



LEAD

LEAD FACTS IN BLACK AND WHITE AND GREEN

The Truth about African American Health and Pollution

The National Black Environmental Justice Network (NBEJN] wants you to know there is a connection between many of the chronic illnesses affecting our communities - such as asthma, lead poisoning and cancer - and our exposure to pollution. Numerous research studies have tied air pollution to asthma attacks, cardiovascular and respiratory illness, cancer, birth defects, and even death.¹ Lead is a known carcinogen, respiratory and neurological toxicant, and lead poisoning can affect nearly every system in the body.^{2,3,4}

Table 1

Health Effects - Selected Hazardous Air Pollutants

Pollutant	Carcinogen	Lungs	Other Organs
Carbon Monoxide		X	X
Lead	X	X	X
Nitrogen Oxide		X	X
Ozone		X	X
Particulate Matter	X	X	X
Sulfur Dioxide		X	X
VOCs	X	X	X
PAHs	X	X	X
Diesel Emissions	X	X	X
Coke Oven Emissions	X	X	X
Benzene	X	X	X

A few air pollutants, Carbon Monoxide (CO), Lead (Pb), Nitrogen Dioxide (NO₂), Ozone (O₃), Particulate Matter (PM), and Sulfur Dioxide (SO₂) called Criteria Air Pollutants, are common throughout the United States. VOCs = volatile organic compounds, such as benzene. PAHs = polycyclic aromatic hydrocarbons, such as Benzo(a)pyrene.

Source: Environmental Defense Chemical Scorecard (www.scorecard.org)

African Americans, Asian Americans, Latinos, indigenous peoples and the poor bear a disproportionate burden of America's environmental problems. Government agencies and industries overwhelmingly locate polluting facilities in communities of color and engage in hazardous and unsustainable development, over the protests of residents and in disregard of safer and more environmentally protective alternatives.

Consequently, the people who live in these communities are inundated with significant environmental and health hazards related to toxic waste sites, mining operations, incinerators, oil exploration, and other harmful developments. In the United States, approximately 60% of African Americans

live in communities with uncontrolled toxic waste sites. Three (3) out of five (5) of the largest hazardous waste landfills in the United States are located in predominantly African American or Latino communities.⁵ As a consequence, people of color have a higher incidence of cancer, lead poisoning, respiratory illnesses and a host of other serious and fatal environmentally-related health problems.

Unfortunately, the medical establishment and the existing public health paradigm do not emphasize the association of pollution. In an effort to combat these realities, NBEJN has launched the Healthy and Safe Communities Campaign to raise awareness, advance public policy initiatives and build the capacity of African American organizations to fight for our health and the health of our children, families, and neighborhoods.

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Lead Poisoning in the U.S.

- Lead poisoning occurs when you absorb too much lead, either by breathing or swallowing a substance with lead in it—such as food, dust or water.⁶
- Lead poisoning is a serious, yet preventable, condition that is particularly damaging to young children.⁷
- Lead is no longer present in new supplies of house paint, however, children who live in older housing remain at risk for lead poisoning due to deteriorated lead paint, with low-income and minority children experiencing the greatest risk.⁸
- Approximately 60% of housing units in the U.S. contain some lead paint.⁹
- Approximately 434,000 U.S. children aged 1-5 years have blood lead levels greater than the CDC recommended level of 10 micrograms of lead per deciliter of blood.¹⁰
- Low-income children are eight times more likely to live in older homes and apartments where lead paint causes a problem.¹¹
- Lead is even more dangerous to children than adults because children's growing bodies absorb more lead.¹⁸
- Because lead poisoning often occurs with no obvious symptoms, it frequently goes unrecognized.¹⁹
- Even children who appear healthy can have dangerous levels of lead in their bodies.²⁰
- Children's brains and nervous systems are more sensitive to the damaging effects of lead.²¹
- The so-called "safe" lead level (10 ug/deciliter) is definitely not safe; it reduces children's I.Q. Studies now show children being damaged at lead levels as low as 2 or even 1 ug/deciliter.²²
- In adults, lead poisoning can cause serious health problems, including: high blood pressure, damage to the central nervous system, stomach and kidneys.²³
- People who have worked in jobs with high levels of lead exposure are about 3 times more likely to develop Alzheimer's disease, according to a study by scientists at Case Western Reserve University and University Hospitals.²⁴

The Lead Poisoning Epidemic in Black America

- While lead poisoning crosses all socioeconomic, geographic and racial boundaries, the burden of this disease falls disproportionately¹² on low-income families and families of color.
- Black children are five times more likely than white children to have lead poisoning.¹³
- 1 in 7 black children living in older housing has elevated blood lead levels.¹⁴
- About 22% of African American children and 13% of Mexican American children living in pre-1946 housing are lead poisoned, compared with 6% of white children living in comparable types of housing.¹⁵
- Recent studies show that workers exposed to 20-29 ug/deciliter of lead in blood have greatly increased risks of heart disease (39%) and cancer (68%) with an overall mortality increase of 46%.²⁵
- The Adult Blood Lead Epidemiology and Surveillance (ABLES) system defines an adult as a person aged greater than or equal to 16 years and an elevated blood lead level in an adult as greater than or equal to 25 ug/deciliter.²⁶

Pollution and Lead Poisoning

- Children may breathe air from nearby smelters, batter plants, and industrial facilities that process lead.²⁷
- A large body of evidence shows that the most common source of lead exposure for children today is lead paint in older housing and the contaminated dust and soil it generates.²⁸
- Many houses and apartments built before 1978 have paint that contains lead.²⁹

The Effects of Lead Poisoning

- Lead poisoning affects virtually every system in the body, and can cause learning disabilities, behavioral problems, seizures, coma, and even death.^{16,17}

- Drinking water can be a significant source of lead exposure in some homes and buildings.³⁰
- Children may be exposed to lead through drinking water that has elevated lead levels from lead plumbing materials.³¹
- Exposure to lead from nearby hazardous waste sites also is a concern.³²
- Today, Industrial processes are the major source of lead emissions to the atmosphere according to the U.S. EPA.³³

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Work with us! For more information on the National Black Environmental Justice Network and the Healthy and Safe Communities Campaign, contact:

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