



CASE DEFINITION

Tetrodotoxin

Clinical description

The consumption of toxic amounts of tetrodotoxin results primarily in neurologic and gastrointestinal signs and symptoms. In severe poisoning, dysrhythmias, hypotension, and even death might occur (1, 2). If a rapid onset of one of the following neurologic and gastrointestinal signs or symptoms occurs, the clinical description for tetrodotoxin poisoning has been met: 1) oral paresthesias (might progress to include the arms and legs), 2) cranial nerve dysfunction, 3) weakness (might progress to paralysis), or 4) nausea or vomiting.

Laboratory criteria for diagnosis

- *Biologic*: No biologic marker for tetrodotoxin exposure is available.
- *Environmental*: No method for detection of tetrodotoxin in environmental samples is available commercially.

Case classification

- *Suspected*: A case in which a potentially exposed person is being evaluated by health-care workers or public health officials for poisoning by a particular chemical agent, but no specific credible threat exists.
- *Probable*: A clinically compatible case in which a high index of suspicion (credible threat or patient history regarding location and time) exists for tetrodotoxin exposure, or an epidemiologic link exists between this case and a laboratory-confirmed case.
- *Confirmed*: A clinically compatible case in which laboratory tests (not available for tetrodotoxin) are confirmatory.

The case can be confirmed if laboratory testing was not performed because either a predominant amount of clinical and nonspecific laboratory evidence of a particular chemical was present or a 100% certainty of the etiology of the agent is known.

Additional resources

1. Sims JK, Ostman DC. Pufferfish poisoning: emergency diagnosis and management of mild human tetrodotoxication. *Ann Emerg Med* 1986;15:1094-8.
2. Torda TA, Sinclair E, Ulyatt DB. Puffer fish (tetrodotoxin) poisoning: clinical record and suggested management. *Med J Aust* 1973;1:599-602.

This document is based on CDC's best current information. It may be updated as new information becomes available. For more information, visit www.bt.cdc.gov/chemical, or call CDC at 800-CDC-INFO (English and Spanish) or 888-232-6348 (TTY).

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