Canine Aggression directed toward people is a serious problem. Several million people are bitten each year, often by a dog familiar to them. The injuries range from minor to severe and even death. The causes of human directed aggression are varied yet the underlying motivation is usually fear, or anxiety and not a desire to dominate or control.

Dog bites and canine aggression results from many factors and may be a normal but unwanted response or an abnormal response to a particular situation. Early environment, genetics, learning, health (both medical and behavioral), and training contribute to aggressive behavior.

On walks, the owner may inadvertently reinforce a tense and defensive behavior by tightening the leash and/or with their vocal cues and body posture. When the owner tightens the leash and draws the dog in closer they are usually doing so because they are unsure of how their dog may respond. However, these behaviors (leash tightening and tense posture) may signal to the dog that the impending approach is problematic, and therefore increase rather than decrease the dog’s emotional arousal.

Aggression at the door may be due to territorial responses and may be combined with fear related aggression toward strangers. Some dogs will show intense responses when the doorbell rings or someone knocks and then be fine when the people come inside. Others may continue to posture aggressively and/or show fearful responses and perhaps injure visitors if given access to them. The behavior can be directed toward everyone who comes to the home, or only selected individuals.

History taking
Background information about the dog’s early experiences with people should be noted and recorded. The lack of appropriate and early exposure to people and new situations as a puppy may contribute to fear based and aggressive responses as an adult. Other animals in the home should be noted and determine if they also exhibit the same behaviors.

All previous attempts to change or correct the problem must be explored and detailed. These might include training, treats, more exposure, confinement etc. Punitive measures including leash corrections, shock collars, physical reprimands should be noted as they can contribute to the anxiety surrounding the situation. Often owners have attempted to “socialize” the dog by repeatedly taking them places where they encounter other people. This may increase rather than decrease the aggressive responses resulting in discouraged owners and a pet quite good at performing the unwanted responses.

The aggressive responses on walks should be explored in detail including location, distance to the person and the response itself. Determine both a distance and response gradient; at what distance does the response first begin (perhaps with just alerting behavior, watchfulness and not full blown aggressive behaviors) and what does it look like. The goal is to establish the distance at which the dog first notices another person, what the response is at that time and also to determine when the response is at its peak and where the person is at that time. The owner should be encouraged to describe the response in very precise detail including body posture, vocalizations, and ability to control or divert the dog. Finally, how does the encounter end and when or at what distance does the dog return to a baseline controllable behavior?

For door related behaviors, the first episodes and several more recent episodes should be explored. Any punishment, reprimands or confinement should be detailed. Are there any people who can come into the home and the dog is relaxed and friendly? Does the behavior occur if people get up and move about the house once they are inside? Are there categories of visitors, i.e. familiar, somewhat familiar, unfamiliar and how does the behavior vary between these groups? How many visits are needed for a person to become a familiar visitor? If they always confine the dog with company, why do they do so? Has anyone been bitten by the dog when they have entered the home?

Diagnosis
In both situations the responses tend to be a combination of fear based responses, anxiety and learned responses. In some cases it is apparent that the dog has poor social communication skills and does not read the social signals of people appropriately. Responses at the door are usually a combination of fear, anxiety, territorial behaviors and learning combined to solidify and intensify the behavior.

General treatment recommendations
All situations that cause either behavior to occur must be avoided. When the dog is able to engage in the behavior repeatedly not only do they learn how to do it better, they may actually bias the synapses for earlier responses. When the problem occurs on walks, all walks must be curtailed until the dog learns new responses. If the only way the dog goes outdoors to eliminate is on a walk then walks must be arranged at times and places where encountering other people is less likely. If the problem is at the door, an adult each and every time someone wants to enter the home must securely confine the dog. If the dog will not tolerate confinement, then
confinement training should be done as a first step. It is important for the owner to gain control of their pet. Leashes are absolutely necessary (not retractable leashes) and the use of head collars (Gentle Leader® Premier Pet Products) and/or muzzles strongly recommended for dogs that will be in situations with people if they cannot be avoided.

**Treatment for aggression on walks**

Treatment will focus on three areas, increasing control and ability to leave potentially aggressive situations, systematic desensitization to people and classical counter conditioning to the approach people.

Two common treatment strategies are often employed. One is counter conditioning and desensitization. The dog is taught to perform a different task that is calm and relaxed. Desensitization is teaching the dog to accept the approach and greeting of people with relaxed body postures. This is begun with people far from the dog until the dog is reliably able to assume calm and relaxed behaviors. Gradually the dog is exposed to people at closer distances. The other approach is to classically counter condition the dog to associate something pleasant with the sight and approach of people.

**Classical counter conditioning**

Animals showing unwanted behaviors are usually experiencing the underlying emotions of anxiety and fear that result in the outward aggressive responses. Changing underlying emotional state can help change outward behavior. The goal is to teach the pet to relax AND to associate the stimulus with something pleasant. The conditioning works to change the meaning of the stimulus from one that predicts something unpleasant to one that predicts something desirable.

