Biological Agents - Vaccine, Therapy, and Prophylaxis

AGENT	Vaccine Available?	Treatment*	Prophylaxis*	Comments
Anthrax	Yes	Ciprofloxacin 400 mg IV q 12 h Doxycycline 100 mg IV q 12 h	Ciprofloxacin 500 mg PO bid Doxycycline 100 mg PO bid	Vaccine should be administered if available Treatment should continue for 60 days
		Penicillin G 4 million U IV q 4 h	Amoxicillin 500 mg PO q 8 h	PCN G and Amoxicillin for sensitive organisms only
Botulism	Antitoxin	Supportive care with respiratory support	Consider antitoxin	Skin test for hypersensitivity before equine antitoxin administration Antitoxin neutralizes only circulating toxin
Brucellosis	No	Doxycycline 200 mg/d PO plus Rifampin 600 mg/d PO Ofloxacin 400 mg bid plus Rifampin 600 mg/d PO	Same as treatment	Continue treatment or prophylaxis for 6 weeks
Cholera	Yes	Oral or IV rehydration therapy	None available	Vaccine not recommended for routine protection
		Tetracycline 500 mg q 6 hr x 3 d Doxycycline 100 mg q 12 h x 3 d Ciprofloxacin 500 mg q 12 h x 3 d		Antibiotics will shorten course and severity
Plague	No	Streptomycin 1 g IM bid Gentamycin 5 mg/kg IM or IV q day Ciprofloxacin 400 mg IV q12 h Doxycycline 100 mg IV q 12 h	Doxycycline 100 mg PO q 12 h Ciprofloxacin 400 mg PO q12 h	Therapy should continue for 10 - 14 days Prophylaxis should continue for 7 days Oral therapy should be substituted for IV when patient condition improves
		Chloramphenicol 25 mg/kg IV qid		Chloramphenicol for plague meningitis
Q Fever	Not available	Doxycycline 100 mg PO q 12 h Tetracycline 500 mg PO q 6 h	Doxycycline 100 mg PO q 12 h Tetracycline 500 mg PO q 6 h	Treatment should continue for 5-7 days post exposure and continued at least 2 days after afebrile
Ricin	No	Inhalation: supportive care Ingestion: superactivated charcoal, gastric lavage, cathartics	None	
Smallpox	Yes	Supportive care Cidofovir effective in vitro	Vaccination within 3 days	
Staph Enterotoxin B	No	Supportive care	None	

AGENT	Vaccine Available?	Treatment*	Prophylaxis*	Comments
Tularemia	Yes	Streptomycin 7.5 - 10 mg/kg IM bid Gentamycin 3-5 mg/kg/d IV Doxycycline 100 mg IV bid Ciprofloxacin 400 mg IV bid	Doxycycline 100 mg PO bid Ciprofloxacin 500 mg PO bid	Continue treatment for 14 days
T2 Mycotoxin	No	Supportive care	Decontamination of clothes and skin	
Viral Encephalitides	Yes	Supportive care, analgesics, and anticonvulsants	None	
Viral Hemorrhagic Fever	Yes	Supportive care, analgesics Management of hypotension	None	Ribavirin may show some improvement

***For treatment or prophylaxis of pediatric or special needs patients (pregnant, immunocompromised) please see the treatment section for the agent involved**