

WMD Agents Quick Reference Guide

* = person-to-person transmission

BIOLOGICAL AGENTS				
Agent	Incubation	Symptoms	Transmission	Treatment
Bacteria				
Anthrax (inhalational) (cutaneous)	1 – 7+ d	Fever/chills , malaise, fatigue, cough Late: Severe resp. distress, shock Papule, fluid-filled vesicle, black eschar	Aerosol Direct	(Cutaneous) ADULT: Cipro 400 mg PO BID OR Doxycycline 100 mg BID -60 days of therapy. PEDS: 10-15 mg/kg/day, not to exceed adult dose (Inhalational) ADULT: Cipro 400 mg IV BID; OR Doxycycline 100 mg BID—switch to oral regime above when clinically appropriate; add one or two additional antibiotics (rifampin, vancomycin, PCN, ampicillin, chloramphenicol, imipenem, clindamycin, clarithromycin) PEDS – dose as cutaneous, deliver in IV until clinically appropriate to switch to PO.
Brucellosis	1 week to several months (avg. 1 month)	Fever/chills, headache, malaise, anthralgia, myalgia, lymphadenopathy and splenomegaly	Aerosol	Doxycycline 100 mg/day PO BID AND rifampin 15 mg/kg/day not to exceed 600 mg daily
Plague (inhalational)	2 – 3 d	Fever/chills, headache, hemoptysis, toxemia. Late: Resp. failure, shock DIC	Aerosol*	ADULTS: Cipro 400 mg IV BID IV; OR Doxycycline 200 MG IV, then 100 mg IV BID, OR chloramphenicol 25 mg/kg IV QID; change to PO after improvement PEDS: > 45 kg, treat as adult < 45 kg, Doxycycline 2.2mg/kg/IV BID not to exceed adult dose OR Cipro 15 mg/kg IV BID OR chloramphenicol 25 mg/kg IV QID
Tularemia (inhalational)	3 – 5 d	Fever/chills, headache, malaise	Aerosol	Same as plague EXCEPT chloramphenicol dose 15mg/kg IV QID
Q fever	2 – 40 d	Fever/chills, cough, pleuritic chest pain, GI symptoms	Aerosol	Tetracycline 500 mg PO TID 15-21 days OR Doxycycline 100 mg PO BID 15 – 21 days (PEDS 2.2 mg/kg PO BID not to exceed adult dose). OR Cipro (same PO dose as noted in anthrax above) OR CoTrimazole at standard doses.
Viruses				
Smallpox	10 – 12 d	Fever/chills, headache, malaise, backache	Aerosol*	Supportive Vaccination rec. w/in 5 days for those exposed
Viral Hemorrhagic Fevers	4 – 21 d	Fever/chills, headache, malaise, myalgia Late: Bleeding, petechiae, hypotension, shock	Aerosol* Direct	Supportive
Toxins				
Botulinum (inhalational)	Sx begins 12 – 72 hrs	Ptsosis, progressive descending bulbar, muscular and resp. weakness; Late: Resp. failure	Aerosol PO	Time urgent utilization of botulinum antitoxin, Supportive
Staphylococcal enterotoxin B (aerosol)	Sx begins 3 – 12 hrs	Fever/chills, headache, myalgia, cough	Aerosol PO	Supportive
Ricin (inhalational)	Sx begins 4 – 8 hrs	Fever/chills, cough, malaise, dyspnea Late: Pulm. Edema, resp. failure	Aerosol	Supportive
Tricothecene mycotoxins (T2)	Sx begins 2-4 hrs	Necrosis and sloughing of affected tissues Late: Prostration, collapse, shock	Aerosol, PO, Dermal, Eye,	Supportive

FL State Warning Point: (800) 320-0519
U.S. Poison Control: (800) 222-1222
CDC Director's Emergency Operation Center (DEOC): (770) 488-7100

Standard personal protection for all biological WMD includes gloves, gowns, and mask. HEPA-mask recommended for plague, smallpox, and other viral pathogens.



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06/2008 ajs

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Chemical Agents

Agent	Symptoms	Decontamination	Treatment	
Nerve Agents				
Tabun (GA)	Salivation Lacrimation (tearing)	Remove contaminated clothing Flush patients with soap & water solution Flush objects with large amounts of 10% bleach solution	Field: Mark I kit. Inject atropine and 2-PAM C1 (1 – 3 kits), then 15 mg atropine IV; 5 – 10 mg diazepam IV or IM if seizing ER: Atropine dosage: ADULT: 2 to 6 mg atropine IV initially depending on severity of symptoms. Use 6 for apnea, flaccid paralysis, coma, convulsions, severe respiratory distress, GI findings. Repeat 2 mg IV every 5 to 10 minutes until dyspnea and secretions minimized. PEDS: 0.05 to 0.1 mg/kg IV every 5 to 10 minutes, until endpoints above. AND 2-PAM 15 mg/kg IV slowly over 30 min. Diazepam: ADULT 5 – 10 mg IV every 5-10 minutes until seizure free; PEDS 0.2 mg/kg IV every 5-10 min as above	
Sarin (GB)	Urination Defecation			Onset: Vapor: seconds Liquid: min - hrs
Soman (GD)	Gastric disturbances Emesis (vomiting)			
V Agents (VX)				
Vesicants (Blister Agents)				
Sulfur Mustard (H)	Acts first as a cell irritant, then as a cell poison Conjunctivitis, reddened skin, blisters, nasal irritation, inflammation of throat and lungs	Remove contaminated clothing Flush patients with soap & water solution Flush objects with large amounts of 10% bleach solution	Immediate Decontamination Supportive Care Lewisite responds to chelation therapy with BAL, 3-5 mg/kg IM every 4 hours x 4 doses. Use only for severe systemic effects such as shock or pulmonary injury.	
Distilled Mustard (HD)				
Nirogen Mustard (HN 1, 3)				
Mustargen (HN 2)				
Lewisite (L)	Immediate pain with blisters			
Phosgene Oxime (CX)	Immediate pain with blisters later – necrosis equivalent to 2 nd and 3 rd degree burns			
Chemical Asphyxiants (Blood Agents)				
Hydrogen Cyanide (AC)	-30% cyanosis Patients may appear to be gasping for air Seizures prior to death Effect is similar to asphyxiation, but is more sudden	Remove contaminated clothing Flush patients with soap & water solution Flush objects with large amounts of 10% bleach solution	Cyanides: Classic cyanide kit (2 step process): 1) 10 ML Sodium Nitrite IV 2) 50 mL Sodium Thiosulfate IV OR 5 grams Hydroxocobalamin IV Arsenic: chelation therapy – ADULTS with BAL, 3-5 mg IM every 4 hours for 2 days. PEDS – with Succimer 10 mg/kg PO for 1 to 3 weeks.	
Cyanogen Chloride (CK)				
Arsine (SA)				