Learning is unlikely to occur when an animal is highly emotionally aroused. In order to change an emotional behavioral response you must understand how the response changes with varying characteristics of the stimulus. To grade the response you need to know how the pet responds to the stimulus as that stimulus changes either in its proximity, speed of approach, location or other characteristics such as sound or size. Essentially you need to know, how the pet responds when the stimulus is 20 feet away, 10 feet away and finally past the owner and pet. And, does the pet respond the same way all the time? Can you grade the response in some way? This helps not only to assess the behavior but can also be used to assess treatment response.

To change underlying emotional state the animal must be offered something enticing that evokes another hopefully happier response. Find a reward that the animal finds especially enticing (an “A” treat) usually food, especially table food. Some dogs will find play an enticing reward but not all dogs will switch gears for play. Training is more successful if there is a gradient of rewards including those that are extremely desirable to less desirable ones. Extremely desirable rewards are saved for training and conditioning sessions only and withheld at other times.

**Pre-training**

The owner needs to identify 3 levels of treats, “A” treats (very delectable usually table food), “B” treats (perhaps liver treats) and “C” treats (biscuits). The owner should also create a “treat jar”; a plastic container with a lid that is filled with A, B, and C treats and a bell placed on top. The pet is taught to “come” to the ringing sound and told to sit after which it will receive a treat from inside the jar.

The dog is taught two baseline tasks. To get the pet’s attention, we teach the pet to look at the owner using a phrase such as “watch me” or “focus”. The animal should maintain eye contact for several minutes but remain neutral and relaxed. A leash and head collar should be used for additional control. The task is first practiced in neutral, quiet surroundings until well performed, and then distractions can slowly be added.

The second is a command that allows you to leave or end the situation. For problems on walks, the dog is taught a phrase such as “let’s go” or “follow me” and to turn 180 degrees and briskly walk the other way. This should be performed quickly, but without anxiety or tension. Again, this is first practiced in a quiet location so that the response is quick and reliable each and every time. When the problem occurs indoors, the pet is taught a “go to your mat” command to send the dog to a quiet location to settle and relax. This training is done in slow steps, first taking the dog to the location and getting it to sit or down and stays with gradual increase in time. The dog is rewarded for relaxed breathing, body posture and facial expressions. In some cases, this mat may need to be in a room with a door that can be securely closed and/or locked or a crate. If the pet is not crate trained this can be attempted if the owner is willing to take the time to teach the pet how to be confined.

All of these steps must be in place before conditioning training can begin. Again, while this pre-training is taking place the stimuli known to cause the problem behavior must be avoided. The dog should be able to focus and then leave on command or settle in their place, before you begin the conditioning.

**Actual training sessions for aggression on walks**

To help with control the pet should be wearing a flat collar or head collar or front clipping body harness and on a non-retractable leash that is held by a responsible adult. Initial sessions begin with the stimulus at the predetermined distance at which little or no response is noted. The owner must have the highly desired treat available and ready. The pet is asked to “focus” and the owner will begin feeding the treat regardless of what the pet does as long as they are not lunging or barking. They can look at the stimulus. As the stimulus gets closer to the predetermined spot where undesirable behavior is going to begin, you must quickly but calmly exit the
situation using the “let’s go” command. Do several repetitions at the same distance. Knowing the response gradient is absolutely essential to setting up successful training sessions. The goal is to help the pet learn that the arrival of the stimulus predicts the desired treat and in the absence of the stimulus the treat is not forthcoming.

The owner must not attempt to remain longer than the dog can remain calm and focused. If the dog becomes very reactive, the stimulus was too close or too intense and future sessions must control the stimulus intensity. Unwanted responses occur when the stimulus is too intense. You may need to be quite a distance away for the dog to be calm and controlled. Without control of the stimulus it is unlikely that the dog will learn the wanted responses because they will be too emotionally stimulated. Remember, the dog learns best when calm.

Punishment must be avoided, if the pet does not respond well to the stimulus you must immediately leave and realize that something about the set up of the training session was incorrect. You cannot punish away an emotion such as fear, anxiety or aggression. When you do punish the pet in these situations you are punishing what they are doing at the time and this can have several unintended consequences. You may change the outward expressions of the behavior such as barking, lunging, growling without any effect on the underlying emotion. This can result in a dog that does not signal but bites unexpectedly. Or, fear or anxiety toward the stimulus may actually increase since the stimulus results in punishment and bad things happening to the pet.

Limit the number of exposures within a training session. You want the dog to be successful and end each session on a positive response. If the dog does extremely well in a given training session, then they should receive a big reward and the session end.

