

Knockdown Agent-Simple Asphyxiant

Affected Areas Central Nervous System Cardiac

Immediate Symptoms Altered state of consciousness Progression from fatigue and lightheadedness to coma

Ongoing Symptoms

Inhalation Exposure

Mild to moderate:

Lightheadedness

Difficulty breathing

Life Threatening:

Respiratory distress

Convulsions

Flushing of the skin

Seizures Cardiac Signs

Fatique

Severe:

Nausea

Anxiety

Fatal: Severe convulsions Irreversible respiratory distress

Ingestion Exposure

Mild to moderate: Vomiting Abdominal pain Fatigue Lightheadedness

Severe: Gl irritation Sedation Confusion Mild increased lactate Seizures/convulsions

Life Threatening: Hypotension GI Perforation Lactic acidosis apnea Coma Seizure Hematemesis

Fatal: Refractory hypotension High lactate Academia (metabolic and respiratory) Refractory bradycardia

CHEMM Not meant to be a complete care guideline. Please refer to the CHEMM website for more information: https://chemm.hhs.gov/mmghome.htm

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Examples

NIH

Chemical Warfare Agents Cyanide*

Toxic Industrial Chemicals/Toxic Industrial Materials

Cyanide* Sodium azide Carbon monoxide Aniline Arsine Nitrogen *May be weaponized

Common Treatment Protocols

Supportive care for all agents and to rule out other diagnoses: Oxygen

For cyanides: Cyano kits

For other agents specific antidotes may be available: Chelators for arsenic

Sensitive Populations

No particularly sensitive populations

Concerns About This Syndrome

No special concerns.