BUNKER HILL / Coeur d'Alene Basin Superfund

LEAD EXPOSURE

There Is No Safe Level

EMILY HASZ Lead Health Intervention Program Outreach Coordinator Panhandle Health District

Mining in North Idaho

- Hard rock mining of the area began in 1884 (Burke)
- Men came looking for gold, but found the area was rich in metals such as lead, silver, zinc, arsenic, and cadmium
- From 1884 1980 area mines produced approximately 7.5 million tons of lead, 4 million tons of zinc, and 1 billion ounces of silver



Early Methods

- Early processing methods were inefficient, recovering less than 75% of metals from the ore
- The mines wished to stockpile these tailings in hopes of reprocessing them when technologies improved but our limited flat ground prevented this practice
- Mines were instead forced to dispose of waste or use it for other purposes



The Problems with Tailings





Flooding

- Historic flooding events contributed to the spread of contamination
- Flooding continues to spread contamination

Lead Creek

Coeur d'Alene Lake

 Contamination has travelled through Lake Coeur d'Alene and into Washington State, where cleanup has been required along the Spokane River



Picture taken in 1991 10 years after the smelter had shut down

2000

THE R. P.

Bunker Hill Superfund Site

- Designated in 1983
- Site covers 1500 square miles
- Largest lead superfund site in the nation





Cleanup efforts began in 1986 and continue today

- Contamination is widespread, deep, and can not be completely removed
- Partial removals were completed, placing clean soil/gravel caps over contaminants sitewide

Remediation

- Hillsides were treated with lime to help neutralize acids in the soils
- Terraces were cut to prevent erosion of newly planted trees





Hillsides Can Still Be Contaminated

- Lead contamination was not removed from hillsides impacted by smelter smoke
- Recreating on contaminated hillsides can expose you to heavy metals



The Problem is Ongoing

 Individuals and families still recreate in contaminated areas

Why is lead a concern?



Exposure Pathways

Ingestion

- Eating with dirty hands
- Eating food dropped on the ground
- Chewing or smoking with dirty hands

Inhalation

• Breathing in dust



Education is Key

- Warning signs are not posted in all contaminated areas
- Educate yourself about areas where contamination can be found and avoid these areas

CAUTION

High levels of lead, arsenic, and other heavy metals from past mining activities are present in this area. Limit contact with the soil, sediments, and water.

For Information contact: (208) 783-07-



Lead Health Intervention at the Bunker Hill Site



- Free blood lead testing began in 1974 and is available year-long to anyone that lives, works, or recreates with the site boundaries.
- In-home follow ups, including in-home testing for any resident with elevated blood lead levels, are provided free of charge.
- Year-round outreach and education are provided to local schools and at community events.
- Each August we conduct an annual, voluntary lead screening event:
 - Approximately 400 individuals were tested in 2024

Bunker Hill Box Average Blood Lead Levels 1974-2024*



*not enough samples in 2003-2012, 2014, 2015, 2020, & 2021

What Should I Do to Avoid Lead Exposure?

- Avoid contact with dirt, dust, and sand when eating
- Bring clean water for drinking and washing your hands
- Brush off or wash pets exposed to dirt or sand



What Should I Do When Fishing?

- Catch and release (safest)
- Follow fish advisory for safe consumption
- fishadvisory.dhw.idaho.gov
- Clean all gear before leaving



What Should I Do When Hiking or Riding?

- Avoid historic mine and mill sites and other contaminated areas
- Avoid riding on dusty days
- Avoid riding in large groups
- Wear masks made to filter dust particulates



What Should I Do When Boating or Swimming?

- Avoid dry, sandy areas
- Brush or wash off dirt or dust after swimming
- Bring clean water for drinking and washing your hands
- Don't drink water from lakes, rivers, and streams



What Should I Do When Camping?

- Camp in clean or remediated areas. Grassy areas are preferred.
- Avoid areas that are known to be contaminated (mine and mill sites, riverbanks, sandy areas, etc.)
- Keep surfaces clean and dust free
- Remove shoes before entering tents and campers
- Remove dirt and dust from clothing and equipment before leaving the area



What Should I Do After Recreating?

- Clean all equipment before leaving the area
- Use decon/washing stations if they are provided at an event or recreational area
- Clean equipment prior to storing
- Wash clothing and gear, separately



Questions?



cdabasin.idaho.gov