

CHEMICAL EMERGENCIES

CASE DEFINITION

Opioids (Fentanyl, Etorphine, or Others)

Clinical description

Exposure to opioids typically occurs through ingestion but potentially can result from inhalation, if opioids are aerosolized. Clinical effects of opioid poisoning result from central nervous system and respiratory system depression manifesting as lethargy or coma, decreased respiratory rate, miosis, and possibly apnea (1, 2).

Laboratory criteria for diagnosis

• *Biologic*: A case in which opioids are detected in urine, as determined by hospital or commercial laboratory tests. Fentanyl derivatives and certain other synthetic opioids (e.g., oxycodone) might not be detected by routine toxicologic screens.

- OR-

• Environmental: Detection of opioids in environmental samples, as determined by 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 opioid 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.

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. Nelson LS. Opioids. In: Goldfrank LR, Flomenbaum NE, Lewin N-A, Howland MA, Hoffman RS, Nelson LS, eds. Goldfrank's toxicologic emergencies. 7th ed. New York, NY: McGraw-Hill; 2002:901-23.
- 2. Sporer KA. Acute heroin overdose. Ann Intern Med 1999;130:584-90.

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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