

Chemical Disaster EDOU: *Crowd control agents/irritants*

Lacrimators (CS, CN, mace, etc), capsaicin, phosgene, ammonia, chlorine, NO₂

Inclusion Criteria

- Exposure to riot control agent or irritant
- Mild to moderate ocular symptoms (pain, lacrimation, blepharospasm)
- Mild to moderate respiratory symptoms (rhinitis, cough)
- Asymptomatic and exposed to phosgene

Exclusion Criteria

- Significant munition/ballistic traumatic injuries
- Partial or full thickness burns, ocular trauma or burns
- Abnormal vital signs – significant hypoxia (pulse Ox <92%) or tachypnea (Resp >30)
- Opacities on chest x-ray
- Stable for immediate discharge (minor symptoms, low risk toxin)

Interventions

- **ED**
 - Removal of contaminated clothing prior to ED entry
 - Irrigation with copious cold water (skin)
 - Standard ocular irrigation
 - Chest x-ray if lower respiratory symptoms or high-risk exposure
- **EDOU**
 - Telemetry, pulse oximetry
 - Symptom mgmt.: analgesics (systemic, topical ocular), nebulized bronchodilators, humidified air
 - Considerations:
 - Nebulized sodium bicarbonate for significant chlorine exposure.
 - Steroids – inhaled or IV
 - Vital signs Q2-4 hours
 - Repeat CXR if new hypoxia or worsening dyspnea

Disposition Criteria

- **Discharge Home**
 - Resolution of symptoms (6-8 hours - chlorine; 24 hours - phosgene or NO₂)
 - Vitals Normal
- **Inpatient Admission**
 - Hypoxemia or tachypnea
 - Stridor
 - Development of opacities on CXR