



TETRODOTOXIN

I. Protocol Overview

The primary natural sources of tetrodotoxin are many species of puffer fish, blowfish, and fugu. Several species of octopus, frogs, crabs, and starfish as well as the California newt also produce tetrodotoxin. Rapid onset (20 minutes to 3 hours) of signs and symptoms including oral paresthesias (might progress to include the arms and legs), cranial nerve dysfunction, a sensation of lightness or floating, headache, epigastric pain, nausea, diarrhea, vomiting, and weakness (might progress to paralysis). In severe poisoning, dysrhythmias, hypotension, and even death might occur within 4-6 hours.

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.

Tetrodotoxin can be detected in environmental samples in commercial laboratories and by an enzyme-linked immunosorbent assay (ELISA) method in biologic samples. Urinary tetrodotoxin can be assessed by liquid chromatograph tandem mass spectrometry (LC/MS/MS) techniques. Samples are extracted and pre-concentrated and then quantified using mass spectrometry analysis.

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/tetrodotoxin/casedef.asp>