

## **SODIUM MONOFLUROACETATE (MFA or Compound 1080)**

## I. Protocol Overview

Sodium monofluoroacetate (aka sodium fluoroacetate) occurs naturally in at least 40 plants and is believed that the compound is even present in tea leaves in tiny amounts. Signs and symptoms of poisoning appear between 30 minutes and four hours after exposure and include: vomiting, involuntary hyperextension of the limbs, metabolic acidosis, hypotension, dysrhythmias, seizures, coma, and finally cardiac and respiratory collapse, often mimicking an acute heart attack. There is no known effective antidote. Lower doses may cause damage to tissues with high-energy needs such as the brain, gonads, heart, lungs, and fetus. Lower doses are typically completely metabolized and excreted within four days. Few animals or people have been treated successfully after significant compound 1080 ingestions.

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.

Mass spectrometry methods are used to detect MFA in urine, environmental, and food samples. Samples are extracted and MFA is quantified via liquid chromatography (LC) separation followed by isotopic dilution mass spectrometry analysis (LC/MS/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/sodiummonofluoro/casedef.asp