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# Recommendations for Exposures to Crowd Control Agents

The Ontario Poison Centre has recently been consulted on appropriate treatment and management of potential casualties from exposure to crowd control measures. Commonly-used devices involve lacrimators (e.g tear gas) or pepper spray. These are not true gases but are aerosolized solids or liquids meant to cause eye, skin and respiratory irritation.

Lacrimators temporarily incapacitate the individual by causing irritation of mucous membranes and skin. Severe reactions are rare, but may occur with close range fire and may result in mechanical injury to the eye. Pepper sprays (capsaicin resin) result in irritation to skin, eyes, and respiratory tract through activation of pain and heat receptors. Severe toxicity is rare but may involve bronchospasm and severe respiratory distress. This is more likely to occur in patients with underlying pulmonary disease.

Recommendations for Management:

## **Pre-hospital Care**

Adequate flushing/irritation with copious amounts of water are the mainstay of treatment. Soap and water may be used if available. Contaminated clothing should be removed and bagged. Contact lenses should be removed. Irrigate affected area with water for a minimum of 15 minutes. All eye exposures and patients with respiratory symptoms should be seen in hospital.

## **In-hospital Care**

Health care workers should avoid dermal contact with contaminated skin and/or clothing by use of appropriate protective equipment. Adequate irrigation may be completed using normal saline. Ocular exposures should be assessed by slit lamp examination, as particulate matter can become embedded in cornea. Time to decontaminate may take as long as 30-60 minutes for symptom relief.

Inhalation exposures may require supportive care with bronchodilators, steroids etc. as determined by the attending physician.

For more specific treatment recommendations for significantly symptomatic patients, contact the Ontario Poison Centre.

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