



F45 What Drives a Dog to Bite?

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The presentation will familiarize the audience with the drives that can motivate a dog to bite.

In a Centers for Disease Control report for the period from 1992 to 1994, the number of people who reported a dog bite injury to a medical professional was estimated to be 4.7 million, of which about 800,000 required medical care and nearly 334,000 required visits to hospital emergency departments. Seventeen deaths were attributed to that period. From 1979 to 1998, 300 Americans were reported killed by dogs. Of the nearly 800,000 people who sought medical care for dog bites in 1994, at least half were children under the age of 18. These statistics are even more significant when it is estimated that a large number of bites actually go unreported.

Previous speakers have discussed dog bites from the perspective of what has happened to the victim and an analysis of the bite mark. Undoubtedly from the CDC's statistical information, dog bites will continue to plague the professional and to be of concern to the forensic odontologist. Rather than an analysis of the bite marks, the author thought it important to know what can drive a dog to bite and how the drive can affect how the dog bites, the intensity, and the number of bites. A general understanding of these drives, especially the prey drive, will give you a better understanding of how dogs are trained to search and track, perform obedience, and do bite work in such sports as Schutzhund protection dog training.

Dogs can become aggressive and bite for a variety of reasons. It is sometimes difficult for humans to understand canine aggression, and this discussion is an attempt to expound some of the theories that are used in Schutzhund protection dog training to help one understand what the dog is saying when it bites. Aggression is a normal behavior for dogs. Whether or not the aggression is dangerous depends on the situation. Good dogs can be aggressive, and good dogs can bite. It is all a matter of perception.

Dogs can become aggressive due to different motivating factors. These can include but not be limited to social dominance, defense, and prey drives. The 2 primary motivating drives are the defense and prey drives. The defense drive deals with the fight or flight response, which is aggression or avoidance. Aggression is the active defense, and avoidance is the passive defense. Both types of defensive drives can be triggered by the same stimuli such as staring or making threatening and aggressive movements against the dog or its owner. In protection training the dog is worked through a progressive measure of increased pressure on the dog in order to develop the aggression and lessen the avoidance response. Examples of avoidance would be running away or submissiveness as when a dog turns over and displays its belly to you. In prey drive the pursuit carries over from the wild where the dog had to survive. The dog has to find its prey, pursue it, capture it, and then kill it. You see this in dogs that chase cars, and others who chase and catch Frisbees or balls. And yet other prey dogs will also bite. Of utmost concern are children who are most vulnerable to dogs with strong prey drive. The child's small size, high pitched voices, jerkier movements make them more alluring to the prey dog, and the small stature places many vital areas of the child in easy striking distance. In training a young dog to bite, the helper displays similar characteristics. The sleeve is moved around as the helper runs past the dog. The dog attacks the sleeve as if it is prey and bites it. The sleeve is slipped, and the dog will often shake the sleeve to kill it and then carry it away.

Some dogs will bite once and then let go, resulting in 1 to 4 canine punctures. This can advance to a bite or a series of bites with shaking. Advancing further would be biting with serious mutilation progressing further to biting resulting in death. You will note that in protection training, the dog is taught to bite with a full grip so that not only the canines are engaged but also the molars. The sleeve fits fully into the dog's mouth insuring that the sleeve cannot escape. Should the dog lose its grip, ideally the dog will attempt to regrip – rebite.

A murder occurred in December 1999 in which a park ranger was killed in Kona, Hawaii. The author was called to view the body at the Kona morgue to photograph numerous dog bites for future analysis. The agents informed the author that very vicious dogs had done the biting. Evaluation of the numerous bites led to the conclusion that the dogs (three) were aggressive but not necessarily vicious. The veterinarian called into the same case concurred after assisting the author in the examination. It appeared that the dogs might have bitten in defense of its owner during a confrontation with the ranger.

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