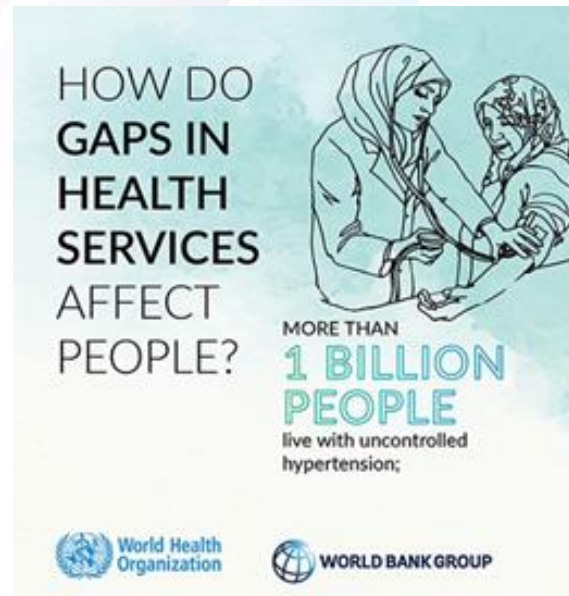




## Deaths from lead exposure approach the levels attributable to smoking

A 1st August 2018 fact sheet by LEAD Group volunteer Emily Choong, using extracts of media articles about the landmark Lancet lead article by Lanphear et al, March 2018.

“Lead is most widely recognized as a hazard to children, who can suffer intellectual damage from even minimal exposure. However, because lead can contribute to conditions such as high blood pressure and hardening of arteries, it is also believed to contribute to cardiovascular and heart disease.” [Glenza, 2018]



"The population attributable fraction of the concentration of lead in blood **for all-cause mortality** was **18.0%** (95% CI 10.9–26.1), which is equivalent to 412,000 deaths annually [in the US alone]. Respective fractions were **28.7%** (15.5–39.5) **for cardiovascular disease mortality** and **37.4%** (23.4–48.6) **for ischaemic heart disease mortality**, which correspond to 256,000 deaths a year from cardiovascular disease and 185,000 deaths a year from ischaemic heart disease." [Lanphear et al, 2018]

Lanphear and his team reviewed two decades of health data for more than 14,000 adults in the US, covering the period 1990-2011. The participants all had blood tests at the outset to measure past and current exposure to lead, as well as a urine test for the metal cadmium. [Hood, 2018]

"There's no safe threshold," Lanphear said. "Once we found that there was a risk across the entire range of exposures, we could estimate the number of attributable deaths. And instead of it being 40,000 deaths, which is what had previously been estimated, we found that it was about 10 times that." [Lieber, 2018]



‘Overall, people who had high lead levels (6.7 µg/dL) were at 37% greater risk of premature death from any cause, 70% greater risk of cardiovascular death, and double the risk of death from ischemic heart disease, compared with people with lower levels (1 µg/dL)... These results were adjusted for age, sex, household income, ethnic origin, diabetes, BMI, smoking status, alcohol consumption, diet, physical activity, and amount of cadmium in urine. [The Lancet, 2018]

They also concluded the estimated number of deaths attributable to lead were comparable to the number of deaths from tobacco smoke exposure. [Lardieri, 2018]

**The new Lancet study estimates that deaths from lead exposure approach the levels attributable to smoking**, which kills 483,000 Americans each year. People are still far more likely to suffer complications from smoking. **But only 20% of Americans now smoke, while lead exposure is more common, affecting 90% of people in the study.** [Glenza, 2018]

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[www.leadsafeworld.com](http://www.leadsafeworld.com) – test the environment. [www.lead.org.au](http://www.lead.org.au) – info on blood lead levels

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