



## CASE DEFINITION

### Nicotine

#### Clinical description

After oral ingestion of nicotine, signs and symptoms of nicotine poisoning mimic those for nerve agent or organophosphate poisoning and typically include excess oral secretions, bronchorrhea, diaphoresis, vomiting (common, especially among children), diarrhea, abdominal cramping, confusion, and convulsions. Although tachycardia and hypertension are common, bradycardia and hypotension might also occur as a result of a severe poisoning (1, 2).

#### Laboratory criteria for diagnosis

- *Biologic:* A case in which increased nicotine or cotinine (the nicotine metabolite) is detected in urine, or increased serum nicotine levels occur, as determined by a commercial laboratory or CDC.  
- OR -
- *Environmental:* Detection of nicotine in environmental samples, as determined by NIOSH or FDA.

#### 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 nicotine exposure, or an epidemiologic link exists between this case and a laboratory-confirmed case.
- *Confirmed:* A clinically compatible case in which laboratory tests have confirmed exposure.

#### Additional resources

1. CDC. Green tobacco sickness in tobacco harvesters---Kentucky, 1992. MMWR 1993;42:237-40. Available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/00020119.htm>
2. CDC. Nicotine poisoning after ingestion of contaminated ground beef---Michigan, 2003. MMWR 2003;52:413-16. Available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5218a3.htm>

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](http://www.bt.cdc.gov/chemical), or call CDC at 800-CDC-INFO (English and Spanish) or 888-232-6348 (TTY).