

Bite Wounds in Dogs

One of the most common reasons dogs see their veterinarians for emergency appointments is because of a bite wound. The bite wound may have been caused by another family dog or by a fight with a strange or unfamiliar animal.

Why do dogs bite?

In puppies, biting is often part of aggressive play. In adult dogs, biting or other aggressive behaviors can have multiple underlying motives or causes. Aggressive behaviors such as growling, lunging, snarling, snapping or biting are used as a means of communication and to resolve competitive issues or perceived threats. The competition may be over food, territory, attention of an owner, position in a pack or group, as a protective reaction towards another dog, etc.



How serious are dog bite wounds?

Estimates suggest that dog bite wounds account for about ten percent of the traumatic injuries that veterinarians see on a routine basis.

Dog bites can cause significant injury to the skin and soft tissues. The dog's teeth and jaws are very powerful and the wounds they inflict can crush or tear muscles and skin, penetrate through the chest wall causing lung collapse, or cause serious or fatal damage to intestinal organs. Even a bite that does not break the skin can cause crushing or bruising injuries to the underlying soft tissues.

Bite wounds are commonly inflicted on the legs or around the head and neck. Vital structures in the neck that could be easily injured include blood vessels such as the jugular vein or the carotid artery, numerous nerves, the esophagus, and the trachea or airway. Wounds on the face can cause severe damage to the eyes, ears or mouth; wounds around the eyes are particularly dangerous. With bite wounds on the legs, there is a risk that the injury can involve the joints.

Since the dog's mouth is full of bacteria, any bite that does puncture the skin will introduce bacteria or other infectious organisms below the skin surface, where the bacteria can multiply and spread throughout the underlying tissues. Therefore, all bite wounds are considered to be contaminated and/or infected. Left untreated, the bacteria in an infected bite wound will cause a localized abscess or more generalized cellulitis (a tissue infection) that spreads through the surrounding area. In rare cases, a penetrating bite wound can cause septic arthritis (infection of the joint), osteomyelitis (infection of the bone), pyothorax (pus in the chest cavity) or septic peritonitis (pus in the abdominal cavity).

Does my dog need to be seen by the veterinarian after it has been in a fight?

If a dog has been involved in a fight, it can sometimes be challenging to determine the extent of the injuries, particularly if the wounds are located in heavily furred areas of the body. Small puncture wounds from canine teeth can close over rapidly and can easily be missed.

Therefore, if your dog has been in a fight with another animal, you should take him to the veterinarian for an examination as soon as possible. If you can see obvious bite wounds, you should seek immediate veterinary attention. Wounds that appear to be minor on the surface can be deceptive and may have the potential to be life threatening, depending on the location of the injury.

What should I look for to determine how quickly my dog needs to see the veterinarian?

There are certain symptoms that require immediate emergency treatment. These include uncontrollable bleeding (bleeding that can't be stopped), breathing difficulty, weakness, crying or whining, limping, pale or blue gums, or collapse.

What sort of treatment will be given to my dog?

Your veterinarian will determine what sort of treatment is necessary, based on the extent of the injuries, your dog's general health, and the location of the wounds. The goal of treatment is to reduce the severity of any infection that develops. This will be accomplished by cleaning the wounds, removing any dead or severely damaged tissue, and surgically closing the wounds whenever possible.



Antibiotics will be prescribed for all wounds that have penetrated the skin. For minor injuries, or for wounds that must be left open to heal, your veterinarian may prescribe a topical antibiotic. If there is any doubt about skin penetration, your veterinarian will prescribe a broad spectrum antibiotic to lessen the chance that a serious infection will develop. The sooner antibiotics are begun after a bite injury the quicker the infection will be brought under control. Wounds that are treated within 6 hours of the injury have the best chance of healing without complications.

Most wounds are painful and it is more humane for your animal to be given some sort of pain medication or a sedative or anesthetic before attempting to assess the extent of the injuries. Your veterinarian will then shave the fur off of the skin that surrounds the wounds to lessen the potential for further contamination, and will flush the wounds to remove any contaminants and debris. For extensive wounds, severely contaminated wounds, or wounds in sensitive areas of the body (such as near the eyes, mouth or ears), it will be necessary to put your dog under general anesthetic so that the area can be safely and thoroughly cleaned and treated.

Small puncture wounds will usually be left open so that any infection can drain out. Lacerations will be sutured up, and temporary drains may be placed if the damage is extensive or if there is a chance that fluid will build up in the area. Most lacerations will be 'debrided' (any infected or compromised skin tissue will be cut away and the edges of the laceration will be trimmed). In many cases, skin wounds will be enlarged to allow the underlying tissues to be thoroughly examined and cleaned.

Experts recommend that bacterial culture and sensitivity tests should be performed to determine which bacteria are involved and the best antibiotics to treat these bacteria. However, it takes a couple of days for the test results to be ready, so your veterinarian may not perform these tests unless your pet's wounds do not respond appropriately to initial broad spectrum antibiotic treatment.

What sort of home care will be necessary?

If your dog's wounds have been closed with sutures, you will need to keep the area clean and dry. If the wound has been left open to heal, or if a drain was placed in the wound, you will need to clean away any draining material on a regular basis. You can use a soft washcloth or cotton balls and warm water to remove debris. In some cases, your veterinarian will prescribe a mild disinfectant cleanser to assist with keeping the area clean. Use only products that are recommended by your veterinarian. Never use hydrogen peroxide to clean a bite wound unless specifically instructed to do so by your veterinarian, since this will delay healing and can worsen the problem.

If you have been instructed to clean the wounds, use extreme care since these wounds may be painful and the pet may bite out of pain or fear. It is advisable to use a muzzle on your dog, even if he is extremely gentle.

What can I do to prevent bite wounds?

Do not allow your dog to roam freely, and keep your dog on a tight leash when you are outdoors, especially if you are in a park. Dogs that are well-mannered are less likely to fight, so basic obedience training is strongly recommended. If you are outdoors with your dog and you see a stray dog that is running free, do not approach it. Even if your dog is gentle and friendly, you have no way of knowing the temperament of the other dog.

*This client information sheet is based on material written by: Cheryl Yuill, DVM, MSc, CVH
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