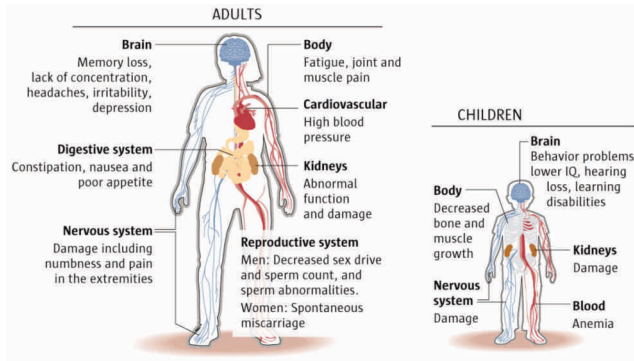


## Health Effects of Lead



Talk to your neighbor about the dangers of lead and how they can reduce exposure

## WHAT CAN YOU DO TO REDUCE EXPOSURE TO LEAD?

- Washing hands and face frequently, especially before eating and bed time
- Keep your house clean and free of dust - wet mop when cleaning floors and walls
- Practice wet wiping of furniture, household appliances and washing of dishes
- For people exposed or working in lead contaminated areas, remove and wash clothes upon return home, keep work clothes separate from other clothes
- Clean vehicle interiors to remove dust
- Avoid walking barefoot other than in clean areas
- Avoid creating dust – moisten areas before sweeping
  - Cover your yard with unpolluted clean soil cover and maintain the clean soil cover

- Wash locally grown vegetables thoroughly
- Maintain grass cover wherever possible
- Clear drains to prevent flooding of lead polluted water and soil
- Have your children play in lead safe designated play centres

## Where can you get information about lead pollution from:

Environment Africa  
 Flat No E3 Moyo Farms, Dallas  
 P. O. Box 80800, Kabwe  
 0 260 975 379 734  
[namo@environmentafrica.org](mailto:namo@environmentafrica.org)  
[www.environmentafrica.org](http://www.environmentafrica.org)

Kabwe Municipal Council  
 Department of Housing and Social Services  
 Plot No?????  
 P. O Box ?????, Kabwe  
 Phone:  
 Email:

Pure Earth website: [www.pureearth.org](http://www.pureearth.org)  
[info@pureearth.org](mailto:info@pureearth.org)



## WHAT YOU NEED TO KNOW ABOUT LEAD EXPOSURE IN KABWE

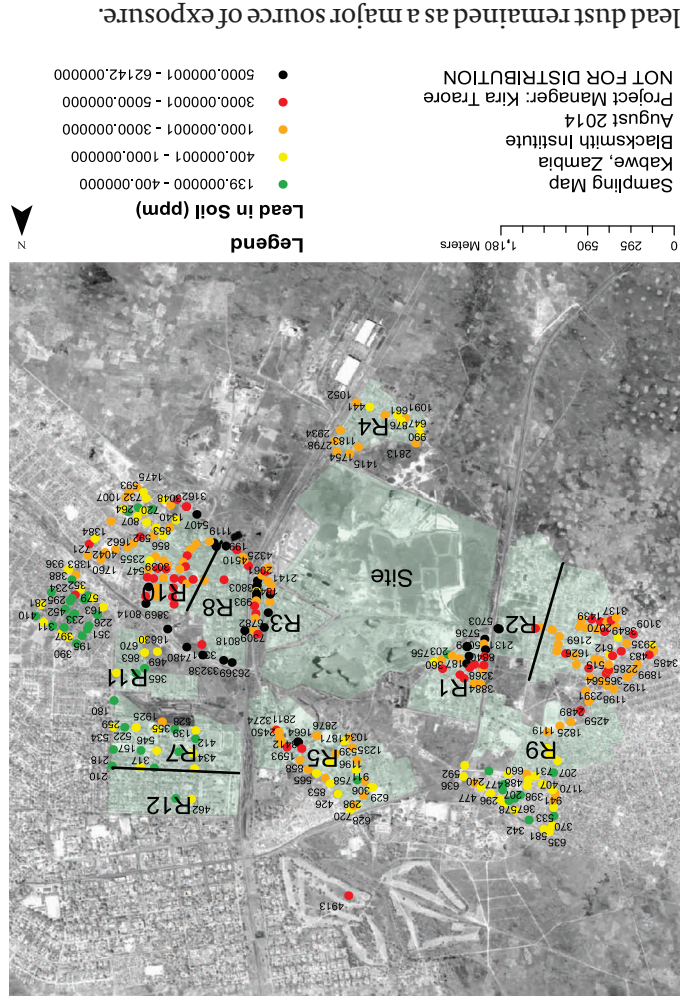


ENVIRONMENT AFRICA

*"This document has been produced with support from TDH and Pure Earth. The content of this publication is the sole responsibility of Environment Africa and can in no way be taken to reflect the views of TDH and Pure Earth."*

Environment Africa is an environmental nongovernmental organisation working in Zambia advocating for the protection of citizens environmental rights and community participation in environmental decision making and policy formulation processes.

**WHAT IS LEAD:** Lead is a heavy metal with poisonous effects on the human body. Lead is widespread in Kabwe due to many years of mining. When mining stopped in 2004



Lead dust remained as a major source of exposure.

Sampling Map  
Kabwe, Zambia  
Blacksmith Institute  
August 2014  
Project Manager: Kira Taore  
NOT FOR DISTRIBUTION

**WHERE DO YOU FIND LEAD IN KABWE:**

Lead is found mainly around the old mine area, tailing dumps and in the townships around the old mine. The most affected areas are:

- Katondo
- Chowa
- Mine
- Makuluju
- Parts of Luangwa
- Kasanda
- Railways

**FACTORS IN LEAD EXPOSURE**

- Level of contamination of soil
- Dustiness of soil
- Time spent by children in contaminated areas

**HOW IS TRANSPORTED AROUND THE ENVIRONMENT?**

- Through wind blown dust:

- o High wind levels result in more lead mobilised from road, fields and tailing piles

- o The closer the distance from source the more exposure to lead

- o Amount of traffic in dust producing areas increases lead exposure i.e vehicles.

- Through Surface runoff
- o Particles carried off-site in drainage ditches and streams
- o Blocked drains allow lead to spread in the environment

- Contaminated Clothing and Shoes for people working in lead areas and the mine dumps
- Vehicle Tyres and dusty
- Imported lead contaminated soil and vehicles

construction and yard quarry used for



**WHAT ARE THE MAIN LEAD EXPOSURE ROUTES?**

- Ingestion of contaminated soil
- o Eating without washing after handling lead contaminated soils
- o Children eating soil
- o Chewing fingernails, licking hands etc.
- o Breathing in of dust, then coughing up and swallowing it

- Inhalation: Very small particles reach and cross lung/blood barrier
- Skin Contact: Contaminated dust on the body/skin may present a lead ingestion risk
- Contaminated Food Ingestion
- o Lead dust may find its way on roots and leafy vegetables in the garden

- Drinking water: Inorganic lead does not dissolve in water. Lead levels in normal water are not a serious concern.

**WHAT HEALTH EFFECT DOES LEAD EXPOSURE CAUSE?**

- Excessive lead exposure may cause:
- o Memory loss, loss in coordination and negative speech development
- o Intelligence loss in children
- o Stomach pain, numbness, fatigue and weight loss
- o Disability and may result in death at high doses

- Children are most affected because:
- o They have smaller bodies and exposure result in proportionally greater impact
- o Children tend to ingest more dirt because of their outdoor playing habits
- o Their Neurological development still in progress