the end of leaded petrol use in 2002 lead isotopic composition values 'recover' toward more lithogenic values. However, the lead isotopic composition data indicate



that the environmental impact from leaded petrol emissions persists in contemporary samples dated to 2002-2008. Overall, the data reveal that herbarium lichens and fungi from central and southern Victoria can be used as proxies for environmental lead emissions over the past 150 years.

- * Lichens absorb most of their nutrients and minerals from the atmosphere and consequently are potential useful biomonitors of atmospheric contamination.
 - + Trametes fungi are a wood-rotting genus which mainly uptake trace metals from the atmosphere.
-

Beware of Lead Poisoning in Cattle

By Evelyn Walker, District Veterinarian South Coast NSW Australia. Originally published in **Animal Health Update** January/February 2019, in **Boorowa Newsletter** March 2019, South East Local Land Services (LLS)*, NSW Government
<https://southeast.lls.nsw.gov.au/resource-hub/newsletters/2019/janfeb/animal->



Local Land Services



Boorowa Newsletter
[health-update](#)



Lead poisoning in cattle is more common than you think. Over the years, I have seen a number of lead poisoning cases involving young and adult cattle. Cattle are commonly affected, but sheep and goats may also become affected. The most common source of lead is from ingestion of old batteries, but I have also seen lead poisoning occur from ingestion of other lead based materials such as flashings, sump oil, grease and burnt building materials containing lead.



Lead poisoning can be fatal and cattle don't have to ingest much to develop signs of ill health either. A range of symptoms may be observed including strange behaviour, mania, depression, dullness, walking aimlessly including into fences and trees or dying of misadventure due to sudden onset blindness.

Dry times and drought may predispose cattle to ingest

lead. Cattle are attracted to the salty taste of lead and return often to lick and chew at the source. I have also seen cattle on lush crops chasing lead because they were craving salt.

Blood samples can be tested from live animals and kidney samples from deceased animals to confirm or rule out lead poisoning. Often where one animal dies there will be many other animals that have sub lethal levels in their blood. Lead poisoning is a notifiable disease as it is important that lead does not end up in the food chain. This means that you must notify your local LLS District Veterinarian if you suspect or know your cattle to be lead affected. There is no cure for lead poisoning in livestock but if not lethal, the lead will eventually clear from their bodies. Lead affected animals must be detained on farm and cannot enter the food chain until further testing by a veterinarian indicates they are safe to do so.

Prevention is best by removing old batteries and lead containing material from the farm. Prevent stock from accessing burnt rubbish that may have contained lead based materials, including old lead based paints. When moving stock to new paddocks, agisting or acquiring new land, always inspect for any potential hazards before running stock on there.



Contact your local LLS District Veterinarian for advice if you are concerned that your stock may have been exposed or want to know more about lead poisoning.

*South East Local Land Services, PO Box 49, Boorowa, NSW 2586, Australia

Photo (at left) added by The LEAD Group to this article:

2018 Volcano Art Prize Entry by Dr Michael Hindmarsh 3rd. Title: 'Blackie' smells Lead. Lead-safety Message: Old Ford Tractor with pale rectangle - its Battery! Cattle are attracted by the Smell! If the Battery is Free they will smash the Case & Lick the Lead. <http://volcanoartprize.com/portfolio-item/blackie-smells-lead/>

Check out the requirements re: Lead, in the Queensland Public Health Act 2005

By Elizabeth O'Brien, Lead Advisor, The LEAD Group Inc, Australia



2012 Volcano Art Prize Entry. Title: Children free to play safe. **Lead-Safety Message:** Ask your Council whether the playground equipment is lead-safe. Wash children's hands after play and before eating. Artist: Janet Richardson.

<http://volcanoartprize.com/portfolio-item/children-free-to-play-safe/>

Is lead permitted in paint on playground equipment in Australia?



I contacted Queensland Health in December 2018 because I'd received an inquiry re: possible lead in playground equipment in a park in Brisbane City Council area. I asked if Queensland Health could confirm or correct my interpretation of the (national Australian) Poisons Standard which is: the Poisons Standard lead paint 0.1% limit did not apply to paint on playground equipment until 2008, when it applied to all paint, because playground equipment was not specifically mentioned up to the 2007 Poisons Standard (unlike paints for houses, fences, posts, roofs for potable water collection, etc which were all specifically mentioned as needing to comply with the 0.1% lead paint limit. And further, I asked for confirmation that the Poisons Standard lead limit only relates to paint used in Australia and therefore does not apply to playground equipment that was painted overseas & then imported.

The lady from Queensland Health's Metro North Public Health Area suggested I look at Section 60 of the Queensland Public Health Act 2005 (see below) which brings the Poisons Standard into play. And Section 58 which says that lead must not remain in or on a building or part of a building if it is or may be easily accessible to children. So playground equipment is not covered by the Public Health Act either. Of interest though (also unrelated to playground equipment) is Section 59 which says lead must not remain in or on a roof, gutter or anything used to convey potable water.

