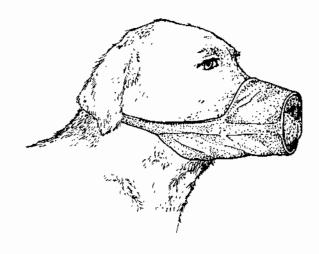
Dos and Don'ts Concerning

Vicious Dogs

By: Donald H. Clifford, DVM, MPH, PhD

Kay Ann Green, BS John Paul Scott, MS, PhD



Provided By AVMA Professional Liability Insurance Trust P.O. Box 1629 Chicago, IL 60690-1629



TABLE OF CONTENTS

SUM	MAR'	USTRATIONS	ı
1.	Dos b	efore you encounter a vicious dog:	1
	a.	Know the types of canine behavior	1
	b.	Know how aggressive or vicious canids behave	3
	C.	Be able to identify the quard dogs, i.e. German Shepherds, Doberman Pinschers, Rottweilers, Chows and Akitas, the sled dogs or arctic dogs, i.e. Malamutes, Huskies and Samoyeds and the fighting dogs or pit bulls, i.e. Staffordshire Bull Terriers and American Pit Bull Terriers/American Staffordshire Terriers	4
	d.	Remember that noises, odors, food and certain activities such as running or scuffing may excite, stimulate or trigger some dogs to attack	4
	e.	Know where vicious dogs live	5
	f.	Keep away from the territory of vicious dogs	5
	g.	Support laws and ordinances that require vicious dogs to be controlled.	6
	h.	Insist that leash laws and other dog ordinances are enforced.	6
	i.	Support animal control personnel and their activities	7
	j.	Carry defensive equipment	8
	k.	Consider defensive strategies	9
	١.	Report vicious dogs, stray dogs and incidents to	

		animal control personnel	9
	m.	Report animal cruelty to the humane society	С
	n.	Don't keep a vicious dog	С
	0.	Contribute to educational programs that reduce dog bites	1
	p.	Recognize personality changes in household pets	1
2.	Dos w	hen you encounter a vicious dog:	2
	a.	Stay calm, sit still or walk your normal pace	2
	b.	Maintain eye contact (without staring) or face the vicious dog or pit bull, stand still or back away when threatened	2
	C.	Climb out of reach such as onto the roof of a car or on playground equipment	3
	d.	Give a vicious dog or pit bull a coat, hat, purse, book, shoe or something to bite	3
	е.	Protect your face, neck and right arm if you are right handed	2
	f	Avoid vicious dogs and pit bulls on the street or in yards and leave a yard when a strange dog or dog "on chain" appears	2
	g.	Speak to vicious dogs or pit bulls with words such as "no," "go," "go home," "sit," "down," "lie down," "stay" or "halt" in a low stern voice	Ę
	h	Let the dog approach you or sniff you first	Ę
	i.	Make a slow, cautious approach when meeting or passing a dog on a leash	6
	j.	Act like a log or curl up in a ball on the ground with your arms around your neck or head	
	1.	Danilla	_

3.	Dos w	when a person has been bitten by a vicious dog:	17
	a.	Capture and remove the dog as soon as possible	18
	b.	Ask the victim to lie down and comfort the patient while professional help is being summoned	18
	C.	Transport a victim gently and quickly to a clinic or hospital	19
	d.	Report the incident to police, animal control and/or local health department	19
4.		or veterinarians, veterinary technicians, trainers, animal control rs and others:	20
	a.	Separate vicious dogs from other animals and clients in the office waiting room or other setting	20
	b.	Have an experienced veterinary technician or handler present in the examining room or reception area while the owner is being questioned and the dog is being examined	21
	C.	Place a vicious dog in an end run with an empty adjacent run if there are no solid partitions between runs.	21
	d.	Attach a chain leash (lead) to the collar of a vicious dog	22
	e.	Use transport cages	22
	f.	Prepare for the exit of a vicious dog from a hospital or clinic	23
	g.	Use security locks on doors and runs	23
	h.	Avoid contact between vicious dogs and other animals	24
	i.	Make sure that two people are present for cage and run cleaning and treatments on weekends and holidays when vicious dogs are present	24

j.	Make sure appropriate drugs, their delivery systems and other protective equipment are available at all times	5
k.	Check the security of a hospital or other areas where vicious dogs are confined	6
ł.	Avoid publicity that would encourage "break-ins"	6
References		7
	List of Illustrations	
Fig. 1 Fig. 2 Fig. 3 Fig. 4 Fig. 5 Fig. 6 Fig. 7 Fig. 9 Fig. 10 Fig. 12 Fig. 13 Fig. 14 Fig. 15 Fig. 15 Fig. 17 Fig. 17 Fig. 18 Fig. 20 Fig. 21 Fig. 22 Fig. 23 Fig. 24 Fig. 25	EXPLORATION DOMINANCE PLAY STANDING SUBMISSION LYING SUBMISSION AGGRESSIVENESS AKITA TEASING FENCE JUMPER CATCH INSTINCT PACK EFFECT ANIMAL CONTROL DOG TAG HALT® SANCTUARY VICIOUS DOG ABUSE BANNING INFANT CALM RETREAT MISDIRECTED AGGRESSION TUGGING PROTECT YOUR FACE AND NECK IT TORM	1 1 1 1 3 4 4 5 5 6 6 7 8 9 9 0 0 1 1 2 2 2 3 3 4
Fig. 25 Fig. 26 Fig. 27	OBEDIENCE TRAINING	5
Fig. 28 Fig. 29 Fig. 30 Fig. 31	CHAIN LEASH	16

Fig.	32	TRANSPORTATION)
Fig.	33	IMPOUNDMENT)
Fig.	34	DOG BITE)
Fig.	35	CARRIER	
Fig.	36	MUZZLE 21	
Fig.	37	PARTITION	>
Fig.	38	CHAIN LEASH 22	2
Fig.	39	EXIT	š
Fig.	40	LOCK	3
Fig.	41	NO CONTACT	ļ
Fig.	42	ASSISTANCE 24	ļ
Fig.	43	POLE SYRINGE 25	
Fig.	44	RABIES SNARE	õ
Fig.	45	SAFETY SLEEVE	ŝ
Fig.	46	SECURITY	ò
Fia	47	PUBLICITY 26	3

v:\AVMA\DOSDONT

DOS AND DON'TS CONCERNING

VICIOUS DOGS

SUMMARY

A dangerous or vicious dog incident may occur anywhere -- on the street, in a home or in a veterinarian's waiting room or kennel. The intensity of the incident will vary depending on the size of the animal, its genetic background, training, location, number of animals and other factors. Measures such as recognizing dangerous or vicious dogs, isolating or staying away from them, remaining calm, avoiding activity that will excite them, and providing a jacket or shoe may avoid or divert an attack. Protecting your face or neck, keeping wounds moist, and seeking medical attention immediately, may minimize the consequences of an incident. Reporting stray dog(s) or incident(s) may prevent future encounters.

DONALD H. CLIFFORD, DVM, MPH, PhD

Division of Laboratory Animal Medicine, Medical College of Ohio, Toledo, Ohio 43699.

