



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

11<sup>th</sup> December 2018    Lead Safe World UK

Duncan Selbie  
Chief Executive  
Public Health England  
Wellington House  
133-155 Waterloo Road  
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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 review<sup>1</sup>. 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 toddlers<sup>2</sup> and 14% of pregnant women<sup>3</sup> had damaging levels of lead<sup>4</sup>. 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 site<sup>5</sup>. However, this seems to be the extent of the PHE support for last year's International Lead Poisoning Prevention Week of Action<sup>6</sup> 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'*<sup>7</sup> 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 Lancet<sup>8</sup> 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 Program<sup>4</sup> (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 England<sup>9</sup>.

One major area related to lead exposure is mental health. The NTP monograph<sup>4</sup> 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 USA<sup>20</sup> and €23 billion in France<sup>21</sup>.

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 entry<sup>22</sup>, 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”<sup>23</sup>. 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 crime<sup>24</sup>.

### Health Profile for England

The 2018 ‘Health Profile for England’ has recently been published<sup>27</sup>. 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 Denmark<sup>28</sup>; in France, houses built before 1949 must be tested for lead paint<sup>29</sup>.

### 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 poisoning<sup>10</sup>. 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**”<sup>25</sup>.

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**”<sup>26</sup>.

Children on Medicaid are screened for elevated BLLs<sup>31</sup>, but several states now screen **all, or at risk, children** including Maryland<sup>11</sup>, New York<sup>12</sup>, Massachusetts<sup>13</sup> and New Hampshire<sup>32</sup>.

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**”<sup>14</sup>.

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

The New Your City Housing Authority is to **spend \$1.2 billion** over 5 years – addressing lead risks being a large part of this<sup>30</sup>.

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

The City of New York is to **spend \$80 million** to inspect 130,000 public housing units for lead<sup>16</sup>.



Our Decent Homes Standard<sup>33</sup> does not mention lead, but the US National Healthy Housing Standard<sup>34</sup> refers to lead extensively and the National Center for Healthy Housing aims to “**eradicate childhood lead poisoning within five years**”<sup>35</sup>.

### 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)<sup>17</sup> or the British Coatings Federation<sup>18</sup>.

Establish a lead hot-line and web site - like the EPA in the USA<sup>19</sup>.

Yours sincerely,

Lead Safe World UK

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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

References:

1. The UK NSC recommendation on Lead poisoning screening in children;

<https://legacyscreening.phe.org.uk/leadpoisoning>

2. Effects of early childhood lead exposure on academic performance and behaviour of school age children; K Chandramouli, C D Steer, M Ellis, A M Emond, 2008;

<http://adc.bmj.com/content/94/11/844>,

<http://news.bbc.co.uk/1/hi/health/8259639.stm>



3. Environmental Factors Predicting Blood Lead Levels in Pregnant Women in the UK: The ALSPAC; Study, C Taylor, J Golding, J Hibbeln, A M Emond, 2013;  
<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0072371>
4. National Toxicology Program; Health Effects of Low-level Lead, 2012; Evaluation;  
<https://ntp.niehs.nih.gov/pubhealth/hat/noms/lead/index.html>
5. Exposure To Lead In Pregnancy; UK Teratology Information Service, 2016;  
<http://www.medicinesinpregnancy.org/bumps/monographs/EXPOSURE-TO-LEAD-IN-PREGNANCY/>
6. International lead poisoning prevention week of action, 2018;  
[http://www.who.int/ipcs/lead\\_campaign/materials/en/](http://www.who.int/ipcs/lead_campaign/materials/en/)
7. Prevention and the NHS long term plan: 3 ways we can save more lives; Duncan Selbie, 2018;  
<https://publichealthmatters.blog.gov.uk/2018/09/06/prevention-and-the-nhs-long-term-plan-3-ways-we-can-save-more-lives/>
8. Low-level lead exposure and mortality in US adults: a population-based cohort study; B Lanphear, S Rauch, P Auinger, R W Allen, R W Hornung, 2018;  
[https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667\(18\)30025-2/fulltext](https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(18)30025-2/fulltext)



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

<https://volcanoartprize.com/portfolio-item/heart/>

9. East Sussex Healthcare NHS Trust, Clinical Biochemistry Reference Ranges Handbook;  
<https://www.esht.nhs.uk/wp-content/uploads/2017/08/Clinical-Biochemistry-reference-ranges-handbook.pdf>





