

(1) AGGRESSION: Introduction to Aggressive Behavior in Dogs & Cats

What is aggression?

Aggression is defined as threats or harmful actions directed toward another individual. In animals, aggressive behaviors are a means of communication. Dogs and cats use aggressive displays, threats and attacks to resolve competitive disputes over resources (territory, food) or to increase their reproductive potential. "Aggression" describes the behavior, but does not give any information about underlying motives or causes. Aggression can have multiple motivations.

How is aggression classified?

Aggression can be subdivided into type based on intended victim, body postures during aggression, and other factors such as the animal may want, estrus status of animals involved, and location of the aggressive encounter.

Ethologists, persons who study animal behavior, use the term 'agonistic' to refer to the behavior of animals (usually of the same species) that involves conflict or contest. These encounters can involve fighting, escape, dominant and submissive gestures and posturing. Aggressive behavior can also be divided into offensive and defensive aggression. In dogs and cats the supposed function of the aggression is most commonly used as the basis of classification:

Dominance (status related) related, possessive, protective and territorial, predatory, fear induced, pain induced, parental, redirected, play, intermale, interfemale, and pathophysiologic (medical) in origin.

Note that there is no one single cause of aggression. Many factors and stimuli may combine to push the dog or cat to a point where aggression is displayed. For example a dog may be territorial as well as fearful of children. This dog can only exhibit aggression however when it is cornered or tied up and cannot escape, and a strange child comes onto the dog's property. When the dog learns that snapping or growls are successful at chasing the child away, the behavior may be repeated in other situations.

Are aggressive dogs and cats abnormal?

Aggressive behaviors may be "normal", but when they result in human or animal injury, the behavior is dangerous and unacceptable. Human safety must always be a primary consideration when discussing aggression. More than 2 million bite wounds occur annually across North America and most people are bitten by animals they own or are known to them. It is important to be able to identify aggressive dogs and cats to prevent injuries wherever possible.

Some aggression in dogs and cats may have abnormal components and be the result of genetics, disease conditions ranging from hormonal imbalances to organ disease, environmental influences or experience and learning. However, even though health problems and degenerative changes may be present, they may or may not be contribute to the aggressive behavior.

How do dogs communicate their aggressive behaviors?

By watching the body postures and facial expressions of dogs, it is possible to find an indication of what the dog may do. When a dog is reacting to intrusion, the first sign may be eye contact as when two dogs meet. In some cases, the more dominant dog will maintain eye contact, until the more subordinate dog looks away.

Prolonged eye contact may be considered a threat by both dominant and subordinate dogs. Dogs that are acting subordinate by looking away may feel threatened by continued eye contact and bite out of fear. A dominant and/or assertive dog can react to continued eye contact by holding the stare and escalating its aggressive threat. In some dogs a dark iris or hair occluding the eyes may make eye contact difficult to ascertain.

What happens next?

If the dog believes the intrusion is continuing, the dog may escalate the threat by exposing the teeth and snarling. Snarling is not always accompanied by growling and may only be an upward movement of the lips. Long pendulous



lips, long hair or beards on the face may obscure seeing such lip movements. Ear position in dogs can also give clues to canine intentions. A subordinate dog will usually place the ears back as will a fearful dog. An assertive dog will have ears erect. Again, visualization of these positions can be inhibited by conformation, coat and cosmetic surgery.

Dogs will also attempt to change the way they position their body in reaction to a perceived threat. A dog standing its ground tries to look "bigger" by raising the hair along the neck and back, raising the tail in a high position and slowly wagging its tail from side to side. Other dogs attempt to look "smaller" by crouching down, tucking the tail between the legs and even rolling over. Crouching and a lowered body posture in dogs is an appearement posture designed to decrease the aggressive threat. While maintaining either of these postures a dog may be growling, snarling or barking. These postures can result in a stand off, a decrease or an increase in the aggression.

What does an aggressive cat look like?

Often the first sign is a dilation of the pupils (the dark part of the eye) and rapid lateral movements of the tail. This may be accompanied by putting the ears back and hissing or growling. In addition, the cat may "swipe" at the intruder with a front paw, either with the claws sheathed or exposed. Sometimes the cat will gather its legs under and appear ready to pounce. If the intruder is not too close, or begins to leave, the aggressive encounter may end.

Cats have other more dramatic body postures that signal "go away". Cats frequently try to enhance their size and ferocity to make the threat more menacing. They will do this by turning sideways to the intruder, arching their back, holding the tail upright or straight down, and having their fur stand up. They may hiss, growl and yowl at the same time. In other situations a cat may crouch down, tail switching back and forth with the ears tight against the head, again with accompanying vocalization. A cat anticipating a fight may roll onto its back with claws extended ready to fend off a foe.

How should I respond to these behaviors?

The distance between the animal and the intruder can be influential in determining response. This is often called the "flight" distance. If the intrusion is far away the animal may choose to flee, but if the intrusion is very close the animal may choose to fight. If flight is inhibited, as in a dog or cat that is cornered or tied up, aggression or fight is likely to occur. Most dogs, and some cats, on their own territory are more likely to fight than retreat. When approached rapidly, a dog or cat may go through the stages of aggressive behavior very quickly and bite without the intruder being able to react. This happens in encounters between people and their pets because they may approach too close, too fast. Dogs and cats that are mildly fearful may calm down if the intruder shows no fear, waits until the pet settles, and then offers a food reward. Reaching for a dog or cat, while continuing to advance is most likely to lead to aggression. Standing still is often the best way to reduce aggression in the dog that is chasing. Cats will often flee if given the opportunity. However some cats will stand their ground and will scratch or bite if reached for.

In some cases, despite standing still, avoiding further advance or retreating, the aggression continues. Since aggression depends on the situation, the pet's level of motivation, previous experiences and the type of aggression, it will be necessary for you to provide a detailed history to your veterinarian in order that an accurate diagnosis, and appropriate treatment plan be established. Details on the diagnosis and types of aggression in dogs and cats can be found in separate handouts. Ask us.