

What Does Living On A Landfill Mean To My Health?

by Dr. Kenneth Dangman, M.D., Ph.D., M.P.H., UCONN Environmental Health Specialist

Q: Is My High Blood Pressure Related to the Exposure to Lead?

- The best answer is “Maybe” - high blood lead levels may increase blood pressure, but so can dietary and genetic factors.
- Recommendations:
 - See Your Doctor and discuss this issue if you have a high blood pressure. Let him know of your concerns. High blood pressure must be treated.
 - Maintain good nutrition (calcium, iron and vitamins) to help reduce lead uptake and increase lead elimination.

Q: Can Lead Exposure Cause Cancer?

- Studies on laboratory animals show that very high amounts of lead exposure causes cancer
- Whether high amounts of lead exposure causes cancer in people remains an open question
- There are cancer studies in workers from lead smelters and battery plants who had high blood lead levels (averaging 60 to 80 ug/dL)
- Two studies found an association with cancer, and two studies did not.
- However, these studies are limited to:
 - Workers exposed to other chemicals
 - Cancer risk from smoking not accounted for
 - Details of exposure not always reported

Q: What do blood and bone lead levels tell us about health risks?

- Blood Lead levels reflect current exposures and uptake (over the last 1- 3 months)
 - CDC (Centers for Disease Control and Prevention) level of concern in children is 10 ug/dL
 - OSHA (Occupational Health and Safety Administration) levels are 40 ug/dL for increased monitoring in workers, and 50 ug/dl for removal from workplace exposures.
- Bone Lead studies reflect exposures and uptake over several decades.
- A high bone lead level generally is associated with high blood levels.

Q: Can a Blood Lead Test Tell You Whether the Lead Came From Lead Paint or the Landfill Waste?

- I am not aware of any such test...

Q: What About Medical Tests for Other Toxic Chemicals Found on the Site?

Arsenic toxicity is usually followed with urine tests (and some doctors may check hair or fingernail levels). For PAHs, I am not aware of validated tests for blood or tissue levels...

Q: If I am Exposed to Chemicals such As Barium, Vanadium, or Selenium, Will They React to Other Medicines I am Taking?

Perhaps, but I am not aware of any interactions. (Barium swallow tests are routinely used in medicine today, and Selenium pills are sold in health food stores). You should discuss this with the doctor(s) who are prescribing your medications.

Q: Are There Any Medical Conditions That Would Make Someone More At Risk for Health Problems From the Landfill Contaminants?

For lead risks, this is possible, and you should discuss this with a doctor who knows you and your medical history.

Factors that could interact with lead exposures to cause health problems :

- Poor nutrition (Low calcium, iron or Vitamin C intake may increase lead absorption by the body).
- High salt or alcohol intake may contribute to high blood pressure
- Pica/Geophagia (eating clay from contaminated areas)

Continued on next page...

Q: What can I do from here on out to protect myself as well as possible?

Take the fingerstick blood lead test today and discuss the results with your own doctor. Depending on your results, exposures and symptoms, he or she may want to recheck your blood lead level (in your veins).

This is particularly important if you have or are regularly being bothered by:

- Tremors
- Headaches
- Unexplained joint pain
- Sugar in your urine
- Attention deficit disorder

If your blood lead level is high, try to reduce your exposures to lead.

- Vegetable gardening per DPH (Department of Public Health) Fact Sheet (www.newhallinfo.org, Health section)
- Avoid drinking or eating from lead crystal glasses, decanters, etc.
- Check lead in household water - run tap water for 30-60 seconds before drinking
- Use caution if doing home repairs, repainting
- Avoid some hobbies: Target shooting, melting lead to make fishing sinkers, stained glass making, etc. can expose you to lead fumes.

Q: What can I do from here on out to protect myself as well as possible?

- Re-check your blood lead level after 1-2 months of avoiding lead intake.
- Diet: adequate calcium, iron and Vitamin C
- Certain things release stored lead from bones:
 - Osteoporosis (calcium loss from bone)
 - Overactive thyroid gland disease
 - Pregnancy and breast feeding

Q: What do I do if the blood lead level remains high after reducing my exposures as much as possible?

- There is a bone lead test that may be helpful.
- This is an X-ray research technique called “KXRF”, which measures levels in leg bones.
 - This is experimental and not done in any hospital in Connecticut.

Q: Should everyone in Newhall get a Bone Lead measurement using “KXRF”?

- Not necessarily. If your bone lead level is high, blood lead probably will be too.
- This technique will expose you to radiation, which may have harmful effects.
- This test should be done only if necessary.
- You should see your own doctor to discuss the pros and cons of seeking this test.

The closest medical centers where you can have your bone lead level tested are in NYC (at Mt Sinai Medical Center) and in Boston (at Harvard Medical School).

Summary

Risks of developing illness from living in the Newhall neighborhood may vary greatly from person to person. Talk to your doctor about evaluation of your lead levels, maintaining good nutrition to reduce lead effects on your body, and about doing all the nationally recommended preventative health screening tests for adults and children.