This conversation led me to wonder if the lead content of paint on playground equipment is covered in any State or Territory legislation in Australia, or any jurisdiction in the world, and whether any other jurisdiction requires that lead must not remain on a residential, childcare, public library etc building if it is accessible to children. And further, I wonder whether that applies to leadlighting, lead flashing under windows etc, lead lining of shower and bath recesses, lead radiation shielding which is sometimes installed in homes where electro-magnetic radiation is determined to be a health problem, interior leaded dust from roads, or demolition or mining or smelting or industrial emissions, etc.

I also wonder whether anyone has experience in having this Section 58 requirement enforced, eg in a rental home.

And does it apply to lead paint?

And if it does apply to lead paint, at what lead level does it apply? In 2005 when the Act was first passed, the definition of lead paint in 1997 Australian Residential Paint Management Standard (AS/NZS 4361.2) was paint containing 1% or more of lead, but when the Standard was revised in 2017, the definition of lead paint was changed to paint containing 0.1% or more of lead.

Would a rigorous application of Section 58 of the Queensland Public Health Act require that paint containing more than 1% lead, or more than 0.1% lead, be removed if it was accessible to children?



2012 Volcano Art Prize Winner of a month's illustration in the 2013 Lead Safe World Calendar. Title & **Lead-Safety Message:** Think before you strip lead white. Artist: Janet Richardson.

<http://volcanoartprize.com/portfolio-item/think-before-you-strip-lead-white/>

There follows a Reprint current from 1 December 2018 to date (accessed 17 December 2018 at 15:20)

Queensland Public Health Act 2005

An Act to protect and promote the health of the Queensland public, and for other purposes

[<https://www.legislation.qld.gov.au/view/whole/html/inforce/current/act-2005-048> ; accessible via <https://www.legislation.qld.gov.au/view/html/inforce/current/act-2005-048>]

Minister: Minister for Health and Minister for Ambulance Services
Agency: Queensland Health

...

Part 6 Lead

58 Lead in buildings must not be accessible to children

- (1) A person must not use or permit the use of lead in, or for the purposes of, constructing, erecting, altering, extending, improving, renovating or repairing a building or part of a building if the lead is, or may be, easily accessible to children.

Maximum penalty—100 penalty units.

- (2) The owner of a building, or part of a building, must not knowingly allow lead to remain in or on the building or part of the building if the lead is, or may be, easily accessible to children.

Maximum penalty—100 penalty units.

59 Lead must not be used in water collection



- (1) A person must not use, or permit the use of, in a building any of the following things if the thing has in or on it a substance that contains lead—
- (a) a roof, guttering, downpipe or other thing for carrying water to a tank or other receptacle for potable water;
 - (b) a tank or other receptacle for potable water.

Maximum penalty—100 penalty units.

- (2) The owner of a building must not knowingly allow any of the following to remain in the building if they have in or on them a substance that contains lead—
- (a) a roof, guttering, downpipe or other thing for carrying water to a tank or other receptacle for potable water;
 - (b) a tank or other receptacle for potable water.

Maximum penalty—100 penalty units.

- (3) In this section—
potable water means water that is intended to be, or is likely to be, used for human consumption.

Part 7 **Paint**

60 Person must comply with standard

- (1) A person manufacturing, selling, supplying or using paint must comply with the standard.

Maximum penalty—100 penalty units.

- (2) In this section—
prescribed means prescribed under a regulation.
standard means the prescribed part of the Standard for the Uniform Scheduling of Drugs and Poisons dealing with paint, compiled by the Australian Health Ministers' Advisory Council and published by the Commonwealth.

[*Editor's note:* the "Standard for the Uniform Scheduling of Drugs and Poisons" is now called the "Poisons Standard". The *Poisons Standard 2019*, which consists of the *Standard for the Uniform Scheduling of Medicines and Poisons No 23* (the SUSMP 23) - commences on 1 February 2019 and contains:

SECTION SEVEN/Appendix I PAINT OR TINTERS

General Requirements

- (1) ...



- (2) A person must not manufacture, sell, supply or use a paint or tinter containing more than 0.1% Lead (the proportion of Lead for the purposes of this section is calculated as a percentage of the element present in the non-volatile content of the paint).
- (3) A person must not manufacture, sell, supply or use a paint for application to toys unless the paint complies with the specification for coating materials contained in Australian/New Zealand Standard AS/NZS ISO 8124.3:2012 entitled *Safety of toys Part 3: Migration of certain elements* (ISO 8124-03:2010, MOD).]
-

Pregnant women and parents misled about dangers of living with lead pollution

January 12, 2016 6.21am AEDT

THE CONVERSATION

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<https://theconversation.com/pregnant-women-and-parents-misled-about-dangers-of-living-with-lead-pollution-52752>



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Pregnant women in three Australian cities are not told that lead exposure during pregnancy is linked to miscarriage and early delivery.

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Partners



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Parents in three Australian states are being given misleading information about the dangers of lead exposure for babies and small children – including failing to warn pregnant women about the risks of miscarriage.

