



# How to Reduce Your Exposure to Arsenic and Lead in Dewey-Humboldt, Arizona



*This factsheet gives tips for protecting yourself and your family from coming into contact with arsenic and lead.*

## Why is exposure to arsenic and lead a concern in the Dewey-Humboldt area?

The Dewey-Humboldt area in Arizona has arsenic and lead from naturally occurring sources and from past mining and smelting activities. There is arsenic and lead in soil, dust and groundwater. Some foods can also contain arsenic.

Arsenic exposure at high doses can cause skin problems, stomach ache and nausea. Arsenic exposure over many years also raises the risk of bladder, lung, liver, and skin cancer. You can read more about the health effects of arsenic at: [www.atsdr.cdc.gov/tfacts2pdf](http://www.atsdr.cdc.gov/tfacts2pdf)

Lead exposure at high doses can cause anemia, stomach ache, muscle weakness and damage to the brain and kidneys. In children, even low doses can affect IQ, ability to pay attention, and academic success, and cause behavioral problems.

You can read more about the health effects of lead at: [www.atsdr.cdc.gov/facts13.pdf](http://www.atsdr.cdc.gov/facts13.pdf)



## How can I reduce my exposures to arsenic and lead?

### Make sure your drinking water is safe

In some places, groundwater in the Dewey-Humboldt area contains arsenic and other contaminants at levels above federal and state drinking water standards.



*If you have a private well that you use for drinking water, you should test it for arsenic and lead. ADHS can help you with testing, see the table below.*

- ✓ If a first test of your well water shows arsenic above 10 parts per billion (ppb), or lead 15 ppb or higher, collect and test a second sample before making any decisions about water treatment.
- ✓ If a second test shows that your well has arsenic above 10 ppb, or lead 15 ppb or higher, you should install a water treatment system that removes arsenic and lead.
  - \* Use a different water source for drinking and cooking until you are able to install a water treatment system.
- ✓ You may need to test your well for metals every three years. In addition, ADHS recommends you test your well water yearly for bacteria.

*If you get your water from the Humboldt Water System, your water is already tested for arsenic, lead and other contaminants.*

The Humboldt Water System is a public drinking water system and is required to provide water that meets all state and federal drinking water standards. You can get a copy of the Humboldt Water System "Annual Consumer Confidence Report" by calling the Humboldt Water System at (928) 301-3723.

## Help on groundwater wells, water treatment systems, and public water

### For questions about ...

### Call:

... how often to test your private groundwater well	ADHS at (602) 364-3128
... which contaminants to test your well for	ADHS at (602) 364-3128
... how to find a water testing lab	ADHS lab at (602) 364-0728
... understanding water test results	ADHS at (602) 364-3128
... how to pick a water treatment system	Dr. Janick Artiola at the University of Arizona at (520) 621-3516
... water from the Humboldt Water System	Humboldt Water System at (928) 301-3723 or ADEQ at (602) 771-4641

## Practice safe gardening



- ✓ Wash all fruits and vegetables whether they are homegrown or bought.
  - ✓ Wash your hands after gardening and before eating or drinking.
  - ✓ Limit the time children spend digging or playing in soil. A sandbox with clean sand is a healthier place for digging and playing.
  - ✓ Research in Dewey-Humboldt found that lettuce, radishes, broccoli, Brussels sprouts, kale, cabbage, spinach, Swiss chard, and beets store more arsenic than other garden vegetables. Consider eating a limited amount of these vegetables from your garden.
- ✓ More information on gardening in soil possibly contaminated with arsenic is available from the University of Arizona Superfund Research Program at [www.superfund.pharmacy.arizona.edu/content/gardenroots](http://www.superfund.pharmacy.arizona.edu/content/gardenroots) on the "Recommendations/Resources" tab.

## Reduce dust in your home

- ✓ Limit the amount of soil you bring into your home by taking off coats, outerwear and shoes when entering your home and use a walk off mat at doorways to the outside.
- ✓ Vacuum carpets and rugs before mopping non-carpeted areas. If possible, use a vacuum with a high-efficiency particulate air (HEPA) filter.
- ✓ Use a wet mop on hard floors and clean window sills with wet rags regularly.
- ✓ Wash your hands and your children's hands often, especially before eating and after outdoor activities.
- ✓ Be aware of other possible lead sources, like lead paint in older homes.



## Ask your doctor to test your children's blood for lead



- ✓ At a minimum, all children in Yavapai County should have their blood tested for lead at age 1, and again at age 2. If you think a child of any age has come in contact with lead, then test that child's blood for lead.
- ✓ If you suspect your children may be exposed lead, call your doctor or ADHS at (602) 364-4676 for more information.

## Is there a medical test to show if I've been exposed to arsenic?

Testing urine for arsenic can show if you have been exposed in the last few days. But results cannot predict whether the arsenic levels in your body will affect your health. To learn more about testing urine for arsenic contact ATSDR at (415) 947-4316.

## Who is working in my community?

The groups listed below are working on environmental cleanup, and looking into whether there are levels of arsenic and lead that could cause health effects to people in the community.

Agency		Contact Information
ADEQ	Arizona Department of Environmental Quality	(800) 234-5677 ext.7714641 • <a href="http://azdeq.gov">azdeq.gov</a>
ADHS	Arizona Department of Health Services	(602) 364-3128 • <a href="http://azhealth.gov">azhealth.gov</a>
ATSDR	Agency for Toxic Substances and Disease Registry	(415) 947-4316 • <a href="http://atsdr.cdc.gov">atsdr.cdc.gov</a>
EPA	Environmental Protection Agency	(415) 972-3068 • <a href="http://epa.gov/region09/ironkingmine">epa.gov/region09/ironkingmine</a>
UA	University of Arizona	(520) 307-3452 • <a href="http://superfund.pharmacy.arizona.edu">superfund.pharmacy.arizona.edu</a>