

CHEMICAL CHART

Agent	Latent Period	Decontamination Including removal of clothing	Antidote	Medical Management	Comments	Symptoms
Pulmonary						
DP (diphosgene) PS (chloropicrin) CL (chlorine)	Seconds	Vapor-fresh air Liquid-copious water irrigation	None	Airway secretions / Hypoxia Bronchospasm / Hypotension Pulmonary edema	Termination of exposure Enforced rest Positive Pressure Vent.	Eye and airway irritation, dyspnea, chest tightness, delayed pulmonary edema.
Cyanide						
AC CK	Seconds	Vapor-fresh air Liquid-copious water irrigation	Sodium nitrite & Sodium thiosulfate - IV	100% oxygen Sodium nitrate IV Sodium thiosulfate IV	Death due to cellular anoxia	Seizures, respiratory arrest, cardiac arrest.
Vesicants						
HDH (Mustard)	Hours	0.5% Hypochlorite (Clorox)	None	Decontamination immediately after exposure. Symptomatic management of lesions.	Watch for leukopenia	Erythema and blisters, conjunctivitis, corneal opacity, upper respiratory airway damage, Bone Marrow stem cell suppression and gastrointestinal symptoms
L (Lewisite)	Minutes	0.5% Hypochlorite (Clorox)	British Anti-Lewisite	Decontamination immediately after exposure. Symptomatic management of lesions	Acidosis Volume depletion, Pseudomembranes	Erythema and blisters, conjunctivitis, corneal opacity, upper respiratory airway damage, Bone Marrow stem cell suppression and gastrointestinal symptoms.
CX (Phosgene)	Seconds	0.5% Hypochlorite (Clorox)	None	IVF, Monitor volume, oxygen, early intubation, steroids	Possible hemorrhagic inflammation of GI tract	Immediate burning, wheal skin lesions, eye damage airway damage, pulmonary edema.
Nerve Agent						
GA (Tabun) GB (Sarin) GD (Soman) GF VX	Seconds	0.5% Hypochlorite Copious water irrigation	Atropine Pralidoxime chloride Diazepam	Ventilation, Suction, Cardiac support	Inhibits acetylcholinesterase in tissue, and their effects are caused by the resulting excess acetylcholine	Miosis, rhinorrhea, SOB, loss of consciousness, sweating, nausea, vomiting, convulsions apnea, flaccid paralysis, copious secretions, shock, death.
Incapacitating Agent						
BZ (US agent) Agent 15 (Iraqi agent)	30 minutes to 24 hours	Removal of agent and clothing	IV Physostigmine	Competitive inhibitor of acetylcholine. Monitor core temperature	Related to atropine and scopolamine compounds	Combination of anticholinergic (CNS-mad as a hatter) Peripheral nervous system symptoms (PNS- dry as a bone, red as a beet, blind as a bat).
Riot-Control Agent						

CS (Teargas)	Seconds	None	Skin- soap/water Eyes - Water	Symptoms resolve in 15 to 30 minutes < 1% seek medical aid	May use bronchodilators	Burning and pain on exposed mucous membranes, skin, eyes, tearing, and respiratory discomfort. Symptoms are self limiting.
CM (Mace)						
CR (British)						