Lead is particularly harmful to unborn babies and young children. As the [World Health Organization](#) warns, “there is no known level of lead exposure that is considered safe”. Childhood lead exposure is estimated to contribute to about 600,000 new cases of children developing intellectual disabilities every year.

Yet [our research](#), published in the international journal [Environmental Health](#), found that official online educational materials aimed at people in Broken Hill in New South Wales, Mount Isa in Queensland and Port Pirie in South Australia understate the health risks of lead for fetuses, babies and children.



Mount Isa in north-west Queensland. [Rob and Stephanie Levy/Flickr](#), [CC BY](#)

All three cities are home to an active lead mine or smelter.



With slogans such as [“Lead, it’s in our hands”](#) and [“Living safely with lead”](#), the cities’ health education programs all promote the idea that parents can sufficiently protect their children from lead exposure through individual actions, such hand washing, household cleaning, and taking precautions in the garden.

Yet there is no evidence to show that’s true. In 2014, a group of international experts [reviewed 14 studies involving 2656 children](#). They found that “educational and dust control interventions are not effective in reducing blood lead levels of young children”. They also concluded that there was “insufficient evidence” to show that reducing children’s exposure to contaminated soil would reduce blood lead levels.

So what exactly are parents in Broken Hill, Mount Isa and Port Pirie being told? And what risks are pregnant women and families in the United States being clearly warned about that parents in Australia are not?

CLOWNING AROUND!!



Above: Rusty and Dusty promoting a good message - sharing safe practise around lead with local Port Pirie kindergarten children and Janet McWilliam, for them Manager.

Clowning around? A blog post about teaching Port Pirie kids about ‘safe practises around lead’, despite health experts warning that ‘there is no known level of lead exposure that is considered safe’. tenforthempirport.com.au, accessed 6 January 2016

Why do American parents get clearer warnings than Australians?



Emissions from lead mining and smelting activities in Broken Hill, Mount Isa and Port Pirie have been linked to higher levels of lead in local children’s blood.

These blood lead levels exceed the National Health and Medical Research Council’s (NHMRC) new public health intervention level of 5 micrograms per decilitre in about [half of all children in Broken Hill](#) and [Port Pirie](#), as [explained in The Conversation](#) last year.

Lead exposure puts children at risk of significant health effects including developmental, learning and behavioural problems. For example, a [recent study](#) found that children living closest to the Broken Hill mine had lower school test scores and were more likely to be diagnosed with developmental disabilities.

All three cities have online lead health education programs. In Broken Hill, the www.leadnsw.com.au program was developed by a local health clinic and the NSW government. Mount Isa’s website www.livingwithlead.com.au involves the Queensland government, Mount Isa Mines, and the local council.



A screenshot from Mount Isa’s Living with Lead homepage, which still uses the slogan ‘Living Safely with Lead’. www.livingwithlead.com.au accessed 6 January 2016

In Port Pirie, the SA government and lead smelter operator Nyrstar have [worked together](#) on the Targeted Lead Abatement Program, or www.tlap.com.au. (TLAP’s website is currently down, with a message saying the site has “crashed”.)

As part of our new study, we compared those Australian websites with international best practice, published by the US Centers for Disease Control and Prevention (US [CDC](#)). We found important differences between them.

Like the World Health Organization, the [US CDC plainly states](#): “No safe blood lead level in children has been identified.”



In contrast, at the time of our analysis, *none* of the materials from Broken Hill, Mount Isa or Port Pirie made such a clear statement about lead exposure and harm to children.

As our article went through the peer review process, one page of the Mount Isa website “[About Lead](#)” was updated to include a new statement:

There is no safe level of lead that has been proven not to cause any health problems.

However, that statement is not repeated on other pages, including the one labelled [Mount Isa Children](#), which instead begins with advice to “Wash hands regularly”.

The US CDC also warns parents that the “effects of lead exposure cannot be corrected” and that “even low levels of lead in blood affect children.”

At the time of our analysis, only the Broken Hill site contained comparable information on low-level exposure and the fact that lead can cause permanent damage to children.

Missing warnings for pregnant women and kids at higher risk

All three of the Australian websites left out important risks of lead exposure during pregnancy.

The US CDC has a page specifically on [lead and pregnant women](#), using blunt language to warn women that lead exposure during pregnancy can “put you at risk for miscarriage” and “cause your baby to be born too early or too small”.



From the Broken Hill website, showing when it’s recommended local toddlers get blood tests to check for lead poisoning. [Lead NSW](#)

In contrast, none of the three Australian sites mentioned those crucial risks to babies. (Compare the [clear US advice](#) to that given to pregnant women [in Broken Hill](#) and [Mount Isa](#).)



People can often be affected by lead exposure without showing obvious symptoms. Yet only the Broken Hill materials provided parents with a schedule for when they should have their children's blood tested for lead exposure.

The US CDC also discusses the fact that racial minorities and low-income families may be at higher risk of lead exposure. Only in Broken Hill were racial differences in blood lead levels discussed, even though higher average blood lead levels have been reported in Indigenous children in both Mount Isa and Broken Hill.

