

Selected Breeding of Dogs and Severe Dog Bites

Our topics for this week are:

- **Diversity in dog breeds**
- **Characteristics of breed groups**
- **Breeds and bites**

The DNA of the domestic dog is nearly 99% identical to that of the gray wolf, but due to selective breeding by humans, it has more diverse body shapes, sizes, and dispositions than any other species. The dog has an unusually large number of chromosomes: 78 compared to 46 for humans and 38 for cats, and a short gestation period (63 days) which have allowed relatively rapid selective breeding for specific traits. Despite the diversity among dog breeds, 99.8% of the DNA is identical among all breeds.

The Kennel Club was formed in England in 1873 and was the first that formally recognized breeds of dogs. The American Kennel Club was formed 11 years later. Most breeds of dogs recognized since 1900 have been selectively bred just on their appearance, not their service. There are currently 202 dog breeds recognized by the AKC which are separated into one of 7 Groups: Sporting, Hound, Working, Terrier, Toy, Non-Sporting, and Herding.

Breed Characteristics

The natural behavior of dogs has been modified genetically by selective breeding. These traits can be intensified or suppressed by training, but the trait will remain and can be manifested again under new circumstances such as a new home, owner, or handler, among many possibilities. Although breed behavior varies by family lines, the behaviors intentionally or unintentionally concentrated in breeds can be categorized by usage deemed desirable by past and present breeders.

Personal guard dogs, such as the boxer, St. Bernard, and mastiff, tend to be even tempered and have a strong bond to family. Livestock guard dogs (e.g., Great Pyrenees, Komondor, Kuvasz) are solitary, bond less with handlers, and have low reactivity. Herding dogs (collie and shepherd breeds) bond strongly to individual handlers, have high desire to chase and herd things that move, and a low level of fear. Terriers and pinschers are highly alert, aggressive, and develop possessive bonding with individual handlers. Sight hounds (e.g., borzoi, greyhound saluki, whippet) are aloof and quiet, have low reactivity, and bond less strongly with handlers. Scent hounds (e.g., bloodhound, coonhound, basset hound, beagle) have low reactivity and low aggression with stoic dispositions. Sled dogs (e.g., malamutes, spitz, Norwegian

elkhound, Siberian husky) are usually not aggressive but can be, bond weakly with owners, and have moderate reactivity.

Breeds and Bites

Dog bites account for more than 1/3 of all homeowner liability claims. The average bite claim settlement is for more than \$29,000. The most dangerous dogs are larger dogs, not because they necessarily bite more often, but because their bites inflict more damage. The ability to inflict a killing bite is instinctive. What is killed is not considered food by a dog unless taught by older dogs or by starvation.

Fatal dog bites occur most often to 1- to 4-year-old children. Based on a U.S. Centers for Disease Control report, 90% involve an unaltered male dog and 90% of 2-year-old children were unsupervised by an adult. The dog acts alone in 68% of cases, and in 25% of killings the dog is chained. Three-fourths of biting dogs are owned by family or friends of the person bitten. Most dogs involved in a killing are in the 50 to 100 lb. weight range.

Breeds of dogs that have been selectively bred for aggressive behavior do not have the same temperament as breeds that were not bred for that trait. However, members of aggressive breeds can have the trait of aggressiveness encouraged or discouraged by their socialization as a puppy and handling as an adult. A dog's handling, socialization, and training have more to do with the risk of bite or lethal ability than the breed. However without proper handling, some breeds are more inherently dangerous due to their size, gender, and breeding. For example, a Labrador retriever has been bred to willing to jump in water and most can be trained to retrieve ducks. A Yorkshire terrier will not willingly jump in water and cannot be trained to retrieve ducks. Breeds selectively bred to protect people or property or to move or fight other animals are more likely to develop the courage to bite a human. Pit bull-type dogs were bred from bulldogs and terriers to fight bears and bulls (bear-baiting and bull-baiting). Later, they were bred to fight each other in pits.

The American Veterinary Medical Association and the American Bar Association do not support breed bans, but they are concerned about public safety involving dangerous dogs. Although a single factor approach is inadvisable, only some breeds are big and strong enough to inflict serious injuries or become a lethal hazard. These breeds were genetically selected for their size, strength, fearlessness, and aggressiveness to serve as personal and property guardians. Their inbred tendencies may not be manifested unless the dog is not socialized or trained to express and refine their aggressiveness. A dog that can bite once and inflict great damage or death is a far more significant threat to public safety than a little dog that bites frequently and does not seriously hurts no one.

The choice should neither be to ban all members of the breed, nor to give all pit bulls and other 50 lb plus aggressive dogs the benefit of doubt. The objective in controlling dog bites should be to ban the IRRESPONSIBLE ownership of dogs capable of inflicting serious injuries

and fatal human attacks. People should be allowed to own big, strong, and potentially aggressive dog breeds if they can prove that their dog is has been properly socialized and is adequately controlled. They should also be required to have liability insurance that covers the possibility that their dog might bite and injure someone.

Requiring evidence of a pedigree, certificate of American Kennel Club Canine Good Citizen training, the dog being neutered, and having three or fewer dogs in the same household would significantly reduce the risk of serious or fatal dog bites. If a high risk breed dog is pedigreed, the risk is usually not high. Fighting dogs and drug dealer dogs are usually mixed breeds. A certificate of professional training from a qualified trainer usually indicates the dog is not at high risk for biting. Dogs in households with three or fewer dogs are less likely to be a risk for aggressive biting. If a dog has been neutered, it suggests the owner is a responsible owner and that the dog is more likely socialized.

Whenever there is doubt that a dog is safe to be around, having the dog wear a harness with a chain lead and a basket muzzle, when among the public, is an alternative to a complete ban simply based on breed. Rather than band based on breed, bans may be beneficial if they are on selected pit pulls, Rottweilers, and other strong personal or property protection dogs that are (1) not purebred, (2) have not been certified as having puppy classes before four months of age, and (3) are not always on a leash if not in another dog-proof enclosure.

I have been on a dog bite control council for a few years. A common excuse for a dog biting someone is that the dog is always gentle with family members, inferring the person bitten did something wrong. Loving or at least tolerating family members is part of most dogs nature, including aggressive pit bulls and Rottweilers. The real questions to answer in determining should be designated a dangerous dog are how big is it and how does it deal with people outside of the immediate family, who are not on the dog owner's property.

If you have comments or you're interested in particular animal handling subjects, contact us at CBC@BetterAnimalHandling.com

Now let's recap the key points to remember from today's episode:

- 1. Some dog breeds have the temperament and size to cause serious injury from bites.**
- 2. Breeds should not be banned because of the irresponsibility of some owners.**
- 3. The owners of dog breeds that can inflict serious injury from bites should be required to meet criteria for responsible ownership of their dog that aid in preventing or mitigating dog bite injuries.**

More information on animal handling can be found in my books, *Animal Handling and Physical Restraint*, *Concise Textbook of Small Animal Handling*, and *Concise Textbook of Large Animal Handling* all published by CRC Press and available on Amazon and from many other fine book supply sources.

Additional information is provided at: www.betteranimalhandling.com . This website has more than 300 past podcasts with notes on handling of dogs, cats, other small mammals, birds, reptiles, horses, cattle, small ruminants, swine, and poultry.

Don't forget, serious injury or death can result from handling and restraining some animals. Safe and effective handling and restraint requires experience and continual practice. Acquisition of the needed skills should be under the supervision of an experienced animal handler.