

# Laboratory

## **STRYCHNINE**

#### I. Protocol Overview

The primary natural source of strychnine is the plant *Strychnos nux vomica*, found in southern Asia and Australia. It was available in a pill form and was used as a respiratory, circulatory, and digestive stimulant. It is used primarily as a rodenticide, and is soluble in water. Strychnine is also found as an adulterant in street drugs such as amphetamines, heroin, and cocaine.

Strychnine poisoning signs and symptoms are severe, painful spasms of the neck, back, and limbs, and convulsions with an intact sensorium. Symptoms might progress to coma. Tachycardia and hypertension are also common effects. The minimum lethal dose is estimated to be 15 to 30 mg for children and 50 to 100 mg for adults, although with adequate treatment recovery may occur after the ingestion of 250 mg or more.

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.

Strychnine can be detected in urine and serum using gas chromatography nitrogen phosphorus detection (GC-NPD) and gas chromatography mass spectrometry techniques (GC/MS). Strychnine is detected in food and environmental samples through capillary electrophoresis (MEKCS) with UV-detection after solid phase extraction.

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/strychnine/basics/facts.asp

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