Patchy advice for parents on kids playing outdoors

Our study also found that incomplete information on the risks of lead in soil, even though soil and dust are major pathways of exposure. Only the Broken Hill materials said that:

many local yards exceed the national soil lead safety level.

While the other cities' websites acknowledged that soil may be contaminated, none of the three contain information on the acceptable Australian standard for lead in gardens (300 milligrams per kilogram) or the percentage of gardens that exceed the standard in each city. They also didn't tell residents how they could get their soil tested to evaluate their family's risk.

Because lead contamination is widespread in Broken Hill, Mount Isa and Port Pirie, and the potential for children to be exposed in their homes, gardens, and play areas is very real, the three websites make many recommendations for reducing children's exposure.

These include intensive interior and exterior cleaning, personal hygiene, gardening, diet and food preparation. But the advice was not consistent across the communities.

For example, in Broken Hill and Mount Isa parents have been advised to let children play in areas with grass or turf cover or to provide a sand pit. But in Port Pirie, no specific advice on children's play areas was given, except to cover bare soil.

Only in Port Pirie were parents advised to wash outdoor play structures. A recent study, however, found playground washing to be of [limited effectiveness](#) for reducing children's lead exposure if contamination is ongoing.

Advice on eating homegrown vegetables also varied. In Port Pirie, children and pregnant women are told not to eat "leafy vegetables like lettuce, silverbeet, cabbage, broccoli and cauliflower". No similar advice was provided in the other communities.

Additionally, some advice on [how to reduce exposure](#) to lead that *is* [supported by research](#) has not been shared with families in all three cities. Two examples include:

Door mats to reduce tracked in lead: this recommendation is supported by research but was only provided in Mount Isa.

HEPA filters for vacuuming: even though both South Australia Health and US EPA recommend the use of HEPA filters on vacuums in communities with lead contamination to minimise the spread of lead dust when vacuuming, this advice was not offered in Broken Hill or Mount Isa. In Port Pirie, HEPA filters were only said to be "preferred."



Canadian expert Dr Bruce Lanphear explains how extremely low levels of toxins including lead can affect a child's brain development.

What needs to happen to make Australian kids safer?

The health education programs in Broken Hill, Mount Isa and Port Pirie currently place the overwhelming burden on parents to keep lead out of their children's bodies, even though they are living in communities with [historical and ongoing contamination](#).

Lead pollution is not a problem that parents can solve on their own. Reducing or eliminating lead emissions, removing children from the sources of exposure, and cleaning up environmental contamination is critical.

Based on our research, we recommend revising the advice to people in all three of these communities so that it is as clear and comprehensive as what is published by the US Centers for Disease Control and Prevention. Parents and pregnant women in Broken Hill, Mount Isa and Port Pirie need to be given *all* of the evidence-based advice about reducing lead exposure.

Those revisions should be led by the NHMRC, as Australia's leading expert health body. And that work should be coordinated across the three cities, so that families aren't given different advice depending on where they live. There should also be rigorous and independent evaluation of these programs to determine if they are effective.

Better lead health education is important. But it is also not a substitute for eliminating lead in children's homes, play areas and gardens.

Keywords:

[Children](#)

[Lead poisoning](#)

[Child wellbeing](#)

[Mining](#)

[Lead](#)

[Long read](#)

[Pollution](#)

[Lead smelters](#)

[Author Q&A](#)

[Pregnancy](#)

[Port Pirie](#)

[Broken Hill](#)

[Women](#)

[Foetus](#)

[Toxicity](#)

[Indigenous health](#)

[Water pollution](#)

[Mines](#)

[Parenting](#)

[blood test](#)

[indigenous women](#)

[Miscarriage](#)

[child health](#)

[Dust](#)

[Babies](#)

[mine](#)

[pregnant](#)

[Air pollution](#)

[Parents](#)

[blood lead levels](#)



lowest literacy and numeracy scores. Katherine Clark/Flickr

[Australian children exposed to toxic mining metals do worse at school](#)

Reducing lead exposure has health, social and economic benefits. rSnapshotPhotos/Shutterstock

[The verdict's in: we must better protect kids from toxic lead exposure](#)

The South Australian town of Port Pirie – home to a historic smelter – has some of the worst reported toxic air pollution in Australia. Photo by Imre Hillenbrand www.universalfocus.com.au

[Australia's dirty secret: who's breathing toxic air?](#)

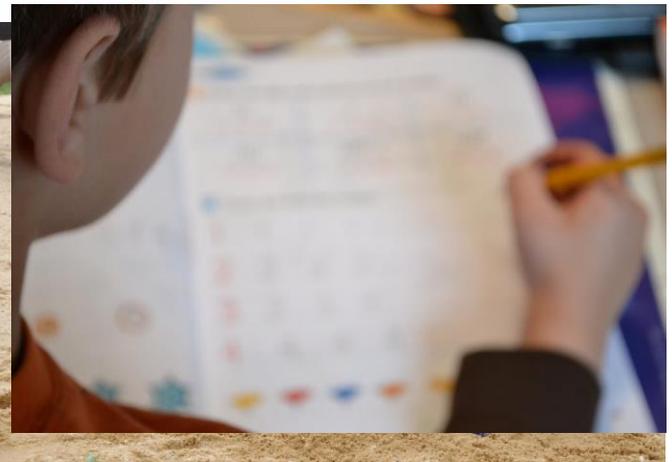


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Unsafe: thousands of Port Pirie children have been poisoned over decades, and yet government after government fails to stop it. Flickr/Viola Ng

