

Dog Bite Treatment Guidelines Handout

A dog bite is a wound caused by a dog's teeth breaking through the skin. It can range from a minor scratch to a deep puncture or tear, depending on the size and strength of the dog and the force of the bite.

These guidelines are based on the American Academy of Family Physicians' guidelines on the treatment of dog and cat bites.

Treatment options

Wound treatment

- Dog bite wounds are considered grossly contaminated; therefore, proper wound treatment is essential to prevent secondary infection.
- The affected skin surface should be cleansed, and the wound should be copiously irrigated with water, normal saline, or dilute povidone-iodine solution, especially if the animal may be rabid.
- To irrigate the wound, a 20-mL or larger syringe should be used to generate the high pressure required for adequate cleaning. If a 20-mL or larger syringe is unavailable, a 20-gauge catheter can be connected to the syringe to increase the pressure. Cautious debridement of devitalized tissue further decreases the potential for infection.
- The wound should be carefully explored for tendon or bone involvement and foreign bodies, such as teeth fragments. Older dogs and cats often have significant periodontal disease, increasing the risk that a tooth will break off during a bite.
- Radiography is indicated if a foreign body or bone involvement is suspected. Tendon ruptures should be evident on examination, but identifying a partial tendon rupture requires careful exploration of the wound. Observing the tendon throughout the joint's full extension and full flexion can reveal small or partially torn tendons, which warrant referral for repair.

Wound closure

- Allowing a wound to close by secondary intention should be considered if there is a higher risk of infection, such as wounds to the hand.

Antibiotic prophylaxis

- Antibiotic prophylaxis should be considered for all bites requiring closure and for high-risk bites.
- Amoxicillin/clavulanate (Augmentin) is generally considered the first-line prophylactic treatment for animal bites.
- A three-day to seven-day course of prophylactic antibiotics is likely adequate and was typical in most studies.

Prophylactic antibiotic dosages		
Group	First line	Alternative
Adults	<ul style="list-style-type: none"> Amoxicillin/clavulanic acid (Augmentin), 875/125 mg every 12 hours 	<ul style="list-style-type: none"> Clindamycin, 300 mg 3 times per day plus ciprofloxacin (Cipro), 500 mg twice per day Doxycycline, 100 mg twice per day Penicillin VK, 500 mg 4 times per day plus dicloxacillin, 500 mg 4 times per day A fluoroquinolone; trimethoprim/sulfamethoxazole, 160/800 mg twice per day; or cefuroxime axetil (Ceftin), 500 mg twice per day plus metronidazole (Flagyl), 250 to 500 mg 4 times per day, or clindamycin, 300 mg 3 times
Children	<ul style="list-style-type: none"> Amoxicillin/clavulanic acid, 25 to 45 mg per kg divided every 12 hours 	<ul style="list-style-type: none"> Clindamycin, 10 to 25 mg per kg divided every 6 to 8 hours plus trimethoprim/sulfamethoxazole, 8 to 10 mg per kg (trimethoprim component) divided every 12 hours
Pregnant women who are allergic to penicillin	<ul style="list-style-type: none"> Azithromycin (Zithromax), 250 to 500 mg per day Close monitoring is needed because of high failure rate 	

Tetanus vaccination

- Tetanus vaccination is recommended after an animal bite if it has been more than five years since the patient has been immunized.

Postexposure prophylaxis

- Postexposure prophylaxis is generally not needed in patients with a dog bite as long as the animal is not showing signs of rabies, such as inappetence, dysphagia, abnormal behavior, ataxia, paralysis, altered vocalization, or seizures; however, the animal should be monitored for at least 10 days. If the animal shows signs of rabies, becomes sick, or dies, immediate postexposure prophylaxis is recommended.
- Preexposure prophylaxis should be considered in persons with higher risk of rabies exposure, such as certain laboratory workers, veterinarians, spelunkers, and certain international travelers.

Reference

Ellis, R., & Ellis, C. (2014). Dog and cat bites. *American Family Physician*, 90(4), 239–243.
<https://www.aafp.org/pubs/afp/issues/2014/0815/p239.html#:~:text=Bite%20wounds%20may%20be%20closed>