

Table I. Antibiotic therapy (by organism) for the treatment of invasive soft tissue infection (see notes)

Organism	Antibiotic	Dose	Alternative	
group A streptococci (<i>S. pyogenes</i>)	Penicillin	<i>uncomplicated cellulitis:</i> 8-12 million units/day divided every 6 hours	ceftriaxone	<i>uncomplicated cellulitis:</i> 1-2 grams/day every 24 hours
		<i>necrotizing infections:</i> 24 million units/day divided every 4 hours		<i>necrotizing infections:</i> 4 grams/day divided every 12 hours
<i>S. aureus</i> (MRSA or unknown susceptibility)	vancomycin	<i>uncomplicated cellulitis</i> 2-4 g/day (divided every 6-12 hours) trough target 10-15 mcg/mL	linezolid daptomycin	600 mg every 12 hours 6 mg/kg every 24 hours
		<i>necrotizing infections:</i> 2-4 g/day (divided every 6-12 hours) trough target >15 mcg/mL		
<i>S. aureus</i> (MSSA)	nafcillin	<i>uncomplicated cellulitis</i> 8 g/d (divided every 6 hours)	oxacillin (see nafcillin) cefazolin:	3 g/d (divided every 8 hours)
			vancomycin (see MRSA/unknown)	
		<i>necrotizing infections:</i> 12 g/d (divided every 4-6 hours)	oxacillin (see nafcillin) cefazolin	4-6 g/d (divided every 8 hours)
			vancomycin (see MRSA/unknown)	
Clostridia species (perfringens, septicum)	penicillin	24 million units/day (divided every 4 hours)	clindamycin imipenem*	600 mg every 6-8 hours

			metronidazole	
Peptostreptococci and other anaerobic streptococci	penicillin	24 million units/day (divided every 4 hours)	Vancomycin	2-4 g/day divided every 6-12 hours trough target >15 mcg/ml
Erysipelothrix rhusiopathiae	penicillin	8-12 million units/day (divided every 6 hours)	clindamycin levofloxacin linezolid daptomycin	
			<i>NB. Resistant to vancomycin</i>	
Pasteurella multocida		<i>mild infection--consider oral therapy:</i>		
	penicillin VK or amoxicillin or amoxicillin/clavulanate		levofloxacin	
		<i>severe infection--parenteral therapy:</i>	trimethoprim-sulfamethoxazole	
	ampicillin-sulbactam piperacillin-tazobactam penicillin G	3 g every 6 hours or 3.375 g every 6 hours (monobacterial infection)	imipenem 500 mg - 1g every 6-8 hours	
			levofloxacin	
			tigecycline doxycycline	
Hemophilus influenzae type b	ceftriaxone	2 grams/day	levofloxacin	
Enteric gram negative bacilli (E. coli, Klebsiella, etc.)	ceftriaxone	2 grams/day	piperacillin-tazobactam ciprofloxacin	3.375 g every 6 hours
Nonenteric gram negative bacilli				
Pseudomonas aeruginosa	cefepime	1 g every 6-8 hours	imipenem	1 gram every 8 hours

			ciprofloxacin	
Aeromonas hydrophila	cefepime	1 g every 6-8 hours	ciprofloxacin	400 mg IV every 12 hours
	(+/- gentamicin)	80 mg every 8 hours	imipenem	1 gram every 8 hours
		trough <2 mcg/ml, peak >4 mcg/ml	(+/- gentamicin)	80 mg every 8 hours
				trough <2 mcg/ml, peak >4 mcg/ml
Vibrio species:	doxycycline	100 mg twice daily	levofloxacin	500 mg daily
V. vulnificus, parahemolyticus	(+ceftriaxone)	1-2 grams every 24 hours		
non cholera vibrios				
Capnocytophaga canimorsus		<i>mild disease</i>		
	amoxicillin-clavulanate	875 mg twice daily	doxycycline	100 mg twice daily
		<i>severe disease</i>		
	ampicillin-sulbactam	3 grams every 6 hours	ceftriaxone	2 grams daily-every 12 hours
			or clindamycin	600 mg every 6-8 hours
Note: imipenem may be used interchangeably with meropenem				

- The listed doses are for adults with normal renal function. Dose modifications may be necessary in the setting of renal insufficiency.
- Tetracycline products (e.g., doxycycline) are generally contraindicated in children <8 years of age but may be considered for severe and potentially life-threatening infections in younger children. Doxycycline appears to have a reduced risk of dental staining or other complications.