

ArsenicUnderstanding Your Arsenic Test Results

What is arsenic?

Arsenic is a chemical present in the environment as a naturally occurring substance and as a result of human activity. It is found in water, air, food and soil.

There are two general types of arsenic: **organic** and **inorganic**. The inorganic forms of arsenic are the harmful forms, while most of the organic forms of arsenic are essentially harmless.

There was arsenic found in my urine sample. Should I be concerned?

Everyone has a small amount of arsenic in their body from water, air, food and soil. Some fish and shellfish contain a form of organic arsenic called "fish arsenic." Fish arsenic is much less harmful than other forms of arsenic. Your body does not easily absorb fish arsenic and it leaves your body through the urine.

The most reliable way to test for recent arsenic exposure is through a urine test. If you had a fish meal or ate fish supplements within a few days of having a urine test, the test may show a high level of arsenic. This should not worry you because the fish arsenic has left your body through the urine.

Workers in industries where arsenic is used may be exposed to harmful forms of arsenic. These industries may include copper smelting, lead smelting, wood treatment or pesticide production. Urine tests and other medical screenings may be used by employers to check these workers for arsenic exposure.

What are some other ways that people can be exposed to arsenic?

Examples include:

- Drinking water from a private well contaminated by arsenic
- Handling lumber or burning wood that has been treated with arsenic-containing preservatives
- Living near a hazardous waste site that contains a large amount of arsenic

What should I do if I am concerned about my test results or possible arsenic exposures?

Talk to your health care provider about your concerns and whether or not you should be tested again. If you have another arsenic test, do not eat fish, shellfish or fish supplements for several days prior to the test. This will help keep fish arsenic out of your test result. If you get your drinking water from a private well, your local health department may be able to advise you on whether you should test for arsenic when you test the water quality of your well.

If you are exposed to arsenic at work, your employer is required to follow regulations set by the federal Occupational Safety and Health Administration (OSHA):

https://www.osha.gov/index.html

You may also contact one of the clinics in the New York State Occupational Health Clinic Network for medical consultation and support services:

http://www.health.ny.gov/environmental/workplace/clinic_network.htm

What are the health effects of arsenic?

Exposure to high levels of arsenic can cause nausea, vomiting, abnormal heart rate, damage to blood vessels, and a sensation of "pins and needles" in the hands and feet. Eating or breathing low levels of inorganic arsenic for a long time can cause darkening of the skin and the appearance of small corns or warts on the palms, soles and body. Breathing or eating inorganic arsenic can increase the risk for certain cancers.

The health effects of arsenic depend on its chemical form, how much enters the body, how it enters the body, how long the person has been exposed, the health status of the person, and other factors.

Why were my test results sent to the New York State Heavy Metals Registry?

Health care providers and laboratories are required by regulation to report urine arsenic test results to the New York State Department of Health. This reporting system is designed to identify people who may be harmed by arsenic through their jobs or from other sources so that measures can be taken to protect their health.

If you would like more information on exposure to and control of arsenic in the workplace, contact the State Health Department's Bureau of Occupational Health and Injury Prevention at 518-402-7900.