

Laboratory

ARSINE (SA)

I. Protocol Overview

Arsine (SA), classified as a blood agent, is a derivative of arsenic and a highly toxic gas that does not provide adequate warning of high levels of exposure since onset of symptoms is not immediate. Inhalation symptoms at lower concentrations can include weakness, fatigue, headache, confusion, breathing disorders, nausea, vomiting, abdominal pain, discolored urine, jaundice, and cramps.

Exposure to high concentrations by any route can result in unconsciousness, convulsions, paralysis, respiratory failure, and death. Arsine poisoning is often referred to as Stibine poisoning though Stibine is a similar toxic gas. 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.

There is currently no known biological marker is available for arsine exposure; however, arsine exposure may be indicated by detection of elevated arsenic levels in urine (>50 μ g/L for a spot or >50 μ g for a 24-hour urine) and signs of hemolysis (e.g., hemoglobinuria, anemia, or low haptoglobin). Refer to the Arsenic fact sheet and collection guidance for clinical samples. The most common method available to detect arsine in environmental samples uses graphite furnace atomic adsorption spectroscopy (GFAAS).

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/arsine/casedef.asp

24/7 Emergency Contact Number: 302-223-1520