

Gustilo-Anderson Open Fracture Classification

Type	Wound Size	Contamination	Fracture	Vascular Injury Requiring Repair	Soft Tissue Coverage
I	Wound < 1 cm	Minimal	Minimal comminution, no periosteal stripping	No	Adequate
II	Wound > 1 cm	Moderate	Moderate comminution; minimal periosteal stripping	No	Adequate
IIIA	Any Size	Severe	Severe comminution or segmental fractures, periosteal stripping	No	Adequate, may become inadequate with debridement
IIIB	Any Size	Severe	Severe comminution or segmental fractures, periosteal stripping	No	Inadequate (rotation or flap flap)
IIIC	Any Size	Severe	Severe comminution or segmental fractures; periosteal stripping	Yes	Inadequate (rotation or free flap)

Treatment Recommendations For Open Fractures

	Absence of soil or water contamination	Presence of soil contamination	Presence of water contamination
Gustilo-Anderson Type I or II			
Preferred Treatment	Cefazolin 2g IV every 8 hrs	Cefazolin IV + Metronidazole IV OR Ceftriaxone IV + Metronidazole IV	No modifications needed for G&A I or II injuries
Alternative treatment for patients with beta lactam allergies	Vancomycin IV	Clindamycin IV	No modifications needed for G&A I or II injuries
Gustilo-Anderson Type III			
Preferred Treatment	Cefazolin IV + Gentamicin IV OR Ceftriaxone IV	Ceftriaxone IV + Metronidazole IV OR Cefazolin IV + Gentamicin IV + Metronidazole IV	<u>Fresh Water Contamination</u> -Zosyn IV <u>Sea Water Contamination</u> -Zosyn IV + Doxycycline IV/oral
Alternative Treatment for patients with beta-lactam allergy	Clindamycin IV	Clindamycin IV + Gentamicin IV	<u>Fresh Water Contamination</u> -Imipenem OR Meropenem IV <u>Sea Water Contamination</u> -Imipenem or Meropenem IV + Doxycycline IV/oral