Aggression is the most serious and dangerous behavior problem that dog owners may encounter. Since there are many different types of aggression, making a diagnosis, determining the prognosis (the chances of safe and effective correction) and developing an appropriate treatment plan are usually best handled with a veterinary or applied animal behaviorist. In some cases medical conditions can contribute to aggression, therefore before a behavior consultation it is essential that your dog has a complete physical examination and any necessary blood tests to rule out organ dysfunction. In order to treat the problem effectively, it will first be necessary to determine the type of aggression your dog displays. It may be dominance-related, fear, possessive, protective and territorial, parental, play, redirected, pain induced, pathophysiological or learned. In many cases more than one specific form of aggression may be exhibited.

**What is dominance aggression and how is it diagnosed?**

One of the most common types of aggression seen by veterinary behaviorists is dominance-related aggression. Once a dog develops a position of leadership or control over a family member (or other dog), any challenge to that dog's position may result in aggression. Dogs use facial expressions and body postures as signals to display dominance. These include standing tall, a high wagging tail, eye contact, or snarling. Aggression towards family members in one or more of the following circumstances along with dominant signalling may suggest a dominance aggression problem:

A. Around rest areas or resources (food, toys)
B. During episodes of restraint, discipline, punishment or control
C. Whilst making eye contact
D. During handling by the owner (lifting, petting, hugging, rolling over onto back or side)
E. Around a particular family member

**What is fear aggression and how is it diagnosed?**

Fear aggression arises when a dog is exposed to people or other animals that the dog is unfamiliar with or those that have been previously associated with an unpleasant or fearful experience. Although some dogs may retreat when fearful, those that are on their own territory and those that are prevented from retreating because they are cornered or restrained, are more likely to show aggression. If the person or animal retreats, acts overly fearful or the pet is harmed or further frightened in any way (e.g. by physical punishment), the fear is likely to be further aggravated. Fear aggression toward family members might arise out of punishment or some other unpleasant experience associated with any member. Many cases of fear aggression are seen as combinations or complicating factors of other forms of aggression (dominance, maternal, possessive, etc.). Fearful body postures in conjunction with aggression are diagnostic of fear aggression. Behavior therapy, possibly in combination with drug therapy, can be used to treat most cases of fear aggression.

**What is play aggression and how is it diagnosed?**

Play aggression is commonly seen in young dogs toward people or other pets in the family. Overly rambunctious play along with grabbing, nipping or biting of people or their clothing are some of the
handled incorrectly could lead to more serious forms of aggression as your dog matures.

**What is possessive aggression and how is it treated?**

Possessive aggression may be directed to humans or other pets that approach the dog when it is in possession of something that is highly desirable such as a favourite chew toy, food, or treat. While protecting possessions may be necessary if an animal is to survive and thrive in the wild, it is unacceptable when directed toward people or other pets in a household. What can be confusing for some owners is that it is not always food that brings out the most protective displays. Novel and highly desirable objects such as a tissue that has been stolen from a waste basket, a favoured toy, human food, or a piece of rawhide are some of the items that dogs may aggressively protect.

Treatment must first be directed at preventing possible injury. At first it may be best to confine your dog in a cage so that it cannot gain access to any items that it might pick up and protect. Dogs that protect their food can be given a less palatable diet, and fed in a separate room away from family members. Dogs that protect their treats or toys should have them taken away, and only allowed access to them when alone in the cage or confinement room. When you are available to supervise, a long lead and head collar can be kept attached so that your dog can be prevented from wandering off, and immediately interrupted if it attempts to raid a dustbin or pick up inappropriate objects. Booby traps (including remote alarms or unpleasant tastes) can occasionally be used to teach your dog to stay away from selected objects, but will not be successful alone. Although prevention can help to ensure safety, if the problem is to be corrected your dog will need to be taught to accept approaches and give up objects on command. The goal is to train the dog that it will receive a favoured treat or reward that is even more appealing than the object in its possession. Giving up possession is then associated with gaining something new rather than losing something important. The key to success is to have good control and a well-trained dog.

**What is territorial aggression and how can it be treated?**

Protective and possessive aggression may be exhibited toward people or other animals that approach the pet's property (territorial aggression). Generally people and other animals that are less familiar to the dog, or most unlike the members of the household are the most likely "targets" of territorial aggression. While most forms of territorial aggression are likely to occur on the property, some dogs may protect family members regardless of the location. Territorial aggression can be prevented or minimised with early socialisation and good control. Young dogs should be taught to sit and receive a reward as each new person comes to the door. To reduce potential fear and anxiety toward visitors, you should ensure that a wide variety of visitors come over to visit the puppy, while the puppy is young and sociable. Most dogs will start to alert the family to strangers near the home by barking. However the dog that has been well socialised and under good control can be trained to quickly settle down and relax. For dogs exhibiting territorial aggression, you will need to gain enough control to have your dog sit, stay and when calmed down, take a reward at the front door. Generally a lead and head collar will give the fastest and most effective control. Using a desensitisation and counter-conditioning programme you can begin retraining with low levels of stimuli (such as people arriving in a car, walking past the front of the house, or perhaps even a family member knocking on the door or ringing the bell). The idea is that each time someone arrives at the house or rings the bell, the dog will come to expect a favoured reward (toy, cheese, treat or play session) as soon as it stops barking. Once the dog can be controlled and receives rewards in this environment, gradually more intense stimuli can be used. Sometimes, the initial barking can be disrupted so that the pet can be directed to perform the appropriate behavior and get its reward.
What is predatory aggression and how can it be treated?