BIOLOGICAL CHART

Disease or Agent	Diagnosis	Incubation	Vaccine	Comments	Chemotherapy Rx	Symptoms
Anthrax	Non-specific May see a wide mediastinum on CXR.	1-6 days (up to 45 days)	Yes – 0.5ml. 0,2,4 wks. 6,12,18 mo. Booster yearly	Spores very stable may remain viable for > 40 yrs.	Ciprofloxacin Doxycycline Chloramphenicol	Fever, malaise, fatigue, cough, chest discomfort, followed by severe respiratory distress with dyspnea, diaphoresis, stridor, cyanosis, shock. Death occurs within 24- 36 hrs.
Botulism	Clinical Serology/Culture	1-5 days	Pentavalent Anti-toxin	Most toxic compound known	None Ventilatory assist	Ptosis, weakness, dizziness, dry mouth, blurred vision, diplopia, dysphonia, flaccid paralysis, respiratory failure.
Brucellosis	Blood cultures	5-60 days	None	Complications Endocarditis Encephalitis	Doxycycline + Rifampin Ofloxacin + Rifampin	Irregular fever, headaches, profound weakness, fatigue, chills, sweating, arthralgias, myalgias, depression.
Cholera	Clinical/Darkfield Stool Culture	4hr – 5 days	Yes – Only 50% effective	Vaccine only lasts 6 months	Tetracycline / Doxycycline Erythromycin / Ciprofloxin	Vomiting, headache, intestinal cramps, little or no fever, voluminous diarrhea, dehydration, hypovolemia, shock
Glanders	Sputum culture Miliary lesion on CXR	10-14 days	None	Necrotizing lesion possible in lungs	Sulfadiazine / doxycycline Rifampin / Ciprofloxin Trimethoprim- sulfamethoxazole	Fever, rigors, sweats, myalgia, pleuritic chest pain, photophobia, lacrimation, diarrhea, splenomegaly, pneumonia, leukocytosis.
Plague	Nasal, sputum cultures/ PCR Immunoassay	2-3 days	Yes Effective- bubonic Not aerosol	Lives up to 1 yr in soil / 270 days in live tissue.	Streptomycin drug of choice Tetracycline Chloramphenicol	High fever, chills, headache, hemoptysis, and toxemia. Rapid progression to dyspnea, stridor, and cyanosis. Death due to respiratory failure if not treated in 12-24 hrs.

Tularemia	Culture Serology	1–10 days	Yes	Tetracycline used as prophylaxis	Streptomycin Gentamicin	Local ulcer, lymphadenopathy, fever, headache, malaise, substernal pain, non-productive cough, prostration.
Ricin Toxin	Protein toxin-Dx – Clinically	Latent period 8hr Death in 36-72 hr	None	Made from Caster Bean	None Medical Support Measures	Weakness, fever, cough, pulmonary edema, severe respiratory distress, gastrointestinal hemorrhage, necrosis.
Q-Fever	Serology IFA / ELISA	2 to 3 weeks	Investigational Only	Tetracycline Prophylaxis	Tetracycline Doxycycline	Fever, cough, and pleuritic chest pain Illness could last from 2 days to 2 weeks
Small pox	PCR	7-19 days	Not available for mass use	Could confuse with varicella	No effective medications Clinical support	Malaise, fever, rigors, vomiting, headache, backache. 2-3 days later lesions from macules to pustular vesicles.
StaphylococcusEnterotoxin-B	Clinical CXR normal	Symptoms 3-12 hr post exposure	None	Prophylaxis – Use a protective mask	No effective medications Clinical support	Sudden onset of chills, fever, headache, myalgia, non-productive cough, SOB, retrosternal chest pain.
T-2 Mycotoxins	Blood toxicology	Death in minutes hours or days	None	Called “Yellow rain” in Laos	No effective medications or antidote Clinical support	Pruritus, vesicles, necrosis, nasal discharge, dyspnea, hemoptysis. Death due to bone marrow collapse or hypotension tachycardia and hypothermia.
Equine Encephalitis	Virus isolation IgM Antibody	2-6 days	Investigational Only	Weaponized 1960	No effective medications Clinical support	Sudden onset, malaise, fever, rigors, severe headache, nausea, vomiting, cough. Recovery 1-2 weeks
Viral Hemorrhagic Fevers	Viral Isolation	Varies with type of virus	Only for Yellow Fever	Infectious by Aerosol or fomites	Support hemodynamic, hematologic, pulmonary, and neurologic manifestations regardless of agent	Febrile illnesses with bleeding, petechiae, hypotension, shock, vomiting, diarrhea, headaches, microvascular damage, increased vascular permeability.