[Lead poisoning of Port Pirie children: a long history of looking the other way](#)



[Les Johnston](#)

Appreciate the analysis of health effects of air pollution on residents of these three cities and the effectiveness (or rather ineffectiveness) of regulatory responses. There is a consistent pattern within Australia of failure to address health effects caused by air pollution.





[Donna Green](#)

Associate professor, [UNSW](#)

In reply to [Les Johnston](#)

Yes Les, unfortunately, I'd have to agree - and we are getting further behind the rest of the world on this.



[marianne kidd](#)

In reply to [Donna Green](#)

I grew up under the shade of a lead smelter I also trained as an artist. When I started art school in the mid sixties I was told that as a painter I should consider myself part of the lead industry. The teachers told me that I could inhale it, ingest it and absorb it through my skin. That lead would find its way into my blood stream, my sweat system breast milk and if I were a male, seminal fluids. I also heard that ancient Greeks would use lead to procure abortion (encourage miscarriage) Lead workers at Port Pirie and Broken Hill would surely be placing pregnant spouses at risk of miscarriage if they had unprotected sex with them as the lead laden seminal fluid would come very close to the developing foetus. The lowering of the IQ level of children exposed to lead as infants would no doubt impact on their ability to learn, putting them behind their peers. It seems to me ridiculous that in these days of enlightenment, Living With Lead documents should be replaced by Not Living With Lead documents. The onus should not be on the mother to mop up this mess, and bear the brunt of guilt, while the 'tap is still dripping'.



[Stephen Prowse](#)

logged in via Facebook

It would seem that clean up to reduce lead and eliminate exposure of pregnant women and children is almost impossible. Should they not be living in these cities? Would that mean the end of these cities?



[Donna Green](#)

Associate professor, [UNSW](#)

In reply to [Stephen Prowse](#)

It's a good question that should be answered by the residents themselves.



Anyone planning a family living in a leaded city might have some serious concerns about staying. Unfortunately, some people get trapped if they can't sell their home for example, or feel they wouldn't be able to get work elsewhere.

From the government side, there is a national agreement that 'all Australians' should be equally protected from pollution (Australia's Intergovernmental Agreement on the Environment, signed in 1992, which includes an objective that 'people enjoy the benefit of equivalent protection from air, water and soil pollution ... wherever they live'.)

It seems that some Australians are more 'equal' than others.



Sue Ieraci

In reply to [Donna Green](#)

The problem is, Donna, there will never be total equality between Australians. There can't be.

As an inner city dweller, I endure much higher pollution and much higher costs for housing than most rural and remote area dwellers, but much better access to health care and public transport. As a professional, I have a better income and lifestyle than people who exist on pensions.

We also know that there is strong correlation between socioeconomic status and health status.

So, we need to look at overall influences on pregnancy outcomes and child development.

According to the CDC's 2010 publication on lead and pregnancy (<http://www.cdc.gov/nceh/lead/publications/leadandpregnancy2010.pdf>), the best recent information about lead in pregnancy comes from Mexico City, and confirms that there is a strong relationship between lead levels and outcomes:

"The strongest evidence to date is a prospective study of pregnant women in Mexico City, which addressed most of the deficiencies of the prior studies and demonstrated a statistically significant dose-response relationship between maternal blood lead levels (average 11.0 µg/dL) and risk for spontaneous abortion (BorjaAburto et al. 1999). Odds ratios for spontaneous abortion for the blood lead groups 5-9, 10-14, and >15 µg/dL were 2.3, 5.4, and 12.2, respectively, in comparison to the reference group (<5 µg/dL) (p for trend = 0.03) with an estimated increased odds for spontaneous abortion of 1.8 (95% CI = 1.1–3.1) for every 5 µg/dL increase in blood lead. In another study of pregnant women (N = 207) from Mexico City (mean BLL 6.2 µg/dL), a 0.1% increment in the maternal plasma-to-blood lead ratio was associated with a 12% greater incidence of reported history of spontaneous abortion (p = 0.02) (Lamadrid-Figueroa et al. 2007)"

This information is readily available.

So, shouldn't information for affected families include a broad discussion of all the factors that affect health outcomes? And, rather than the "there is no known safe level" mantra, it makes more sense to explain that there is, indeed, a strong relationship between blood levels and outcomes. Thus, minimising exposure by evidence-supported methods can minimise the impact, leaving families with some control over their lives, rather than being given scary messages.



Marie Ange

Just unacceptable. It involves money, lots of it, hence we close our eyes to the problem. It does affect children. Look at the results from the schools in these areas for proof. Fly in fly out workforce?