Predation is the tendency to chase and hunt prey. Predatory behaviors include stalking, chasing, attacking, and ingestion of prey animals, but may occasionally be directed at people or other pets. Some dogs that have never shown predatory tendencies, may display the behavior when running together with a group of dogs. Although the desire to chase can be reduced by using a head collar combined with desensitising and counter-conditioning programmes in the presence of exciting stimuli, the seriousness of this problem should not be underestimated. It may pose a threat to a variety of humans and animals. Whenever the dog is outdoors it should be confined to an escape proof pen or run, or controlled securely by the owners. A lead and head collar and preferably a muzzle, should be used to help to ensure safety when out for walks.

What is pain-induced aggression and how can it be treated?

Pain-induced aggression is usually elicited by some form of handling or contact that elicits pain or discomfort. However, even if your dog is not exhibiting pain, many medical conditions make a pet more irritable and perhaps more prone to aggression. Fear and anxiety further compound many of these cases. Once your dog learns that aggression is successful at removing the stimulus, aggression may recur when similar situations arise in the future, whether or not the pain is still present. Treatment first requires that the medical or painful condition is resolved. Next, you will need to identify the types of handling and situations that have led to aggression in the past. With desensitisation and counter-conditioning, your dog can slowly and gradually be accustomed to accept and enjoy these situations. Once the dog learns that there is no more discomfort associated with the handling, but that there may be rewards, the problem should be resolved. A muzzle and lead and head collar, may be the safest way to begin the retraining.

What is maternal aggression and how can it be treated?

Maternal aggression is directed toward people or other animals that approach the bitch with her puppies. When bitches have a false pregnancy (pseudopregnancy) they may also become aggressive and begin to protect nesting areas or stuffed toys at the time approximately equivalent to when the puppies would have been born. Once the puppies are weaned and the dog is spayed the problem is unlikely to recur. In the interim, the owners can use a lead or lead and head collar, along with the “come” command and rewards to teach the dog to leave the litter, at which time the puppies can then be handled. With desensitisation, counter-conditioning, good control and highly reinforcing rewards, it may be possible to train your dog to accept approach and handling of her puppies.

What is redirected aggression and how can it be treated?

Aggression that is directed towards a person or pet that did not initially evoke the aggression is classified as redirected. This is likely to occur when the dog is aroused and a person or other pet intervenes or approaches. Dogs that are highly aroused must not be directly challenged. In some cases a sound alarm, or long lead can be used to safely remove the dog from the situation. If the aggression and arousal does not immediately subside, consider securing your dog in a safe quiet area, until it settles down and will come out for food and gentle affection. Since redirected aggression arises out of other forms of aggression, it is important to identify and treat the initial cause of aggression (e.g. fear, territorial, sibling rivalry, etc.), and to prevent the problem. This can be accomplished by avoiding exposure to the stimulus for the aggression. By keeping a lead and head collar and muzzle on your dog and distracting it with a game or training session the animal can be slowly re-exposed to the problem situation and rapidly desensitised to the exciting stimuli.

What other causes of aggression may be encountered?

Aggression associated with medical disorders may arise at any age, may have a relatively sudden onset and may not fit any canine species typical behavior. Some medical conditions can, on their own, cause aggression, but in many cases a combination of behavioral factors and medical problems cause the pet to display aggression. It is well known that infections like rabies result in aggression, but other infections, hormonal imbalances like Cushings disease, tumours and a variety of genetic and metabolic factors can instigate, predispose or exacerbate aggressive behavior. Painful conditions such as dental disease, or arthritis, and medical conditions causing fever, fatigue or sensory loss are likely to increase a pet’s irritability.

In rare circumstances, aggression has no identifiable aetiology and no particular stimuli that initiate the aggressive displays. There may be a genetic propensity to aggression in the lines of certain
breeds, but many of the cases previously labelled as "idiopathic", "rage" or "mental lapse aggression" have been disputed and in some cases subsequently reclassified. Only when there is no identifiable stimulus or cause for the behavior following extensive investigation including a thorough neurological assessment should the diagnosis of idiopathic aggression be considered.

What is learned aggression and how can it be treated?

Although learned aggression can refer to dogs that are intentionally trained to act aggressively on command (or in particular situations), learning is also an important component of most other types of aggression. Whenever a dog learns that aggression is successful at removing the stimulus, the behavior is further reinforced. Some forms of aggression are inadvertently rewarded by owners who, in an attempt to calm the pet and reduce aggression, actually encourage the behavior with patting or verbal reassurances. Pets that are threatened or punished for aggressive displays may become even more aggressive each time the situation recurs.

Treatment with flooding is intended to teach the pet that the stimulus is not associated with any harm and that aggression will not successfully remove the stimulus. However this technique carries significant risks and with the alternative approach of desensitisation and counter-conditioning, the dog is not only taught that the stimulus is safe, but that it is associated with a reward.