

CHEMICAL TERRORISM



BLOOD AGENTS

SYMPTOMS INCLUDE:

- Vertigo
- Tachycardia
- Tachypnea
- Cyanosis
- Flu-like symptoms
- Nonspecific neurological symptoms

INDICATIVE LAB TESTS*

- Increased anion gap
- Metabolic acidosis
- Narrow pO₂ difference between arterial and venous samples

POTENTIAL AGENTS

- Hydrogen Cyanide
- Hydrogen Sulfide
- Carbon Monoxide
- Cyanogen Chloride



NERVE AGENTS

SYMPTOMS INCLUDE

- Diarrhea
- diaphoresis
- Urination
- Miosis
- Bradycardia
- bronchospasm,
- Emesis
- Lacrimation
- Salivation
- sweating

INDICATIVE LAB TESTS*

- Decreased cholinesterase
- Increased anion gap
- Metabolic acidosis

POTENTIAL AGENTS

- Sarin
- VX
- Tabun
- Soman



BLISTER AGENTS

SYMPTOMS INCLUDE

- Itching
- Erythema
- Yellowish blisters
- Flu-like symptoms
- Delayed eye irritation

INDICATIVE LAB TESTS*

- Thiodiglycol present in urine

POTENTIAL AGENTS

- Sulfur Mustard
- Phosgene Oxime
- Nitrogen Mustard



CHOKING AGENTS

SYMPTOMS INCLUDE

- Upper respiratory tract irritation
- Rhinitis
- Coughing
- Choking
- Delayed pulmonary edema

INDICATIVE LAB TESTS*

- Decreased pO₂
- Decreased pCO₂

POTENTIAL AGENTS

- Phosgene
- Diphosgene
- Chlorine



METAL AGENTS

SYMPTOMS INCLUDE

- Cough
- Metallic taste
- CNS effects
- Shortness of breath
- Flu-like symptoms
- Visual disturbances

INDICATIVE LAB TESTS*

- Proteinuria
- Blood mercury
- Urine mercury

POTENTIAL AGENTS

- Dimethylmercury
- Lead
- Copper
- Mercury
- Arsenic
- Cadmium

Produced by
THE MINNESOTA
DEPARTMENT OF HEALTH
www.health.state.mn.us

MINNESOTA LABORATORY
SYSTEM - A PUBLIC &
PRIVATE COLLABORATION
www.health.state.mn.us/mls

POISON CONTROL CENTER
www.mnpoison.org

Call Poison Control 24/7 for Treatment Information **1-800-222-1222**

* Call the MDH Clinical Chemists for appropriate specimen collection, packaging and shipping information at 612-282-3750 (After regular hours call MDH at 651-201-5414)

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