Donna Green

Associate professor, [UNSW](#)

In reply to [Marie Ange](#)

Yes, Marie, in light of the Flint scandal in the US - <http://www.theatlantic.com/politics/archive/2016/01/what-did-the-governor-know-about-flints-water-and-when-did-he-know-it/423342/> - something to be concerned about..



Gaye Heroine

logged in via Facebook

consider Borroloola, where wandering stock had to be destroyed because of lead contamination, and locals are now afraid to eat fish from the river that has become a dump for the lead mine.

<http://www.ntnews.com.au/news/national/locals-petition-for-glencore-mine-closure/news-story/ccc75fa6f86762c72232a6be14c5d26a>



Donna Green

Associate professor, [UNSW](#)

In reply to [Gaye Heroine](#)

Yes, you are completely correct, and there's some new research going on there now - another 'out of sight out of mind' place, terrible.





[Hugh McColl](#)

[Hugh McColl is a Friend of The Conversation](#)

The history of the creation of the lead mining and refining industry (and others) means that state governments have been hand-in-glove with corporations from the outset. So if a town is co-located with a mine/refinery site and is understandably if not inevitably contaminated, then responsibility seems to fall on government since it 'allowed' the town to be there. And of course if government 'discovers' too much contamination then its actions might threaten the viability of the corporation. That seems to explain why government is extremely reluctant to conduct continuous screening of infants and parents in towns or parts of towns that are likely polluted with dangerous stuff like lead.

We are fortunate that lead is no longer used in petrol in Australia because inner city areas used to have massive residues which are slowly subsiding to more or less negligible levels. But some cities still have new lead fallout from exports of ores and unfinished product. Most lead ores from Mount Isa and surrounding district are exported through Townsville's port and we know that lead escapes from the transport and ship loading systems into the city of Townsville (the port is upwind in the middle of town). Constant criticism has forced the Queensland government to increase monitoring and pressure corporations to upgrade facilities (covered rail wagons, dust reduction strategies, vegetated verges, sealed transfer systems) and this has helped but there is no monitoring of blood lead levels in infants in Townsville - even though we know for sure that particular residential suburbs, urban parks, schools and play areas have lead residues in their soils - leads with unique fingerprints from western Queensland. In the past couple of years we know for sure that short term spikes in lead-in-dust levels have occurred in Townsville but we don't know why. Industry seems to want government to only know enough to be able to assess compliance - and no more. Governments don't want children to be contaminated by lead but are reluctant to find out if it is happening. Perhaps all of us are complicit in this 'blind eye' approach?



[Sarah Glass](#)

Do we know whether, given we now mostly use unleaded petrol, there is any lead pollution in areas other than the three mentioned??

Is Diesel unleaded?? Is leaded petrol still in use??

A Catalyst program a few weeks ago outlined the stats in the US of violent crimes and showed how they had gone up and up through last century and then down and down after unleaded petrol was introduced. Very interesting.



[Donna Green](#)

Associate professor, [UNSW](#)

In reply to [Sarah Glass](#)



Yes, legacy lead - especially in inner city areas from leaded petrol is still certainly an issue. As with house paint. If you are concerned, you can get your soil tested for free. Check out: <http://research.science.mq.edu.au/vegesafe/>



[Hugh McColl](#)

[Hugh McColl is a Friend of The Conversation](#)

In reply to [Sarah Glass](#)

Sarah, I have seen some graphs produced by the Queensland EPA showing the decline in lead levels adjacent to a main road in inner Brisbane since (if I remember correctly) the early 1990s when lead was no longer added to petrol. At that place the lead contamination was down into the almost unmeasurable levels but it had been quite high for decades beforehand. Of course a measurement of lead in (say) sand in a playground does not tell us much about the likely blood lead levels in children who use the playground. Also, the type of lead (lead sulphate, lead oxide etc) may indicate different levels of 'bioavailability' - lead as a pure metal as in fishing tackle sinkers is not particularly threatening. Yet lead in paint on older buildings may be quite dangerous in certain conditions. I don't think lead is used in any petrol in Australia now (it is still used in a very few countries) nor is it used in diesel although that fuel has other issues, including particulates.

The point I tried to make in my earlier comment was that in places where we know there are ongoing new lead-in-dust issues (including those mentioned in the article but in several others Australia-wide) there is no systematic state government assessment other than what is seemingly very basic, half-hearted and transient 'spot checks' to ensure that industry is minimally compliant with barely adequate, sometimes outdated standards. If we were serious about lead pollution we would be trying harder. Clearly, we are not very serious at all.



[Matthew Dornan](#)

Research Fellow, [Australian National University](#)

Thanks for the article.

Any views on whether the source of lead matters for health outcomes? My understanding is that high lead levels in these 3 cities (and indeed, in many backyards in Sydney) are especially dangerous given their origins from mining/smelting/manufacturing processes. In contrast, many rural areas in the NSW southern tablelands (incl. suburbs in Canberra) have high lead levels due to naturally occurring gossans, but these are considered less dangerous due to lower bioavailability. Has your research looked at the source of lead?