KAY ANN GREEN, BS

Division of Laboratory Animal Medicine, Medical College of Ohio, Toledo, Ohio 43699.

JOHN PAUL SCOTT, MS, PhD

Professor Emeritus, Department of Psychology, Bowling Green State University, Bowling Green, Ohio 43403.

INTRODUCTION

The dog family, or Canidae, includes wolves, whose habitat is the Northern Hemisphere including Europe, Asia and North America; domestic dogs that live everywhere humans reside; coyotes in North America; jackals from Africa and India; dingoes in Australia; and foxes which are widely dispersed. Dogs were domesticated from wolves at least 10,000 years ago and have been selectively bred for various uses: hounds for hunting, retrievers, herding dogs, companion dogs, lap dogs, guard dogs, and fighting or attack dogs. Sizes range from Great Danes and St. Bernards to the tiny Chihuahuas. Dogs have been selectively bred to develop submissiveness to humans and hence not to bite, but breeds and individual dogs vary in this respect. Any dog is potentially capable of biting and should be respected accordingly. A large dog is potentially dangerous to humans because of the strength and size of the jaws. Stray dogs running in packs, uncontrolled by human handlers or owners, are dangerous. Many of the reported incidents of young children killed or seriously injured by dogs are of this sort; the dogs apparently mistake a young child for a prey animal.

There are vicious dogs in every breed, but pit bulls and Rottweilers have come to personify vicious behavior in dogs. The three breeds that have been associated with the term "pit bull" are the Staffordshires or Staffordshire Bull Terriers (AKC), American Pit Bull Terriers (UKC, ADBA) and American Staffordshire Terriers (AKC). American Pit Bull Terriers and American Staffordshire Terriers have been cross-registered or dual-registered and are considered to be the same dog. Rottweilers, Chows, wolf-hybrids and Akitas also have been noted for their aggressive propensities. While the discussion that follows tends to focus on the pit bull and other named breeds with an acknowledged propensity toward vicious behavior, it has equal application to dogs, regardless of breed, which exhibit aggressive anti-social behavior.

Several authors have addressed the issue of dog bites.⁷⁻⁹ The program developed by Dr. J. Michael Cornwell for children¹⁰ is particularly noteworthy since infants, children and elderly people are most apt to be seriously attacked by vicious dogs due to their defenselessness.¹¹

Know how aggressive or vicious canids behave.

Fighting between dogs is different from attacks on prey. The primary

mode of attack on another dog is an attempt to seize the other by the back of the neck and shoulders and force it to the ground. A dog treated in this way gives in and retreats or submits. The attacking dog does not attack vulnerable parts of the body such as the feet or No such inhibitions are belly. present in pit bull terriers. These dogs have a very high pain threshold. They will attack any part of the body and will not let go, no matter how much they

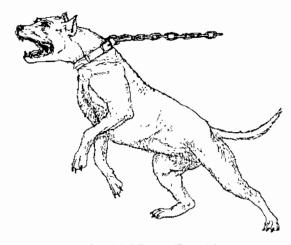


Fig. 6 AGGRESSIVENESS

are punished. Not all dogs that wag their tails are safe especially if the scene is changed or a different person is involved.²¹ Dominant or aggressive behavior usually does not develop until dogs are over one year of age and castration may not suppress dominant behavior completely.²²⁻²³ However, most dog-bite-related fatalities are due to intact, adult male dogs.⁴⁻⁵

Most dogs exhibit threatening or stalking behavior before they attack. Uniquely, pit bulls do not show any threatening signs of aggression. Studies on aggression in dogs lead one to conclude that chaining a dog makes the animal more aggressive toward people.²⁴ The fact that a dog on a chain or rope may be dangerous or vicious is not appreciated by many people, especially children (Fig. 6).

c. <u>Be able to identify the guard dogs, i.e. German Shepherds, Doberman Pinschers, Rottweilers, Chows and Akitas; the sled dogs or arctic dogs, i.e. Malamutes, Huskies and Samoyeds; and the fighting dogs or pit bulls, i.e. Staffordshire Bull Terriers and American Pit Bull Terriers/American Staffordshire Terriers.</u>

Carl Semencic's books²⁵⁻²⁶ are useful in identifying guard dogs and

fighting dogs which are the most dangerous groups. Richard Stratton's books27-28 have many illustrations of American Pit Bull Terriers/American Staffordshire Terriers. which comprise the majority of Staffordshires, or pit bull group, and are unquestionably the most dangerous and unpredictable. One should remember that cross-bred doas with pit bull in their bloodline, i.e., American Pit Bull Terrier and Rhodesian Ridgeback, are equally dangerous and unpredictable. Huskies. Malamutes, German Shepherds, Akita's (Fig 7) and wolf-hybrids deserve special mention but do not attack with the same force and tenacity as pit bulls. Studies of the

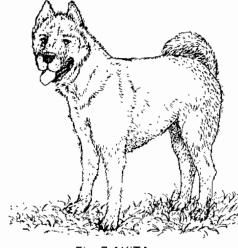


Fig. 7 AKITA

breeds illustrated in dog books and magazines should be supplemented by attendance at shows, obedience trials and agility contests.

d. Remember that noises, odors, food and certain activities such as running or scuffing may excite, stimulate or trigger some dogs to attack.

Firecrackers and other loud noises have been observed to excite dogs. A young man was bitten by his friend's

pit bull at a fireworks display. The odors of cats or food have been associated with frenzy or attacks. Adults or children wrestling or scuffling also may serve as a stimulus to dogs. A six-year-old boy was severely bitten in the face by a cross-bred dog (pit bull and Boxer) in a school yard when he tried to hug the dog.²⁹ The presence of food also may induce a dog to attack (Fig.8). A small girl was killed by a pit bull after pieces of a cookie were given to the dog and the girl ³⁰ The dog attacked the girl for her part of the cookie.



Fig. 8 TEASING

Know where vicious dogs live. e.

Dogs are very territorial. Large and strong dogs may be able to escape from their enclosure or chain³¹ (Fig.9). A pit bull in Toledo, Ohio broke loose from its chained attachment and bit a delivery person in the groin. The video-taped pit bull attack on a Los Angeles animal control officer, Florence Crowell, was another graphic record of the dangerousness of a pit bull.31 Officer Crowell was investigating a previous attack by the same dog. Often a minor incident is followed by a subsequent, serious attack which may result in a fatality.

A dog's territory does not stop at the end of the lot or driveway. For instance, Curtis Stone, 66, was nearly killed by two unconfined pit bulls when he took a short route home through an alley 32

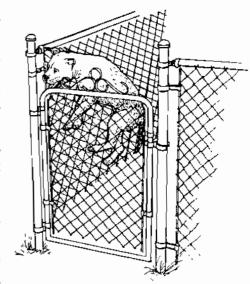


Fig. 9 FENCE JUMPER

f. Keep away from the territory of vicious dogs.

The two most common situations that provoke attacks by dogs are

people entering the home territory of а dog and approaching a guard dog kept on a chain. The best methods of restraint are either to keep the dog inside the house or in a steel wire enclosure that is stout enough and high enough to prevent the dog from escaping recommendation applies to wolves and wolfhybrids.

