

TOXINS

in the air
we breathe...

in the water
we drink...

in the earth
beneath our feet...

IT'S TIME TO
CLEAN UP

PURE  **EARTH**
BLACKSMITH INSTITUTE



IT'S TIME TO CLEAN UP



Agbogbloshie, Ghana: Father with toddler playing in the electronic waste burning fields.

Pollution kills 9 million people each year and costs the global economy more than \$4.6 trillion.

Pure Earth has impacted more than 4 million lives... and we're just getting started.

Pure Earth serves as a catalyst, executing successful pilot projects with private donations that often leverage public funding many times the initial investment.

Our Model in Action... Pure Earth works side-by-side with community partners and governments, building local capacity to continue this life-saving work independently and to scale.



Our Model in Action: Leverage

Dong Mai, Vietnam: Community members cleaning up lead contaminated soil.

Dong Mai, Vietnam

3,000 residents were all suffering from severe lead poisoning due to decades of informal car battery processing.

\$95,000 was leveraged to secure an additional \$330,000 in resources and funding from village residents, government, and private industry.

Initial funding enabled community training and lead decontamination of 39 homes. The community then cleaned an additional 250 homes and secured funding to clean 67 more homes and encapsulate yards and roads.

A larger scale project, funded by the national government of Vietnam, is now in the planning stages.

Globally, 13 million people are negatively affected by lead.



TIME TO CLEAN UP

The Top Toxic Threats That Poison Us and Our Children

LEAD

The world's #1 toxin

SOURCE: Informal recycling of car batteries, electronic waste burning, lead-glazed pottery, paint

AT RISK: 13 million globally

TOXIC SITES IDENTIFIED BY PURE EARTH: 700

HEALTH IMPACT: Causes permanent brain damage in children, organ damage and 500,000 deaths from cardiovascular disease in adults annually.

Deadly Display



Above left: Mexico: Lead-glazed pottery throughout Mexico causes mass lead poisoning. Pure Earth is helping potters convert to lead-free glaze.

Above right: Ghana: These computer parts collected by children are burned to reclaim valuable elements. The process releases toxins throughout the environment.



What's Wrong With This Picture?

Akhtala Monastery, Armenia, UNESCO World Heritage Site

This 12th century Armenian monastery was built on top of an old copper mine and is regularly visited by school children and families contaminated by this old mine. It is one of the most toxic sites in the world with dangerous lead levels in the soil measuring at 47,000 parts per million, 117 times higher than the EPA's standard of 400 parts per million.

With support from Armenia Fund USA, Pure Earth is cleaning up the monastery, and ending a centuries-long cycle of childhood lead poisoning.



Indonesia: Boys in a gold mining community playing in mercury-polluted water.

Photo: Larry C. Price

MERCURY

It affects us all, polluting the oceans and our seafood

SOURCE: Small-scale gold mining using mercury

AT RISK: 10 to 15 million small-scale gold miners using mercury, causing 30% of mercury pollution around the world.

TOXIC SITES IDENTIFIED BY PURE EARTH: 400

HEALTH IMPACT: Disrupts the physiological and neurological development of children. It attacks the central nervous system, organs, and in higher doses, it causes death.

MERCURY POISONING FROM GOLD MINING

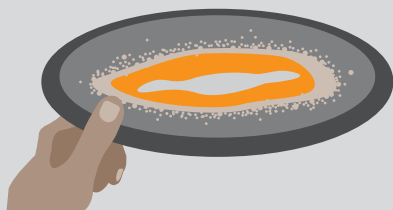
Mercury Travels the Globe

Vaporized mercury gas rises into the atmosphere, travels the globe and falls back to earth in rain or snow, spreading the poison far and wide.



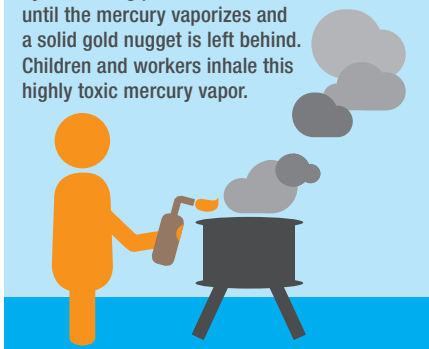
Poisoning Our Water

Water and mercury are used to separate tiny particles of gold from tons of ore manually dug out by miners. Mercury-contaminated water drains into waterways and seeps into groundwater. In addition, the mercury and gold nugget created in the mining process is burned, releasing toxic vapors in to the air.