[Donna Green](#)



Associate professor, [UNSW](#)

In reply to [Matthew Dornan](#)

Yes Matthew, this is a good point. This is one argument that the companies try to make about these lead cities, but research by Mark Taylor (and colleagues) has shown that this is not correct. If you check his articles in the Conversation, and peer reviewed literature (if you have access) you can see this is the case.



[Sally Male](#)

Researcher in Engineering Education, [University of Western Australia](#)

Thank you for the article on this important topic. I have some basic questions relevant to concerned families please. How can families have the soil in their yards tested, and do fruit and vegies grown in lead-contaminated soil contain lead?

Additionally, is lead exported through Fremantle Port? The WA Government plans to privatise the Port. How important is control of lead exports in the negotiations? WA has already had a major disaster with lead exported at Esperance.



[Donna Green](#)

Associate professor, [UNSW](#)

In reply to [Sally Male](#)

Absolutely, anyone anywhere in Australia can get their soil tested. check out:

<http://research.science.mq.edu.au/vegesafe/>

[*LEAD Action News Editor's note:* and anyone in Australia can purchase a LEAD Group Kit, collect their own samples of soil, paint, dust, water, etc, and have them tested by a NATA-accredited lab and receive a report with the results, from The LEAD Group. Go to www.lead safeworld.com/shop]

You are correct about the Esperance disaster, you might be interested to read: A tale of two towns: Observations on risk perception of environmental lead exposure in Port Pirie and Esperance, Australia

<http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1366&context=medpapers>



[Donna Green](#)

Associate professor, [UNSW](#)



In reply to [Sally Male](#)

Also, lead tends to accumulate on leaves (from fall-out in air) rather than come up through the plant itself. See <http://www.extension.umn.edu/garden/yard-garden/soils/lead-in-home-garden/>



[David Thackrah](#)

logged in via Facebook

Reports of lead pollution in Port Pirie go back about 50 years. There has never been any intention of anyone authority or person eliciting the obvious solution. Move the town either north or south. The wind pattern is west to east, if we can recall the nuclear fission fallout from the criminal atomic tests at Monte Bello Islands and later Maralinga. Re-locating Kalgoorlie seems prospective. The super-pit is moving toward the top of Hannan Street. I was told the plan is to have a micro New York City at Kambalda but there is a zinc processor there to the west ? Maybe a plan could be created for Broken Hill and Mt. Isa along the lines of suggesting Kalgoorlie be re-located.



[Janice Russell](#)

Another example of big mining and gov't not keeping Australians informed of health effects of mining.

All these health problems and any cost of mitigating them should be added to the REAL COST of mining. Would we then be inclined to dig up our country and sell it to whoever at a cost that doesn't reflect the true cost of its production. Our minerals are sold off at prices that do NOT cover the real costs and we are left to carry those costs of increased educational, medical and social problems, not the big miners



[Geoff King](#)

It's all thanks to the greedy companies who are making blood money from suffering people.

No difference than Hardy industries and the others who were dealing in their death product: Asbestos. When it was proven in 1918 that asbestos caused lung cancer and other cancers.

Thanks to conservative governments who believe that removing red tape from business is the way to go. Just look what happened in the United States of Amnesia where states gave big business free reign to do what they wanted: Factory explosions, poisoning the drinking water.





Hugh McColl

Hugh McColl is a Friend of The Conversation

In reply to [Geoff King](#)

“Greedy companies” maybe, but “conservative governments” removing red tape is not an explanation for the situation in Port Pirie, Mt Isa or Broken Hill. Pretty sure these mining/smelting towns are and always have been highly unionised Labor towns although they may have been within larger National Party electorates. Don’t worry, blind eyes have bipartisan support because mining towns bring royalties to state governments to spend in state capitals. State governments have to spend a fortune to get public servants (nurses, police, emergency services, child protection and, ironically, EPA officers) to live and work in these places - there’s no way governments are going to talk up pollution and environmental degradation.



John Toth

‘Rusty & Dusty’

How about “Leadly & Deadly”?



Eddy Schmid

Quote, “Why do American parents get clearer warnings than Australians?” End Quote. Really? I’m curious, as to where the author of this article obtains their information from regarding America, as clearly, that information is totally out of kilter with the reality. For example, try reading this article; State of emergency in US city after water poisoned. Flint has faced a lead-saturated drinking water “disaster” affecting almost 100,000 residents over the past 18 months. Ryan Rifai <http://www.aljazeera.com/news/2015/12/state-emergency-city-water-poisoned-151229165652041.html> 07 Jan 2016 Clearly, hundreds of people, including children have been IREPAIRABLY damaged by this lead pollution that the city KNEW OF, and the E.P.A. there, also were very much aware of. Pray tell, were those parents warned of the danger to themselves and their kids, as implied in this article ?????



Sue Ieraci

In reply to [Eddy Schmid](#)

I wondered the same thing, Eddy, but the answer seems to lie in the authors' study that is referenced.

