



Aggression in Dogs Overview

Basics

OVERVIEW

- Action taken by one dog directed against a person or another animal, with the result of harming, limiting, or depriving that person or animal; aggression may be offensive or defensive
- Offensive aggression—unprovoked response directed toward a person or another animal in order to control access to some resource (such as food or toys) at the expense of that person or animal; includes social status/dominance aggression, possessive aggression; intermale (that is, between two males) aggression and interfemale (that is, between two females) aggression, and predatory aggression; common targets are familiar people or animals
- Defensive aggression—aggression is directed toward a person or another animal perceived as an instigator or threat; includes fear-motivated, territorial, protective, irritable (pain-associated or frustration-related), and maternal aggression; common targets are unfamiliar people or animals
- Probability of overt aggression may be influenced by motivation, arousal, and anxiety; specific incidents of aggression may involve both offensive and defensive aggression
- In all cases, medical explanations (including pain) as the cause or contributing factor to aggression must be considered
- Aggression in dogs is the most common reason dogs are presented to veterinary behaviorists in the United States
- According to a 2009 report by the Center for Disease Control and Prevention (CDC), about 4.7 million people are bitten by dogs each year in the United States and approximately 900,000 require medical attention for bite-related injuries

GENETICS

- Some breed-specific aggressive tendencies and bite styles have been selected for in breeding programs, although this cannot predict behavior of individual dogs
- One study linked aggressive English springer spaniels to one breeding sire, suggesting a possible inherited form of aggression

SIGNALMENT/DESCRIPTION OF PET

Species

- Dogs

Breed Predilections

- Any breed may show aggression
- Pit bull types and rottweilers are the most common breed types implicated in fatal dog bites in the United States, although comparative rates of aggression based on breed occurrence are not available
- Selective breeding for certain behavioral traits may increase the likelihood that dogs will have specific types of aggression; for example, dogs of breeds bred for fighting may be aggressive toward other dogs
- English springer spaniels appear at risk for impulsive (“rage”) aggression

Mean Age and Range

- Any age puppy or dog may show aggression
- Aggression commonly becomes more problematic at social maturity (1–2 years of age)

Predominant Sex

- Any sex of dog may show aggression
- Males—intact or castrated most commonly are implicated in dog bites

SIGNS/OBSERVED CHANGES IN THE PET

- Behavioral warning signs include being motionless (immobility), growling, snarling, or snapping at air
 - ♦ Offensive aggression warning signs—head up, tail up with stiff wag, direct stare, face-on immobility
 - ♦ Defensive aggression warning signs—head lowered, tail down, body withdrawn, paw of front leg lifted
- Physical examination usually unremarkable
- Dominance-related aggression, fear-related aggression, or irritable aggression may be evident during the examination
- Nervous system examination—abnormalities may suggest a disease process (such as rabies) as the cause of aggression
- Signs vary, according to the situation and the type of aggression

Offensive Aggression

- Often directed toward familiar household members
- Signs include head up; tail up with stiff wag; direct staring; face-on immobility
- People-directed triggers (situations or things to which the dog reacts, leading to aggressive behaviors)—reaching for pet; patting on head; approaching or displacing when on elevated resting sites; approaching food, toys, or stolen objects

Defensive Aggression

- Often directed to unfamiliar people or dogs that approach, stand over, or reach for the dog
- Certain familiar people may be exempt
- Signs include head lowered, tail down, body withdrawn, paw of front leg lifted
- May be location-specific, as when strangers approach the dog's home, yard, or car
- Aggression may increase if the dog is restrained
- As distance from trigger (situation or thing to which the dog reacts, leading to aggressive behaviors) decreases, response may escalate to agitation, barking, lunging, baring teeth
- Approach/avoidance behavior is common; “approach/avoidance” behavior consists of the dog approaching the stranger and then moving back away from the stranger
- Maternal aggression is directed toward individuals approaching the whelping box/area or puppies

CAUSES

- Part of the normal range of dog behavior; strongly influenced by breed, sex, early socialization, handling, and individual temperament
- May be caused by a medical condition—possible but rare; medical causes of aggression should be considered in all cases

RISK FACTORS

- Unneutered male
- Inadequate socialization during critical period (3–14 weeks of age)
- Traumatic or negative experiences

