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Health risks from toxic pollution

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In its annual [report](#) *The World's Worst Pollution Problems*, released on Oct 24, the New York based Blacksmith Institute together with Green Cross Switzerland attempted for the first time to estimate the burden of disease attributed to toxic pollution from industrial sites in low-income and middle-income countries. Excluding indoor and carbon-related air pollution and arsenic in groundwater, and only including pollutants with quantifiable health outcomes that are given disability weights by WHO, the report estimates that about 125 million people are at risk from toxic pollution across 49 countries with an estimated impact of 17.15 million disability-adjusted life years. These estimates are based on 2600 investigated sites in countries that are safe to visit and are very likely to be an underestimate.

The substances included are lead, chromium, mercury, and asbestos. The top ten industrial sources responsible for their estimated effect on health are: lead-acid battery recycling, lead smelting, mining and ore processing, tanneries, industrial and municipal dump sites, industrial estates, artisanal gold mining, product and chemical manufacturing, and the dye industry. The particular vulnerability of children to these substances, and the fact that many of these sites are within or close to densely populated areas, make it especially important to highlight this neglected area of health risk, which is likely to increase with rapid industrialisation and development in low-income and middle-income countries. Whereas developed countries have oversight bodies, such as the Environmental Protection Agency (EPA) in the USA, to regulate and educate, developing countries often have lack of oversight, no or poor regulation, and limited understanding of potential health effects.

The Blacksmith Institute works with local authorities and countries' Ministries of Health on educational activities, remedial solutions, and preventive efforts, and highlights individual success stories in its report. These are laudable efforts but to make a real difference much more is needed. The international health community needs to tackle hazardous substance pollution with the same urgency as other health threats to achieve healthy and sustainable development worldwide.



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