The paper is here: “Misled about lead: an assessment of online public health education material from Australia’s lead mining and smelting towns”<http://ehjournal.biomedcentral.com/articles/10.1186/s12940-015-0085-9>



The title of the paper reveals a major limitation of the study - it only looks at on-line information. The authors describe their methodology thus: “We used qualitative content analysis to evaluate the accuracy and comprehensiveness of online lead health education information provided to residents of the three cities.”

In other words, they read stuff and evaluated it against a list of criteria they had developed.

The obvious limitation with this study is that it only looked at specific on-line information sites, and did not consider the multitude of other sources of information - from health care professionals to the wealth of research available on-line.

Clearly lead exposure is a significant public health issue, and as much as possible should be done to minimise exposure. For that reason, petrol and paint have been de-leaded, making a significant reduction to exposure. People living in high-exposure towns need all the accurate information they can get, but this fairly simple, limited analysis does not seem to add anything.

More pertinent areas for exploration would be whether residents are aware of relevant, evidence-based information, whether blood lead levels are falling, and whether health outcomes are improving.



[Marianne Sullivan](#)

Associate Professor of Public Health, [William Paterson University](#)

In reply to [Sue Ieraci](#)

Thanks for your comment, Sue. Qualitative content analysis is a well-established and recognized research method that was appropriate for the question we were asking in this study, which essentially was, what are parents in the three communities being told about lead’s health effects, sources and pathways of exposure and strategies for reducing exposure, from the three local programs that have been specifically established to educate residents on these issues. We compared what residents were being told in these communities to international best practice where possible.

Of course there are other sources of information out there, and we discuss this in the paper, but we think that the materials that have been specifically developed for lead health education in these communities should clearly and accurately communicate health risks and provide parents with all possible evidence-based strategies for reducing risk.

As for the questions you raise, “whether residents are aware of relevant, evidence-based info...”, etc., these are quite pertinent. That is why we recommend rigorous and independent evaluation of lead education programs in these communities.



[Paul Rogers](#)

Australia has, historically, lagged well behind the USA in many environmental health policies and standards. The US Environmental Protection Agency has set an ambient air quality standard of 0.15 mcg/cu.m for lead. Australia’s standard is 0.5 mcg/cu.m, three times less stringent.



Another example – sulphur dioxide, US 75 ppb, Aus 200 ppb (1 hour).

The USA banned DDT and most organochlorine insecticides in the early seventies. Australia took at least another 15 years to implement similar action despite some samples of breast milk so exceeding the DDT (and other) food standards that it would have been rejected as a 'safe' food.

Richard Doll (Sir) had the evidence for the carcinogenicity of asbestos in his seminal 1955 medical journal publication. We did nothing for about 30 years, costing thousands of lives from mesothelioma and related lung cancers, and mounting.

Neither Labor of Liberal governments seem to be able to get serious about national environmental health policy standards and action. The NHMRC is just about useless in this regard, and often their working groups are populated with industry apologists or medicos who have little training in, or understanding of the environmental health sciences.



[marianne kidd](#)

In reply to [Paul Rogers](#)

Of course the powers that be have known the effects of lead poisoning for hundreds of years, smelters go into established towns foisted on communities who become captive, unable to move as house prices tumble. Deluded by authorities that 'its not that bad' easy to succumb. But let's not forget that hand in hand with lead might go cadmium arsenic selenium and other cancer causing goodies not to mention sulphur di-oxide and tri-oxide the combined effect of which does incalculable harm. Living with lead is not living at all really. Of course there is now a community living with the residual contamination from a smelter removed, land remediated (though still contaminated) with smelter land now being sold off as housing blocks...and so the sad story goes on, and how many Lead processing plants are called Zinc plants...



[Henry GRAY](#)

[Henry GRAY is a Friend of The Conversation](#)

There needs to be total transparency and absolute honesty in disclosing the likelihood of environmental dangers to the health of children and families.



[Rosalie Schultz](#)

logged in via Facebook

Worrying is that children are both the monitors of the safety of the environment and the victims of inadequate environmental safeguards.



At least they are testing fingerprick blood and they don't need venepuncture. Mt Isa has a testing schedule so all the kids are supposed to have blood test at age 12 and 18 months and 2, 3 and 4 years. It seems that the other risk sites have unpublished protocols, based on the test result. How do you explain that to your 3 year old?

According to this NHMRC statement, a blood lead level over 10 microgram per decilitre must be notified to the public health authorities in some states, but not in SA, ACT or NT. According to the Living with Lead Mt Isa website, Queensland planned to reduce the threshold for notification to 5 microgram per decilitre so that NHMRC intervention level is the same level at which there is a legal requirement for notification. What about national notification requirement at the agreed level for action – 5 microgram per decilitre?

But what action is possible? The only recommendation is for more of the same urging kids and parents to act in ways that have not been shown to be effective. Unless the blood lead level reaches 45 microgram per decilitre, there is no medical action.

Following this recommendation authorities consider the exposed children and their families responsible for not following recommendations. However it is government and industry who cause and profit from the problem.

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