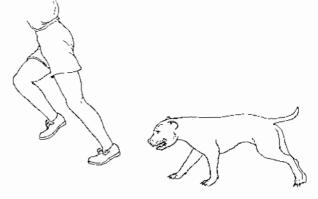


Fig. 10 CATCH INSTINCT

Many dogs have a strong catch instinct. This is exemplified by pit bulls that are used to "catch" or immobilize hogs and cattle. A jogger (Fig. 10) or bicyclist may excite a dog and stimulate it to attack. Minor harm may result if it is a small dog, but large dogs can produce a serious injury. A pit bull in Lynn, Massachusetts was shot by police officers when they found a jogger pinned against a wall.³³ Remember, it is safer to jog or bicycle with a companion or in a group.³⁴

g Support laws and ordinances that require vicious dogs to be controlled.

The Ohio legislature passed a law that requires vicious dogs and

pit bulls to be 1) muzzled, 2) controlled by a chain leash not to exceed six feet in length, 3) confined in a secure enclosure, and 4) insured against claims for personal injury resulting from a potential attack for \$50,000.³⁵

Toledo, Ohio passed an ordinance which limits the number of vicious dogs and pit bulls to one per residence ³⁶ This is a useful ordinance since a pack of dogs (Fig. 11) is much more deadly than a single animal. In Cleveland, Ohio, two pit bulls escaped and killed five dogs before they were brought under control.³⁷ Even gentle dogs may become dangerous when a pack is formed.

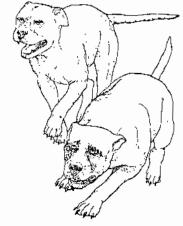


Fig. 11 PACK EFFECT

Insist that leash laws and other dog ordinances are enforced.

Animal control is the community's first line of defense against vicious

dogs. Laws and ordinances mandate the duties of animal control officers. duties often include removing stray dogs from the streets, ensuring that all dogs are vaccinated against rables and registered (licensed), following up on complaints concerning vicious dogs, impounding vicious dogs, and euthanizing unwanted animals and other related tasks (Fig. 12). The old saying that dogs need to run free only leads to dog bites, unwanted puppies, injuries, In some communities animal suffering. control officers work closely with police officers, letter carriers, meter readers and other people who are "at risk." Education should be emphasized.38 The enforcement of



Fig. 12 ANIMAL CONTROL

reasonable laws and ordinances encourages responsible pet ownership.

i. Support animal control personnel and their activities.

There is greater competition among agencies for public support

during difficult financial periods. Schools. and fire departments. street departments, welfare, and many other public have needs for improvements. maintenance equipment facilities and personnel. Animal control agencies can budget with supplement their fees impounding animals, registration (licensing) fees (Fig. 13), adoption charges, fees for

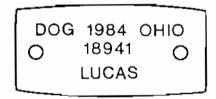


Fig. 13 DOG TAG

citations, etc. A differential fee between intact animals and neutered (castrated or spayed) animals is a means of increasing the revenues from licensed animals. An A.V.M.A. pamphlet, *The Veterinary Profession and Animal Control*, outlines and suggests ways in which veterinarians can help animal control.³⁹ These methods include training sessions in animal care, promoting ordinances, different license fees for intact animals, etc. Encouraging the early castration and spaying of pet animals that are not used for breeding reduces the number of uncared for and stray animals. Some animal control agencies provide instruction in the identification of dogs and techniques that can be used to minimize injury from an attack. Programs may be available for children ¹⁰

Carry defensive equipment. ì.

Letter carriers, meter readers, police officers and other groups carry Mace® or repellents such as Halt® (Fig.14), which are effective against many dogs. 14 These sprays are not uniformly effective against pit bulls and other vicious dogs, however. A pit bull's reactions can be compared to an attacking person who has used alcohol, crack, cocaine, is extremely angry or mentally disturbed. 40-41 Animal control officers have reported that pit bulls have bent their snare poles, ignored Mace®. chewed cattle prods in spite of the electric shock and have not been controlled by tranquilizers. 42-43 Hair spray also has been recommended as a canine repellant.44 It might be effective in some dogs, but it has caused pit bulls to go into a frenzy Ultrasonic equipment may be useful in repelling some dogs. a.b. When encountering a dog, a person must be able to distinguish between an active or hyperactive dog and a vicious dog. 45 The most effective method for service people to



Fig. 14 HALT®

deal with vicious dogs is to interrupt service to such owners and their neighbors when a problem rises 46

Some walkers carry a stick, cane or other item. While these items may be useful, they may also serve to attract vicious dogs. Two pit bulls in New Mexico attacked the vacuum cleaner of a salesman and then turned on the person. One of the two pit bulls that killed 67-year-old Grace Parsons in Harper, Kansas, had been attack trained. 47 Police speculated that the dogs may have attacked Mrs. Parsons because she had a newspaper in her hand 47 The trainer compared this attack-trained dog to a loaded .357 Magnum handgun in the hands of a child.48

b

R.C. Steele, 1989 Transit Way, Box 910, Brockport, N.Y. 14420-0910 а

The Safety Zone, Box 182274. Chattanooga, TN 37422-7247.

k. Consider defensive strategies.

Children can be taught defensive strategies such as entering homes of friends or neighborhood watch homes (Fig.

15) as well as churches, schools and public buildings. Entering a car or climbing on the hood or roof of a car, truck or construction equipment are effective escape means against most dogs. Louise Johnson, a letter carrier in Florida, was attacked by a pit bull that climbed into her Jeep and inflicted severe bite wounds to her arm and leg. 49 She was the sixteenth postal carrier from the Hollywood, Florida post office to be attacked from January to September of 1985. 49 Reporting a stray or loose dog to an adult as well as other defensive strategies are advocated in Dr. Cornwell's program for children. 10 Police



Fig 15 SANCTUARY

officers and public workers also can aid children that feel threatened by animals

Report vicious dogs, stray dogs and incidents to animal control personnel.

Animal control agencies are more effective and provide a greater

service in preventing incidents when they are informed. Attempted attacks, and dogs running at large should be reported to animal control as soon as possible. Frequently there has been a minor incident by a vicious dog (Fig. 16) before a violent attack. For example, Betty Lou Stidham, a 57 year-old teacher, lived beside a police officer, Edwin Hill, whose two pit bulls had attacked his aging mother. Mrs. Hill was hospitalized. One of the pit bulls attacked Ms Stidham's pug dog through the fence, which resulted in the amputation of the dog's front leg.



Fig 16 VICIOUS DOG

The attacks on Mrs. Hill and Ms Stidham's pug were not reported to the local health department or the animal control authorities. Subsequently, the two pit bulls broke loose and mauled Ms. Stidham as she walked to her mailbox. She died four hours later. ⁵⁰

m. Report animal cruelty to the humane society.

