CASE DEFINITION

Brevetoxin

Clinical description

After oral ingestion, brevetoxin poisoning is characterized by a combination of gastrointestinal and neurologic signs and symptoms. The incubation period ranges from 15 minutes to 18 hours. Gastrointestinal symptoms include abdominal pain, vomiting, and diarrhea. Neurologic symptoms include paresthesias, reversal of hot and cold temperature sensation, vertigo, and ataxia. Inhalational exposure to brevetoxin results in cough, dyspnea, and bronchospasm (1-5).

Laboratory criteria for diagnosis

- **Biologic**: Brevetoxin can be detected by an enzyme-linked immunosorbent assay (ELISA) method in biologic samples; however, ELISA of biologic samples is not a certified method for detection of brevetoxin.
- **Environmental**: Any concentration of brevetoxin in environmental samples (5), as detected by a commercial laboratory.

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 brevetoxin exposure, or an epidemiologic link exists between this case and a laboratory-confirmed case.
- **Confirmed**: A clinically compatible case in which laboratory tests on environmental samples 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