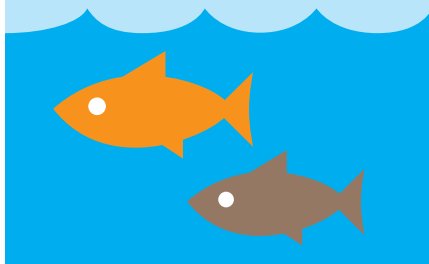
Poisoning Our Air

The mercury & gold nugget created by the mining process is burned until the mercury vaporizes and a solid gold nugget is left behind. Children and workers inhale this highly toxic mercury vapor.



Poisoning the Food We Eat

The mercury deposited in lakes and oceans is transformed into methyl mercury, the most dangerous form. This is ingested by fish and ends up in our grocery stores and on our dinner plates.



Harming Infants & Children Most

Pregnant women are advised to avoid certain fish because methylmercury causes birth defects. Children and adults can suffer neurological damage from consuming too much fish like tuna or halibut.





India: Worker sprays pesticide on field with wife and child nearby. Photo: Larry C. Price

PESTICIDES & CHEMICALS

Children living in toxic hot spots suffer serious health damage

SOURCE: Agriculture, tanneries, chemical and product manufacturing, dye industry

AT RISK: 7 million globally

TOXIC SITES IDENTIFIED BY PURE EARTH: 450

HEALTH IMPACT: Improper management of chemical wastes causes vision loss, birth defects, damage to the central nervous and immune systems, pulmonary diseases, respiratory issues, and DNA damage. Toxins from pesticides and waste greatly elevate the risk factors for cancer.



India: Tannery worker drenched in toxic chemicals. Photo: Larry C. Price

Pure Earth's cleanups have improved the lives of over 4.5 million people since 1999. The team has completed 110 projects in 27 countries, training hundreds in remediation methods throughout this process.

Pure Earth developed and maintains the **world's largest toxic site database** which:

- collects, analyzes and prioritizes toxic sites;
- guides Pure Earth's cleanup and research activities; and
- provides vital data to policy makers and agencies.

TOTAL PROJECTS AND THEIR IMPACT





TIME TO CLEAN UP

Pure Earth Launches Campaign for 10 Million Lives (2016–2018)

Pollution causes 9 million deaths each year—more than the population of New York City—and inflicts physical and mental disability on millions more.

In late 2016, Pure Earth made a bold commitment to **raise \$10.4 million** to improve the health and lives of 10 million endangered women, men and children.

Imagine... \$1 helps 1 life.

Pure Earth has laid the groundwork with partners like the **World Bank**, the **European Commission**, **Icahn School of Medicine at Mount Sinai**, and the **United Nations Environment Programme**.



India: Women and children work scavenging coal from open pit mine while sharing child care duties. Photo: Larry C. Price



Zambia: A boy who lives near the notorious lead and zinc smelter in Kabwe drinks contaminated water that he collected. Pure Earth is cleaning up nearby residences. Photo: Larry C. Price

Join our community to raise \$10 million. Together, we can:

- impact the health of at least 10 million people, including 3.2 million children
- cleanup 35 of the world's most toxic sites
- launch Health Pollution Action Plans with at least 4 national governments
- increase research in understudied areas such as the impact of mercury and lead on human health which will guide our programs and policy makers
- expand Pure Earth's policy and public education efforts to ensure that this global threat gets the attention it deserves
- leverage \$38 million in public funding
- reduce health care costs and increase productivity with healthy workers

YOU CAN HELP

Together, we can achieve a Pure Earth for the millions who currently suffer from the life-threatening dangers of pollution... and for future generations of children.

\$10,000 cleans up an entire neighborhood's backyards where vegetables are grown and children play.

\$5,000 trains a community of small-scale gold miners to use more profitable, mercury-free methods.

\$2,500 cleans up 8 potters' workshops polluted with dangerous levels of lead.

\$1,000 cleans 5 contaminated homes.

\$500 supports an educational workshop in a highly contaminated community on the dangers of toxic chemicals and how to protect their families from additional poisoning.

\$100 funds the monitoring of blood lead levels for 10 children in toxic hot spots.



Life-saving opportunities await from \$25,000-\$250,000 and up to clean up sites threatening families in dozens of countries around the world—Southeast and Central Asia, Africa, Latin America. Please contact Carol Sumkin (carol@pureearth.org) or Jen Marraccino (jen@pureearth.org) at (212) 870-3490 for this important discussion.

Please join our campaign now. Make your check payable to Pure Earth or visit **www.pureearth.org/donate**.