



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

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

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

The graphics are “Made with Flourish” by Johns Hopkins University and are simply stunning – you **must** take a [look](#).

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

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

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

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

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

Ref: United Press International, Inc, *WHO: 143,000 deaths per year from lead poisoning*, Oct. 18, 2013, https://www.upi.com/Health_News/2013/10/18/WHO-143000-deaths-per-year-from-lead-poisoning/11551382150700/

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



Ref: International Society for Environmental Epidemiology (ISEE), *Commentary, ISEE Call for Action for Global Control of Lead Exposure to Eliminate Lead Poisoning*, in *Epidemiology*: [September 2015 - Volume 26 - Issue 5 - p 774-777](https://journals.lww.com/epidem/Fulltext/2015/09000/Commentary_ISEE_Call_for_Action_for_Global.22.aspx), https://journals.lww.com/epidem/Fulltext/2015/09000/Commentary_ISEE_Call_for_Action_for_Global.22.aspx

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



Ref: GAELP, *Lead Safety Message of Volcano Art Prize 2018 Entry: International Lead Poisoning Prevention Week 2018*, October 2018, <https://volcanoartprize.com/portfolio-item/international-lead-poisoning-prevention-week-2018/>

4. Also in 2016, Dr Perry Gottesfeld, a Member of The LEAD Group’s Technical Advisory Board, wrote: “The World Health Organization estimates that 240 million people are overexposed and 99 % of those with blood levels above 20 µg/dl are in the developing world.

“•Lead exposures account for **853,000 deaths** annually vs. 852,000 for all other occupational risk factors...”

Ref: Perry Gottesfeld, OCCUPATIONAL KNOWLEDGE INTERNATIONAL, www.okinternational.org, *The Environmental and Health Impacts of Lead Battery Recycling*, 2016, https://wedocs.unep.org/bitstream/handle/20.500.11822/13943/1_ECOWAS%20lead%20background%202016.pdf

5. Commenting on the [March 2018 Lanphear et al article in *The Lancet*](#): “Researchers concluded about **400,000 deaths** per year [**in the USA alone – 10 times more**



than previously thought] can be attributed to lead, a much higher number than previously reported by the [Institute for Health Metrics and Evaluation](#).”

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

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

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