Treatment of territorial aggression
Aggression toward people may only be exhibited when people enter the dog’s property, or what the dog considers his territory. Dogs may get highly aroused at the sight of people on their territory and may even attempt to jump fences, go through windows or doors to get to the intruder. Certainly, it is easier to prevent this type of aggression than to treat it. Dogs should not be allowed to engage in prolonged aggressive displays at windows, doors and fences at other dogs or people. Owners should strive early in the dog’s life to get control of barking and other territorial displays. Some dogs that act territorial are fearful as determined by their body postures and response to intruders who do enter.

Treatment for territorial aggression has several components. First, in the home the dog can be taught a “quiet” command so that barking displays can be halted using a leash and head collar for control. Also visual access could be blocked to decrease the arousal level. The dog should not be allowed outdoor or window access without supervision because the behavior is rewarded when the stimulus leaves and the dog will repeat the behavior. The cornerstone of treatment is to counter condition and desensitized the dog to the approach of people in its territory. The use of a head collar and/or muzzle is necessary for owner confidence and control. This is accomplished by first teaching the dog a command incompatible with barking and lunging, such as a sit/stay. Food rewards are often helpful in the beginning so that the dog is relaxed and compliant. Then the dog is gradually exposed to people near the territory and praised for good behavior. At first it may be necessary to use people that the dog knows and recognizes and progress to unknown people.

Teaching a new response to the doorbell and visitors to the home
Until the new behavior is mastered, it is important to avoid the full strength stimulus (stranger coming up to the front door). If someone comes to the door, the dog should be safely and securely confined. Daily training exercises should be short, 5-10 minutes in duration using highly delectable food rewards. Training will focus on teaching the dog to settle on command, teaching a new response to the approach of people to the door, rewarding good behavior.

Start the training with no distractions present (nobody at door, house quiet, other pets elsewhere). The dog should be taught to go to a greeting spot (mat, rug, bed) on voice command; the spot should be within sight of the front door but a few feet away from it. Use a head collar and leash and/or place the dog in a tie down for additional control. Before progressing to the next step the dog should reliably go to the greeting spot and hold the sit/stay for 10 seconds with no distractions.

Set up daily exercises with one family member handling your dog and the other family member being a “visitor”. The family member playing the “visitor” should have spent time with the dog just prior to doing the training exercises. The dog should be on leash or have some type of barrier across the door that allows full visualization of the “visitor” but no access (screen door/baby gate) to the outdoors.

Have the “visitor” approach the open door and either knock gently or ring doorbell. The handler should give the command to your dog to go to the greeting place and sit/stay. The correct behavior is rewarded with a food tidbit and praise. Since the stimulus level is low (familiar person, recently seen them) the dog should be able to perform the desired behavior and be rewarded. If the dog isn’t compliant, give no reward and reduce the intensity of the exercise (maybe leave out knocking/doorbell ringing) at the next attempt.

Repeat until the dog is very obedient about going to the greeting location every time the “visitor” approaches the open door and knocks/rings. Then close the door slightly so that it is open 3/4 of the way and repeat entire sequence. Continue gradually closing the
door over multiple sessions until the “visitor” can approach a closed door and knock/ring and the dog will hold a sit/stay at the greeting place as they enter the home.

After this has been successfully completed with the family member as the “visitor”, try to recruit a less familiar person to be the “visitor”. Return to the open door and repeat until your dog will hold the sit/stay even with a non-family member knocking/ringing bell of a closed door and then entering the house. At this time, the entering “fake visitor” can shake the treat jar and give the dog a reward.

**Using classical counter-conditioning to the doorbell**

In other situations, it may be necessary to change the emotional state of the dog when they hear the doorbell before any training can begin. This is especially useful for dogs that are extremely emotionally aroused by the sound of the doorbell and bark, lunge and jump at the doors and windows.

Favored food rewards should be identified for the dog, these must be extremely delectable, generally table food. Place the dog unrestrained in another room away from the door with one family member, while another family member quietly leaves the house and comes to the unlocked front door. This person must have with them a large supply of the delectable treat and windows must be blocked.

They should ring the doorbell and the dog is allowed to run to the door as it usually would. As the outside person hears the dog approach, they open the door, throw the treats inside and close the door. When the dog gets to the door, and the food is delectable the dog will usually eat the treats and perhaps bark. Then the outside family member rings the bell and throws in the treats again. This technique will not work if the dog has seen the person exit the house or knows who is outside before they ring the bell.

A training session is usually only 1-3 repetitions since when the dog realizes it is a known person at the door they may not bark. After several sessions, many dogs will decrease their barking or at least diminish emotional arousal to the doorbell so other training techniques can be utilized. At this point in time, training to sit and stay on a mat can begin and desensitization training implemented.

These training protocols may change how the dog responds to people coming to the door. If the dog is showing intense fear related aggression toward people and has bitten or threatened to bite this may not be enough to allow them to interact safely with people who come into the home. These exercises may only diminish reactivity so other training can be implemented.

**References**

