



## ARSENIC

### I. Protocol Overview

Arsenic is a metal that can cause death if ingested at high levels. Lower levels of arsenic can cause nausea, vomiting, decreased production of red and white blood cells, abnormal heart rhythm, damage to blood vessels, and a sensation of "pins and needles" in hands and feet. Ingesting or inhaling low levels of inorganic arsenic – or high levels of organic arsenic – for prolonged periods can cause a darkening of the skin and the appearance of small "corns" or "warts" on the palms, soles, and torso.

For all suspected chemical exposures, consult the Poison Control Center (800-222-1222) located at Children's Hospital of Philadelphia. Information and treatment advice is available to the public and healthcare professionals at no charge.

Inductively Coupled Plasma Mass spectrometry (ICP/MS) and Inductively Coupled Plasma Dynamic Reaction Cell Mass Spectrometry (ICP-DRC/MS) methods are used to detect the total urinary arsenic present in the sample. Samples are acidified and arsenic is quantified via elemental separation followed by mass spectrometry analysis. ICP/MS and ICP spectroscopy methods are used to detect arsenic in environmental and food samples. Speciation for arsenic often couples ion chromatography with ICP methods, IC-ICP-DRC/MS.

The Delaware Public Health Laboratory does not perform this testing. Contact the CDC or the Poison Control Center.

### II. Contact Information

24/7 CDC Emergency Contact Number: 1-888-295-5156

Poison Control Center: 215-386-2100

### III. CDC Website

<http://emergency.cdc.gov/agent/arsenic/casedef.asp>