

TREATMENT

Bite-Wound Infections

WOUND MANAGEMENT

Wound closure is controversial in bite injuries. Many authorities prefer not to attempt primary closure of wounds that are or may become infected, choosing instead to irrigate these wounds copiously, debride devitalized tissue, remove foreign bodies, and approximate the wound edges. Delayed primary closure may be undertaken after the risk of infection is over. Small uninfected wounds may be allowed to close by secondary intention. Puncture wounds due to cat bites should be left unsutured because of the high rate at which they become infected. Facial wounds are usually sutured after thorough cleaning and irrigation because of the importance of a good cosmetic result in this area and because anatomic factors such as an excellent blood supply and the absence of dependent edema lessen the risk of infection. In general, wounds >12 h old (for bites to the arm or leg) or >24 h old (for bites to the face) should not be closed primarily and may require prophylactic antibiotics (see below).

ANTIBIOTIC THERAPY

Established Infection Antibiotics should be administered for all established bite-wound infections and should be chosen in light of the most likely potential pathogens, as indicated by the biting species and by Gram's stain and culture results ([Table 141-1](#)). For dog and cat bites, antibiotics should be effective against *S. aureus*, *Pasteurella* species, *C. canimorsus*, streptococci, and oral anaerobes. For human bites, agents with activity against *S. aureus*, *H. influenzae*, and β -lactamase-positive oral anaerobes should be used. The combination of an extended-spectrum penicillin with a β -lactamase inhibitor (amoxicillin/clavulanic acid, ticarcillin/clavulanic acid, ampicillin/sulbactam) appears to offer the most reliable coverage for these pathogens. Second- and third-generation cephalosporins (ceftriaxone, cefuroxime, cefoxitin, cefpodoxime) also offer substantial coverage when given in conjunction with a