



## CASE DEFINITION

Interim Document, 7-30-03

## Riot Control Agent Poisoning

### Clinical description

Most exposures to riot control agents occur by inhalation and typically lead to complaints of eye, nose, and throat irritation; hacking cough; suffocation or choking sensation; and dyspnea. Skin burns and rash are possible with cutaneous exposures.

### Laboratory criteria for diagnosis

Detection of riot control agents in environmental samples. Riot control agents include chloroacetophenone (CN), chlorobenzylidenemalononitrile (CS), chloropicrin (PS), bromobenzylcyanide (CA), dibenzoxazepine (CR), and combinations of various agents.

### Case classification

- *Probable*: a clinically compatible case with a high index of suspicion (reliable intelligence or patient history) for tear gas exposure
- *Confirmed*: a clinically compatible case that has laboratory confirmation or an epidemiologic link to a laboratory-confirmed case

### Additional resources

Danto BL. Medical problems and criteria regarding the use of tear gas by police. *Am J Forensic Med Pathol* 1987;8(4):317-22.

Fraunfelder FT. Is CS gas dangerous? Current evidence suggests not but unanswered questions remain. *BMJ* 2000;320(7233):458-9.

Hill AR, Silverberg NB, et al. Medical hazards of the tear gas CS. A case of persistent, multisystem, hypersensitivity reaction and review of the literature. *Medicine (Baltimore)* 2000;79(4):234-40.

Hu H, Fine J, et al. Tear gas—harassing agent or toxic chemical weapon? *JAMA* 1989;262(5):660-3.

## **Case definition for riot control agent poisoning**

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Thomas RJ, Smith PA, et al. Acute pulmonary effects from o-chlorobenzylidenemalonitrile “tear gas”: a unique exposure outcome unmasked by strenuous exercise after a military training event. *Mil Med* 2002;167(2):136–9.

Varma S, Holt PJ. Severe cutaneous reaction to CS gas. *Clin Exp Dermatol* 2001;26(3):248–50.

This fact sheet 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](http://www.bt.cdc.gov) or call the CDC public response hotline at (888) 246-2675 (English), (888) 246-2857 (Español), or (866) 874-2646 (TTY)

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Page 2 of 2