Humane societies are chartered under state law to investigate animal

cruelty and educate the public. Humane societies have knowledge and experience to deal with animal cruelty (Fig. 17). Dogfighting and cockfighting are cruel and should be reported to the humane society and/or law enforcement agencies. Animal fighting is frequently accompanied by gambling, use of controlled substances, weapons, illegal sale of alcohol and other forms of crime ⁵¹



Fig. 17 ABUSE

n. Don't keep a vicious dog

People often keep vicious dogs to inflate their egos, guard their property, engage in dogfighting, and for other

reasons. This may result in injuries to family members or other people. The most frequent victims are infants, children and elderly people, who often reside in the household of the owner. Dedience training is highly recommended for large dogs, which are more punishing than small dogs. Obedience trainers are very perceptive to dogs with poor temperaments through temperament testing, which is becoming more



Fig. 18 BANNING

available and reliable. Veterinarians can be very helpful in providing advice to owners whose dogs may have questionable temperaments. If a dog bites anyone, it should be euthanatized, after proper rabies observation, before there is a serious injury or death. Without self-monitoring by breeders and breed associations, a serious canine attack or dog bite-related death may result in the enactment of an ordinance that may restrict or ban entirely a specific breed of dog (Fig. 18).⁵² Owners that insist on owning, keeping or harboring dangerous or vicious dogs are referred to the six Dos for owners of dangerous or vicious dogs.

o. Contribute to educational programs that reduce dog bites.

Most children are attracted to dogs that remind them of their stuffed

toys. Parents should train their children to be careful around strange or unknown dogs. The Cornwell program¹⁰ is available on tape which can be borrowed or purchased to teach elementary children how to protect themselves. Kennel clubs, animal control agencies and other groups have programs which can be used to educate people of various ages about the breeds of dogs and how to



Fig. 19 INFANT

recognize dangerous animals. A local veterinarian may be helpful in describing the various breeds, selecting a proper pet°, alerting children to the ways that they can avoid being bitten, and providing advice about introducing a new infant or new dog into a family. A pamphlet, *The Veterinarian's Way of Selecting a Proper Pet*, can be ordered from the American Veterinary Medical Association. A listing of the number of dog bites in a community can be helpful to alert citizens to the numbers of dog bites and most dangerous breeds.⁵ Infants or small children should not be left alone with dogs (Fig. 19).

Recognize personality changes in household pets.

Many dogs' personalities change as they grow older. At times, this change may be manifested as an increase in aggressive behavior, which can occur suddenly or over a period of years. A change in a dog's personality can result from a variety of causes, including the development of a painful condition, the development of a brain disease or disorder, or some other inexplicable change in the dog's psychological make up. Any sudden changes in a dog's personality should be reported to a veterinarian or animal control personnel as there are certain contagious diseases, like rabies, that can manifest themselves in this manner. A more gradual onset, however, can be just as dangerous because oftentimes one does not notice the change until someone is seriously hurt. For this reason, pet owners should be alert to changes in their pets' personality and contact a veterinarian or other trained professional for assistance in identifying the possible causes of the problem and any potential solutions.

Anon.: <u>The Veterinarian's Way of Selecting a Proper Pet</u>. American Veterinary Medical Association, Schaumburg, II 60173-4370, 1992

2. Dos when you encounter a vicious dog:

a. Stay calm, sit still or walk your normal pace.

Dogs are predators and are attracted to running or active animals and people.53 A jogger or child on a bike may excite a dog and induce it to attack. many dogs will be satisfied to see a person retreat or leave the area, the catch instinct of pit bulls is stronger and they will not be easily dissuaded (Fig. 20). The catch instinct often leads to serious injury and even death relatively easy for most dogs to catch running people and cause them to lose their balance.9 Although wolves have been observed to bite the face of a moose, usually they "hamstring" the animal or attack the rear legs or rump. 19 The trait of some wolves to attack the nose of their prey undoubtedly gave rise to bull dogs that attacked the face of bulls and "nose biters" among pit bulls in the pit.



Fig. 20 CALM

b. Maintain eye contact (without staring) or face the vicious dog or pit bull. stand still or back away when threatened.

Dogs are initially inclined to attack the legs or back of an escaping person. Prey animals are more vulnerable from the back or behind where the leas may be injured and escape impeded. fence or tree can protect a person's back (Fig. 21). Maintaining eye contact does not mean staring at a vicious dog or pit bull. Initially dogfighters face their dogs toward the corner rather than viewing the opponent. "Face your dogs" is a command given by the referee prior to "release your dogs" and the fight or combat.54 Wolves stare and raise the fur over the neck and back prior to an attack, but do not growl. 55 A threatening posture is a display of dominance rather than an attack to kill. Pit bulls, however, may not exhibit this threatening When there are two attacking

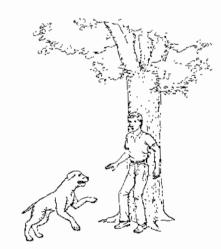


Fig. 21 RETREAT

animals, usually one will feign a frontal attack while the other circles behind the prey. The throat bite or hold is usually employed to kill the victim. 56

c. Climb out of reach such as onto the roof of a car⁵⁷ or on playground equipment.⁵³

Climbing onto the roof of a car⁵⁷ is satisfactory to escape most dogs,

but it may not be adequate with pit bulls. One pit bull was shot when it chased a police officer onto the hood of a car. 58 A man in Dayton, Ohio tried unsuccessfully to escape two pit bulls by climbing onto the roof of a car. 59 A family was able to escape a neighborhood pit bull by entering their car (Fig. 22) The frustrated dog bit the tires. A woman threatened by a wolf-Husky escaped



Fig. 22 MISDIRECTED AGGRESSION

into her car ²⁰ Two repairmen were pulling away after repairing a stereo when a two-year-old pit bull broke loose and attacked and flattened all four tires. ⁶⁰ Attacking the tires of a car is a form of redirected aggression, similar to an attack on a person who tries to break-up a dog fight. Most old-time dogfighters eliminated pit bulls that attacked a handler or referee, but this trait has surfaced with irresponsible breeders and owners ⁶¹

d. Give a vicious dog a coat, hat, purse, book, shoe or something to bite.

Holding, shaking and tugging are common forms of canine behavior

which are related to predation. Tugging also is a form of play and canine toys have been made to encourage this type of activity ⁶² An object may divert an attacking dog or "buy time" until help can be obtained or the victim can reach a door, fence or car. Tugging on a coat can distract the dog from biting (Fig. 23). Pit bulls have the tendency

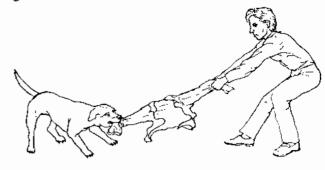


Fig. 23 TUGGING

to hold onto their victim or the object. A "hold" in soft body tissues produces damage to the underlying blood vessels, muscles, and nerves. A 74-year-old woman in Decatur, Michigan was able to escape two female pit bulls when the dogs fought over her slacks which they had pulled from her body. 63

Protect your face, neck and right arm if you are right handed. e

The throat is a common target for predatory animals, and many children have been killed by a direct lunge to the throat. Pit dogs have different styles of attacking their opponents in the pit. One is to grasp the opposing dog by the nose while other methods of attack are an ear hold and throat hold.⁶⁴ Sharron Tucker in Columbus, Ohio had major blood vessels torn on both sides of her throat by a pit bull and Rottweiler. 65 Safety programs for children stress protecting the head and neck¹⁰ (Fig. 24). Ears and noses are especially vulnerable in children. 66-68 One of two pit bulls nearly ripped an ear off Robert Barosso who had rescued a woman bicyclist from the dogs. 67 Protecting the face and neck applies to adults as well as children, and regardless whether one is lying on the ground or standing.