10. The President's Task Force on Environmental Health Risks and Safety Risks to Children, Current Focus: Lead Exposure  
[https://ptfceph.niehs.nih.gov/about/assets/files/task\\_force\\_in\\_brief\\_508.pdf](https://ptfceph.niehs.nih.gov/about/assets/files/task_force_in_brief_508.pdf)
11. Maryland <https://phpa.health.maryland.gov/OEHFP/EH/Pages/Lead.aspx>
12. New York <https://ag.ny.gov/environmental/lead/lead-screening-tests-preschool-age-children>
13. Massachusetts <https://www.mass.gov/service-details/learn-about-lead-testing-for-all-children-in-massachusetts>
14. EPA Administrator Scott Pruitt Hosts Nation's Leaders to Discuss Efforts to Reduce Childhood Lead Exposure; EPA 2018;  
[https://ptfceph.niehs.nih.gov/news/announcements/task\\_force\\_principals\\_meet\\_on\\_federal\\_lead\\_strategy\\_508.pdf](https://ptfceph.niehs.nih.gov/news/announcements/task_force_principals_meet_on_federal_lead_strategy_508.pdf)
15. HUD awards \$127 million to protect children and families from dangerous lead and other home hazards. Funding to make low-income housing safer and healthier; U.S. Department of Housing and Urban Development 2017;  
[https://www.hud.gov/press/press\\_releases\\_media\\_advisories/2017/HUDNo\\_17-049](https://www.hud.gov/press/press_releases_media_advisories/2017/HUDNo_17-049)
16. Mayor Vows to 'Eradicate' Lead From New York City Housing Projects; J. David Goodman, 2018;  
<https://www.nytimes.com/2018/07/10/nyregion/nycha-lead-de-blasio.html>
17. Advice on lead paint in older homes; Defra 2005;  
<https://www.gov.uk/government/publications/advice-on-lead-paint-in-older-homes>
18. PaintSafe; British Coatings Federation 2017; <https://www.coatings.org.uk/paintsafe>
19. United States Environment Protection Agency; Lead Hotline - The National Lead Information Center; <https://www.epa.gov/lead/forms/lead-hotline-national-lead-information-center>
20. Environmental Pollutants and Disease in American Children: Estimates of Morbidity, Mortality, and Costs for Lead Poisoning, Asthma, Cancer, and Developmental Disabilities; Landrigan et al 2002;  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1240919/pdf/ehp0110-000721.pdf>
21. Childhood lead exposure in France: benefit estimation and partial cost-benefit analysis of lead hazard control; Pichery et al 2011; <https://www.ncbi.nlm.nih.gov/pubmed/21599937>
22. Four ways to embed prevention at the heart of care; Gina Radford 2018;  
<https://publichealthmatters.blog.gov.uk/2018/09/07/four-ways-to-embed-prevention-at-the-heart-of-care/>



23. Childhood Lead Poisoning; Centres for Disease Control and Prevention 2005;  
<https://www.cdc.gov/nceh/publications/factsheets/ChildhoodLeadPoisoning.pdf>
24. Aggregate-level lead exposure, gun violence, homicide, and rape; Boutwell et al, 2017;  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5703470/>
25. Lead poisoning: number one environmental health threat to children ages six and younger in the U.S.; Donna Heron, EPA, 2011;  
[https://archive.epa.gov/epapages/newsroom\\_archive/newsreleases/5e312cbe6666dca8852579340068ebef.html](https://archive.epa.gov/epapages/newsroom_archive/newsreleases/5e312cbe6666dca8852579340068ebef.html)
26. Ben Carson calls for more resources to fight lead poisoning during hearing – WHEC news 10; The Housing Council, 2017; <http://www.thehousingcouncil.org/news/2017/01/ben-carson-calls-for-more-resources-to-fight-lead-poisoning-during-hearing-whec-news-10/>
27. Health profile for England: 2018; Public Health England;  
<https://www.gov.uk/government/publications/health-profile-for-england-2018>
28. Statutory Order on prohibiting the import and sale of products containing lead, Danish Ministry of the Environment, 13 September 2007;  
<https://eng.mst.dk/media/mst/69075/Blybekendtgørelse%20-%20BEK%20nr%201082%20af%202007%2009%2013%20oversat%20til%20engelsk.pdf>
29. Lead in your French home; France Entrée, 15th September 2017;  
<https://www.frenchentree.com/french-property/lead-in-your-french-home/>
30. Consent Decree Provides Comprehensive Relief, Requiring NYCHA to Promptly Address Lead Paint Hazards, Remedy Mold and Pest Infestations, and Provide Adequate Heat and Elevator Service; EPA, 2018; <https://www.epa.gov/newsreleases/manhattan-us-attorney-announces-settlement-nycha-and-nyc-fundamentally-reform-nycha>
31. Lead Screening; Centers for Medicare & Medicaid Services;  
<https://www.medicaid.gov/medicaid/benefits/epsdt/lead-screening/index.html>
32. Childhood Lead Poisoning Screening and Management Guidelines; New Hampshire Department of Health and Human Services;  
<https://www.dhhs.nh.gov/dphs/bchs/clpp/documents/screening.pdf>
33. A Decent Home: Definition and guidance for implementation; Ministry of Housing, Communities & Local Government, 2006;  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/7812/138355.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7812/138355.pdf)



34. National Healthy Housing Standard; National Center for Healthy Housing & American Public Health Association, 2014; <https://nchh.org/tools-and-data/housing-code-tools/national-healthy-housing-standard/>

35. Introducing Find It, Fix It, Fund It; National Center for Healthy Housing, 2016; <https://nchh.org/build-the-movement/find-fix-fund/>

36. Protecting Children's Health Booklet; EPA, 2018; <https://www.epa.gov/children/protecting-childrens-health-booklet>

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