- Environmental conditions may lead to aggression or may increase the level of aggression—such as associating with other dogs in a pack; barrier frustration or tethering; cruel handling and abuse; and dog baiting and fighting
- Previous aggression/bite history (number of incidents, severity of aggression)
- Presence of children, elderly people, or other people or animals at high risk living in or visiting household

Treatment

HEALTH CARE

- The first tenet of management is to prevent injury to people
- Euthanasia—appropriate solution in cases of vicious dogs; may be the only safe solution
- Board the dog until an outcome decision or implementation of a safe management plan is made
- Use physical barriers, to reduce risk of injury to people, until the owner obtains treatment
- Identify specific situations that have led to aggression in the past; use a specific plan to avoid these situations
- Improve physical control of the dog using reliable barriers (such as fences, baby gates), muzzles, leashes, and head halters
- Calmly and safely remove dog from aggressive-provoking situations
- Avoid punishment and confrontation; punishment and confrontation promote defensive (fear) responses and escalate aggression
- Management success—combination of environmental control, behavior modification, and medication

ACTIVITY

- Appropriate and safe exercise regimen should be incorporated into the treatment plan, since frustration and arousal may increase the incidence of aggression

DIET

- A reduced-protein diet may be helpful in controlling territorial aggression in dogs

SURGERY

- Neuter or castrate male dogs

Medications

- Medications presented in this section are intended to provide general information about possible treatment. The treatment for a particular condition may evolve as medical advances are made; therefore, the medications should not be considered as all inclusive
- No medications are approved by the federal Food and Drug Administration (FDA) for the treatment of aggression in dogs; discuss the risks and benefits of using medications with your pet's veterinarian
- No medication will eliminate the probability of aggression
- Medication should be used *only* in conjunction with a safe management plan
- Medications that increase serotonin (chemical messenger in the brain that affects mood and behavior) may be helpful to reduce anxiety, arousal, and impulsivity
- Treatment duration: minimum, 4 months; maximum lifetime of pet
- Medications that have been tried include fluoxetine, paroxetine, sertraline, clomipramine, amitriptyline, and L-tryptophan
- Megestrol acetate has been used successfully with dominance-related and intermale aggression; however, it does have side effects that should be considered

Follow-Up Care

PATIENT MONITORING

- Weekly to biweekly contact—recommended in the initial phases
- Clients need feedback and assistance with behavior modification plans and medication management

PREVENTIONS AND AVOIDANCE

- Avoid all situations that previously have lead to aggression

- Use extreme care when handling aggressive dogs; use safe confinement, gates, halter, collars, leashes, or muzzles and other restraints to prevent injury to people and other animals
- Reduce the risk of aggression in young dogs with positive socialization when puppies are 3–14 weeks of age
- Avoid intimidation techniques for training and negative and/or fear-inducing situations

POSSIBLE COMPLICATIONS

- Injury to people and/or other animals
- Interdog aggression—” interdog aggression” refers to aggression between two or more dogs; people often seriously injured when interfering with fighting dogs, either by accident or by redirected or irritable aggression; owners should not reach for fighting dogs; pull apart with leashes
- Liability to the owner; human injury, bite-related lawsuits, and loss of homeowner's insurance can result from dog aggression

EXPECTED COURSE AND PROGNOSIS

- Aggressive dogs weighing more than 40 pounds (18.5 kg) are at risk for euthanasia due to their inappropriate behavior
- Overtly aggressive dogs are never cured; depending on the situation, they may be managed successfully
- Prognosis is case-dependent due to risk factors and management of each situation

Key Points

- Overtly aggressive dogs are never cured; depending on the situation, they may be managed successfully
- Behavioral warning signs include being motionless (immobility), growling, snarling, or snapping at air; offensive aggression warning signs include head up, tail up, direct stare, face-on immobility; defensive aggression warning signs include head lowered, tail down, and body withdrawn
- Avoid situations that lead to aggression
- Use extreme care when handling aggressive dogs; use muzzles and other restraints to prevent injury to people and other animals
- Liability to the owner; human injury, bite-related lawsuits, and loss of homeowner's insurance can result from dog aggression

Notes

Enter notes here



Blackwell's Five-Minute Veterinary Consult: Canine and Feline, Fifth Edition, Larry P. Tilley and Francis W.K. Smith, Jr. © 2011 John Wiley & Sons, Inc.