Fig. 24 PROTECT YOUR FACE AND NECK

f. Avoid vicious dogs and pit bulls on the street or in yards and leave a yard when a strange dog or dog "on chain" appears

Dogs are very territorial and guard their turf (Fig. 25). Fernando

Salazar, a three-year-old in Denver, Colorado⁶⁹ and James Soto, a 21/2 vear-old in Morgan Hill, California.70 were mauled and killed when they approached chained pit bulls Billy Gordon, four years old, was killed by pit bulls when he and a cousin crossed through a neighbor's yard.71 Wolf-hybrids are emerging dangerous canids.20 unpredictable In

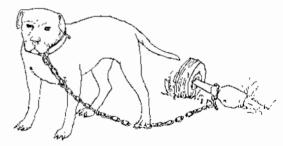


Fig. 25 "ON CHAIN"

Florida, Nathan Carpenter, four years old, was killed by an escaped wolf-Husky which was confined in a backyard with him.20 After pit bulls, German Shepherds, Huskies and Malamutes have resulted in the most human fatalities 5

g. Speak to vicious dogs with words such as "no", "go," "go home," "sit," "down," "lie down," "stay" or "halt" in a low stern voice⁵⁷.

Vicious dogs may be trained to respond to or be controlled by

commands (Fig. 26). Some people reinforce oral commands, by clapping their hands. This will get the dog's attention, but it may excite the animal. It may be risky to clap the hands when approached by a pit bull. Although there is agreement that vicious dogs should have obedience training,72 some trainers are reticent to accept them due to the liability involved. A judge may require that a vicious dog that has been involved in an attack or incident complete an obedience course or be euthanatized training has been suggested as a prerequisite before pit bulls can be registered (licensed). By requiring obedience training, animals with temperaments may be more easily recognized,



Fig. 26 OBEDIENCE TRAINING

controlled or eliminated. A shelter may require a pit bull to pass obedience training before being made available for adoption, ⁷³ but most shelters do not permit pit bulls that have been picked-up, seized or surrendered to be adopted. Staffordshire Bull Terriers (AKC) and American Staffordshire Terriers (AKC) that have been entered in dog shows may be obedience trained. ⁷⁴

h. Let the dog approach you or sniff you first. 10

Scent is an important clue in a dog's recognition system (Fig. 27).

It can be seen when two dogs Dominance and other meet signals are exchanged by scent. If a person makes a quick movement toward a dog before it has sniffed or while it is sniffing, it may be misinterpreted as a threat or elicit fear. Reaching for, or extending a hand or fist to, an unknown dog may cause it to bite.22-24 A person in a relaxed position standing İS threatening and less vulnerable than one in a crouching posture.

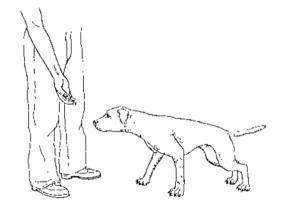


Fig. 27. SNIFFING

A possible response is fear-induced aggression or an attack. 75 Pit bulls are not intimidated as easily as other dogs and fear biting is not as

characteristic of this group. The scent of a cat, rabbit or another dog has a meaning. When a rag doll with cat scent and another doll without cat scent were presented to pit bulls, they would predictably grasp and shake the doll with the cat scent. The scent of a female dog "in heat" may attract and make male dogs more aggressive. Two pit bulls and a Golden Retriever killed a 6 year-old girl on her way to school. A female dog "in heat" at a nearby house was given as the reason for their presence. 76

Make a slow, cautious approach when meeting or passing a dog on a ĺ. leash.

Look at the type of restraint that is being used when approaching a

dog on a leash A chain leash (Fig. 28) is more secure than a rope or nylon leash.77 Although they are more difficult to use, some communities require that vicious dogs be exercised on a chain leash Reel-type leashes for vicious dogs or pit bulls afford less control and are forbidden in some localities. They may malfunction and allow dogs more freedom. Leashes attached to collars provide greater control than leashes attached to harnesses All states should have a law requiring that dogs be leashed when exercised off their owners', harborers' or keepers' premises unless hunting or involved in a show or exhibit



Fig. 28 CHAIN LEASH

j. Act like a log or curl up in a ball on the ground with your arms around your neck or head. 10

An extended arm or foot invites a bite. Two dogs may play "tug of war" with a person on the ground. mimics two dogs killing or fighting over a The log-like (Fig. 29) or prev animal. curled-up position may prevent a neck bite, which is a preferred method of attack for most predators. This defensive position is taken by animals that are overtaken Opossums and porcupines use the curl-up strategy when they are unable to escape Curling up on the ground, however, is a



Fig. 29 ACT LIKE A LOG

poorer defensive position than climbing into a tree or upon playground equipment.53

k. Don'ts

There is an opposite position for most of the dos. These are listed below with a few additions for emphasis. Don't:

- 1 Run, jump about, make fast movements or scuffle before a vicious dog,⁷ as running always excites dogs;
- 2 Show fear;53
- Stare at, approach or challenge an unknown or strange dog, since leaning over, "standing over", hugging or petting a strange dog may be interpreted as a dominant act;
- 4 Tempt a strange dog with food or take food away from a dog while it is eating (female dogs with pups may bite strangers or intruders);
- 5 Provoke or torment a dog with a stick or other object; 78
- 6 Make loud noises which may startle, disturb or excite a dog (yelling excites some dogs while commands may control them);
- 7 Struggle once a dog has taken a hold⁴⁶ (struggling or pulling away will increase the amount of tissue damage); and
- 8 Put your face up to a strange dog during play.
- 9 Don't hold a cat up to a strange or unknown dog (cats are natural enemies of dogs and a dog may instinctively attack them),
- 10 Don't hold a dog's mouth closed as it may cause discomfort and/or pain (Although pit bulls have an increased tolerance to pain, they object to this dominant maneuver. Dominant wolves grasp submissive animals over the muzzle):
- 11 Don't pet or pick up an injured dog unless you are a veterinarian or trained and experienced in the care of injured animals;
- 12 Don't forget to ask the owner for permission to pet his or her dog;
- 13 Don't "sic" a dog on a friend, neighbor or other person since it may get out of control and this conveys a signal that it is okay to attack;⁷ and
- 14 Don't corner, pursue or force a dog to bite in self defense (fear biting is a protective maneuver among defensive dogs);

3. Dos when a person has been bitten by a vicious dog:

Measures taken soon after serious dog bites influence the ultimate outcome. Dog attacks may also be associated with great emotional injury,⁵⁰ which may be overlooked, minimized or untreated in both children and adults.⁷⁹⁻⁸⁰

a. Capture and remove the dog as soon as possible.

The continued presence of the attacking dog(s) will aggravate the

fear and emotional stress to the victim. The dog(s) should be confined in a secure enclosure for rables. If the dog(s) runs away, it's sex, observation. appearance, direction of flight, etc. should be noted for follow-up by animal control personnel and/or police. It is possible that an escaped dog will enter into a state of frenzy and attack other animals or people (Fig. 30). In Newport News, Virginia, one pit bull was killed by a police officer and another was shot in the shoulder.81 The dogs had first attacked and bit a boy who was pushing a lawn mower. The remaining injured dog then went after a woman who was riding a bicycle with her husband. An observer watering his lawn clapped his hands to attract the dog's attention. He was attacked.



Fig 30 VICIOUS DOG

b. Ask the victim to lie down and comfort the patient while professional help is being summoned

Attacks by vicious dogs may result in serious injury. Firefighters and

paramedics have the resources and training to care for such emergencies⁴⁰(Fig. 31). This assistance should be a first consideration and response time is very short in most communities. In Tijeras, New Mexico, Angela Hands' grandfather removed tattered clothing and wrapped the girl's body in wet towels to preserve the tissues before firefighters arrived and transported her to the trauma center at the University of New Mexico.⁸² These initial efforts were credited for preventing more serious injuries. If professional assistance and transportation are delayed,⁸³ washing minor wounds with



Fig. 31 FIRST AID

mild soapy water and rinsing them with tap water may be helpful.46

Transport a victim gently and quickly to a clinic or hospital. C.

Important medical decisions must be made in regard to many dog

bites (Fig. 32). Emergency physicians or trauma surgeons at a hospital or medical center are most qualified to make these They can be aided by information concerning the type of dog and its rabies vaccination status. Pit bull bites are associated with much greater damage to underlying vessels, nerves, muscles and other tissues. Emergency personnel were held at bay for at least 25 minutes in Dayton. Ohio, by two pit bulls



Fig. 32 TRANSPORTATION

before the owner arrived. The victim died after he was transported to the hospital.84

Pit bull bites should be considered to be more serious than other dog bites since these animals inflict damage to underlying vessels, nerves and other tissues.85-88 An insight into the damage produced by pit bulls is provided by Jack London's use of the term "clinging death"87 to describe these animals. In an account of dog and cat confrontations with pit bulls. it was noted that after the skin over the puncture wounds was incised, one would find large black masses of devascularized muscle which had to be removed to promote healing.88 A lady in Minneapolis who tried to pull a pit bull off her Poodle was bitten. This resulted in a wound to her hand and subsequent loss of function.

d. Report the incident to police, animal control and/or local health department.

Animal bites are reported to the police department, health department and/or animal control. In most states, biting dogs, should be impounded for at least ten days in a animal shelter or veterinary hospital for observation of the signs of rabies if they have not been vaccinated (Fig. 33), however, one should be familiar with the particular state's quarantine period. If the dog dies within the quarantine period, it should be tested for rabies. Animals that have been vaccinated may be confined in a secure enclosure on the property of the owner or custodian of the animal. Similarly, vaccinated animals should be tested if they die during the

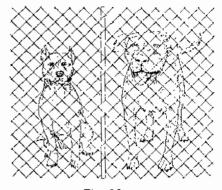


Fig. 33 IMPOUNDMENT

quarantine period. A dog that has been vaccinated against rabies and is being quarantined at its residence or a non-vaccinated dog that is being impounded at a shelter or veterinary hospital should not be vaccinated against rabies since the vaccine may interfere with the development of rabies. Registration (license) tags, description of the animal, details of the bite, and other observations and reports are important to attending physicians and for insurance claims, legal charges, compilation of statistics and other purposes. If a serious mauling occurs and goes unreported, a subsequent attack by the same animal may result in a fatality.⁵⁰

The veterinary perspective of dog and cat bites is well presented in the December,

1988 update in the Journal of the American Veterinary Medical Association.⁸³ However, this article does not mention pit bulls specifically, since there are several breeds recognized as capable of inflicting serious injury to humans (Fig. 34) Pit bulls, Rottweilers and wolf-hybrids are not considered to be appropriate companion animals for many owners.⁸⁸ Extreme care and thought must be exercised before assuming the responsibility for such an animal.⁸⁸

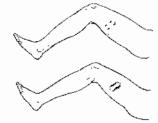


Fig. 34 DOG BITE

4. Dos for veterinarians, veterinary technicians, trainers, animal control officers and others:

Veterinarians, veterinary technicians, trainers and animal control officers are very skillful in handling mean dogs but may not appreciate the intensity and power that can be unleashed by some pit bulls, crack dogs, attack dogs, junk-yard guard dogs or truly vicious animals. The following <u>suggestions</u> are offered for veterinarians, animal technicians, animal control officers, obedience trainers and others who must deal with these animals.

a. Attempt to separate vicious dogs from other animals and clients in the office, waiting room or other setting.

Signs advising owners to keep their animals on a leash or in a carrier or crate should be present at the entrance to a clinic, hospital or shelter (Fig. 35). Leashes and sanitized carriers or cages may be provided for forgetful owners. If a veterinary clinic or hospital has a special room for hyper-active dogs, fractious cats, injured animals, unusual animals, etc., the room also can be used to separate dangerous or vicious dogs. In one veterinary hospital, a pit bull attacked another dog in the waiting room and the owner of the attacked dog had a heart attack. The attending

veterinarian was faced with the choice of assisting the man undergoing a heart attack or breaking up a serious dog fight. The man was quickly and quietly treated by an emergency squad while the dogs in the dogfight were separated by staff. Military guard dogs may be examined and/or given a tranquilizer or restraint drug before entering the animal hospital or clinic with the aid of military police or guards. Experienced animal hospital

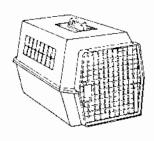


Fig. 35 CARRIER

personnel may be able to identify potentially dangerous animals and direct them to a separate room.

b. Have an experienced veterinary technician or handler present in the examining room or reception area while the owner is being guestioned and the dog is being examined

A calm and knowledgeable veterinary technician or dog handler

recognizes and appreciates vicious dogs. Fighting dogs often have scars, fistulous tracks and various identifying lesions as well as spiked collars and other unique accoutrements. A muzzle, whether it be loops of roller gauze about the nose and tied in a bow behind the head or a commercial nylon, leather or plastic muzzle, (Fig. 36) can reduce stress and risk of a bite injury. Some owners are not capable of handling their animals safely. Occasionally an owner will claim

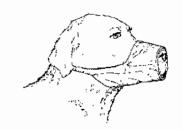


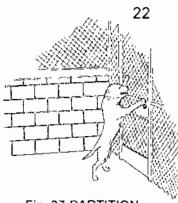
Fig. 36 MUZZLE

that their dog will never bite only to be promptly bitten. Knowledgeable owners may be of great assistance in the examination of the animal and escorting it to a secure run. Some animal control centers have guillotine doors similar to those used in zoos between adjacent runs or pens so that extremely dangerous or vicious dogs can have their runs cleaned and be fed without exposing kennel personnel. This arrangement is also helpful in quarantining rabies suspects.

c. <u>Place a vicious doq in an end run next to an empty adjacent run if there are no solid partitions between runs.</u>

Some vicious dogs will attack across cyclone fencing. This may be prevented by solid partitions between runs which are at least four feet in height (Fig. 37) ⁸⁹ Vicious dogs will jump into the air to view adjacent dogs on the opposite side of the partition, but usually they are unable to injure the neighboring animal. Fencing should extend to the ceiling or over the enclosure if it is outdoors. Fighting dogs will damage doors, floors, food

containers and other fixtures and equipment by scratching, biting or jumping against them. 90-91 Secondary barriers (fencing or doors) may be helpful in keeping pit bulls, wolves and wolf-hybrids from escaping. These secondary barriers also may be effective in preventing dogfighters and thieves from gaining access to a hospital or facility.



đ. Attach a chain leash (lead) to the collar of a vicious dog.

Fig. 37 PARTITION

Light nylon or leather leashes can be severed easily by large or vicious dogs. Some breed-specific ordinances and laws specify that vicious dogs must be controlled by a chain leash (Fig. 38) when they are exercised off the owner's, harborer's or keeper's premises Although these leashes are more difficult to use, they are necessary for safety. The length of the leash may be designated as six feet or less. Owners who use a reel-type leash may be in violation of ordinances that specify the use of short chain leashes. Steel choke-chain collars provide better control than leather or nylon collars or harnesses. Some dogs appear to enjoy pulling against a leather harness. Placing bitter apple, bitter lime or alum on a leash may keep a dog from

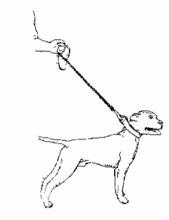


Fig. 38 CHAIN LEASH

chewing or grabbing it. Confining a dog on a chain in a yard may condition the dog to be aggressive toward people.

Use transport cages. е

Stainless steel transport cages are used by medical schools and research institutions to transport dogs from one floor or building to another.90 This prevents animals from escaping, soiling the corridors, fighting adjacent animals and other incidents. These cages also may be useful in segregating incoming animals and transporting them to runs, in addition to enhancing post-operative observation and care. Dogs may be prevented from escaping by using a harness snap attached to the front of the cage by means of a short chain. A lock also may be used for greater security.

f. Prepare for the exit of a vicious dog from a hospital or clinic.

Several measures may help avoid an incident, such as having clients pay their bill before exiting with a vicious animal; having clients leave by a side door (Fig. 39); having a skilled technician present at discharge. using a chain leash; and discharging during working hours or off hours when experienced personnel are present. The use of squeeze cages, anesthetics, and tranquilizers has removed some of the danger associated with examining, treating and discharging vicious animals. Animals may become excited when they see their owners or when a leash is attached to their collar. These events could lead to an incident in the waiting room or reception area.



Fig. 39 EXIT

g. Use security locks on doors and runs.

Pit bulls, wolves and wolf-hybrids are very capable in opening kennel doors.89 There are double latches or locks (Fig. 40) that help to prevent dogs from jumping against such devices and opening them. These animals are also able to climb cyclone fencing and scale other enclosures. 20,31 Doors to runs should swing into the enclosure rather than into the hall. An over-hang, or fencing that extends to or covers the ceiling, may prevent escape. Stainless steel or chrome plated chains which have a bolt or harness snap can be used to provide greater security to doors on cages and runs.

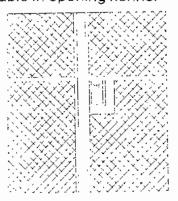


Fig. 40 LOCK

h. Avoid contact between vicious dogs and other animals.

Some vicious dogs will attack other animals in unusual

circumstances. Many pit bulls appear to react aggressively toward cats (Fig. 41). A cat recovering from anesthesia was quickly killed by a passing pit bull. 93 The natural hostility between pit bulls and cats, rabbits and other animals is used to "blood," or train, pit bulls to attack and kill. Coursing dogs such as Greyhounds have excellent peripheral vision and a reflex response to bite may be elicited when passing another animal. A small Poodle was attacked by a Greyhound during a chance encounter.

İ.

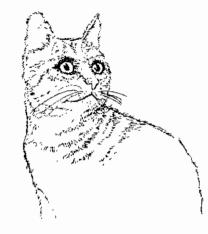


Fig. 41 NO CONTACT

Make sure that two people are present for cage and run cleaning and treatments on weekends and holidays when vicious dogs are present

It is advisable for an additional person to assist with cage cleaning

and treatments on weekends or holidays when a vicious animal is being hospitalized An inexperienced person is at greater risk when working alone.93 Some veterinary hospitals employ high school students for weekend cage cleaning. This may be mutually satisfactory when there are only calm and trustworthy animals. Pit bulls, however. not display obvious may threatening behavior toward other animals or people. 89 A large vicious dog, pit bull or wolf may be extremely dangerous and it would be difficult to justify such a risk in court (Fig. 42) Two veterinarians were sued

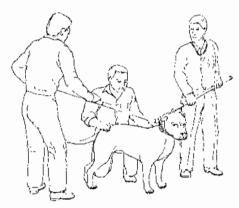
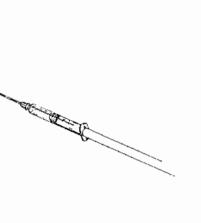


Fig. 42 ASSISTANCE

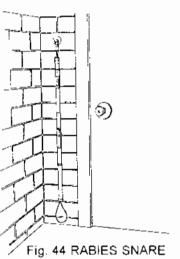
when a pit bull attacked a 16-year-old student who was working as a kennel man. The lawsuit asked \$15 million in compensatory damages and \$32 million for punitive and other damages.⁹³

j. <u>Make sure appropriate drugs, their delivery systems and other protective equipment are available at all times.</u>

There are several types of drugs and equipment which can be used to subdue or manage vicious animals. Several tranquilizers and anesthetics, such as Ketamine HCL, are used to restrain vicious animals. Pole syringes (Fig. 43), rabies snares, shark sleeves, tranquilizer guns, and breaking or parting sticks are useful protective or defensive items. A rabies pole or snare (Fig. 44) should be available in the kennel area and all possibly-involved personnel should be familiar with its use. Shark or safety sleeves^d (Fig. 45) also may be beneficial. In some communities, animal control officers have requested side arms (weapons). Other communities have purchased sleeves, two-way radios and other equipment in lieu of providing guns. ⁹⁴⁻⁹⁵







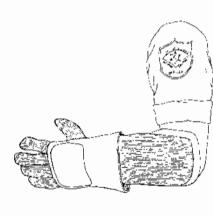


Fig. 45 SAFETY SLEEVE

d. Safety Sleeve III®, Neptunic, Inc. P.O. Box 7870, San Diego, California.

k. Check the security of a hospital or other areas where vicious dogs are confined.

Dogfighters may attempt to break into shelters or veterinary hospitals

to "liberate" their dogs. Break-ins may be preceded by disrupting telephone and power lines. Thefts may be followed by arson. One civic-minded veterinarian consented to impound pit bulls seized during a raid. Dogfighters broke into his hospital and set a fire. The veterinarian died of a heart attack following the incident. Thefts and the release of dangerous animals by animal activists also can produce great risks. Multiple forms of hard security (Fig. 46) as well as electronic security may be considered 96-98 Power outages, interrupted telephone service and natural disasters, such as hurricanes, floods and tornados, can produce

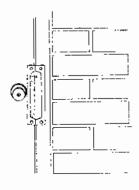


Fig 46 SECURITY

emergencies for which veterinarians can be prepared with auxiliary power. emergency supplies and other precautions.

١. Avoid publicity that would encourage "break-ins"

Thieves can be attracted to many items kept in veterinary hospitals. and animal shelters, such as drugs, computers and unusual or valuable animals. 99-100 Pit bulls, wolf-hybrids and purebred dogs can be very valuable. There have been examples of exchanging pit bulls of minimal value for valuable pit fighters that had been seized at dogfights or from the residences of dogfighters. A stud fee for the service of a valuable dog can be \$500 to \$1,000, which can create a strong incentive for a would-be dog thief. Publicity (Fig. 47) also may serve as a challenge to experienced thieves or people seeking excitement. Veterinarians or associates that confront or encounter thieves as well as uncontrolled

Betting ring is larget Jury here opens dog fight probe



Fig. 47 PUBLICITY

vicious dogs may be at severe risk. Television and the press may depict dogs running loose and thus contribute to irresponsibility among dog owners. 101

The authors would like to thank Mrs. Estella Parra for assistance, Mr. Roy Schneider MEDesign for the illustrations and Mrs. Janet Weiss, Oakland, New Jersey and Mr. Mike Collier, Toledo, Ohio for suggestions.

References

- 1. Hall, B.: Bullyson and His Sons. Walsworth Press Company, Inc., Houston, Texas, 1986;pp 1-246.
- 2. Vogler, M.: Trainer is a pit bull's best friend. Pastor has respect, concern for breed. Sun-Tattler. (Hollywood, Florida) 51 (210):A-3; September 3, 1985
- 3. Anonymous: The information was supplied by a reader in the Midwest. NACA News 16(3):18; May-June, 1993.
- 4. Lockwood R. and Rindy.K.: Are "pit bulls" different? An analysis of the pit bull controversy. *Anthrozoos* 1(1):2-8; September, 1987.
- 5. Sacks, J.J., Sattin, R.W. and Bonzo, S.E.: Dog bite-related fatalities from 1979 through 1988. *J Amer Med Assoc.* 262 (11):1489-1492; September 15, 1989.
- 6. Clifford, D.H., Green, K.A. and Watterson, R.M. The Pit Bull Dilemma "The Gathering Storm" The Charles Press, Publishers, Philadelphia, Pennsylvania, 1990;pp 1-442.
- 7. O'Neil, C.: How can I avoid bites? *Washington Post.* (Washington, District of Columbia) 109 (139):WH-22. April 23, 1987.
- 8. Anonymous: What to do if a dog attacks. *Gazette*. (Montreal, Quebec) NV (NI):B-5; June 27, 1987.
- 9. Kelly, J.V.: Facing a dog. *Post-Courier*. (Charleston, South Carolina) 16 (26):A-10. October 2, 1988.
- 10. Cornwell, J.M.: *Animal Safety Is Fun.* Glencoe Animal Hospital, Video Tape Program. (Columbus, Ohio), 1992.
- 11. Pinchney, L.E. and Kennedy, L.A.: Traumatic deaths from dog attacks in The United States *Pediatrics*. 69 (2):193-196, February, 1982.
- 12. Mech, L.D.: Canis Lupau, Mammalian Species, 37:1-6 May 2, 1974.

Newspaper articles were listed according to Manning, M.: The Standard Periodical Directory. Eleventh Edition, 1988, Oxbridge Communications, New York, New York.

- 13. Anonymous.: Pit bull slams through gate to maul postman in street. Cleveland Plain Dealer. (Cleveland, Ohio) 144 (225):B-2; August 13, 1985.
- 14. Rosen, S.: Whiff of halt! Muzzles attacking dog. *Cincinnati Enquirer*. (Cincinnati, Ohio) 143 (175):C-1, C-2; October 1, 1983.
- 15. Anonymous: Dog mauls baby girl to death in Euclid. Cleveland Plain Dealer. (Cleveland, Ohio) 141 (290):A-10; October 18, 1982.
- 16. Lidle, J.: Wolf Hybrids. Toward An Objective Look. Published by *Wolf.* Clifton Heights, Pennsylvania, 1986; pp 1-42.
- 17. McConoughey, J. *The Wolves*. Crestwood House, Mankato, Minnesota. 1983;pp. 1-47.
- 18. Prendergast, D.: *The Wolf Hybrid.* Second Edition, Rudelhaus Enterprises, Gallup, New Mexico, 1989, pp 1-141.
- 19. Mech, L.D.: The Wolf. The Ecology and Behavior of an Endangered Species. University of Minnesota Press, Minneapolis, Minnesota, 1981; pp 1-384.
- 20. Clifford, D.H. and Green, K.A.: Chief. Attempted adoption of a wolf-hybrid led to tragedy. *Pet Veterinarian*. 3 (5):19-20,25; September October, 1991.
- 21. Voith, V. L. and Borchelt, P.L.: Strangers and the family dog. *Vet. Tech.* 8 (4):211-121, 214; May, 1987
- 22. Voith, V. L. and Borchelt, P.L.: Dominance behavior in dogs. an owners guide. *Vet. Tech.* 7 (2):73-74; February, 1986
- 23. Voith, V.L.: The fearful dog. Vet. Tech. 6 (9):435-436; October, 1985.
- 24. Scott, J. P.: Controlling aggression. *Pure-Bred Dogs/ American Kennel Gazette*. 105 (6):60-64; June 1988
- 25. Semencic, C.: *The World of Fighting Dogs*. T.F.H. Publications, Inc., Neptune City, New Jersey, 1984; pp. 1-287
- 26. Semencic, C.: Pit Bulls & Tenacious Guard Dogs. T.F.H. Publications, Inc., Neptune City, New Jersey, 1991; pp 1-320.
- 27. Stratton R.F.: *The Book of the American Pit Bull Terrier*. T.F.H. Publications, Inc., Neptune City, New Jersey, 1981; pp 1-349.

- 28. Stratton R.F.: *The World of the American Pit Bull Terrier*. T.F.H. Publications, Inc., Neptune, New Jersey, 1983; pp 1-288.
- 29. Anonymous: Dog bites Lake Wales boy in face. Ledger. (Lakeland, Florida) 80 (170):B-1; April 10, 1986.
- 30. Anonymous: Parents of pit bull's victim charged with misdemeanor. Cleveland Plain Dealer. (Cleveland, Ohio) 148 (12):B-6; January 21, 1989.
- 31. Swift, E.M.. The pit bull. Friend and killer. Is the pit bull a fine animal, as its admirers claim, or is it a vicious dog, unfit for society? *Sports Illustrated*. 74 (4): 72-78, 80-84; July 27, 1987.
- 32. Anonymous: Three pit bulls maul man in East Side alley. *Columbus Dispatch*. Final Home Edition. (Columbus, Ohio) 116 (326).A-1, May 22, 1987.
- 33. Liscio, D.: Pit bull emergency vote tonight. *Item.* (Lynn, Massachusetts) 217 (2); 1,8; June 10, 1986.
- 34. Lavoie, D.: Grillo has good reason to support ban *Haverhill Gazette*. (Haverhill, Massachusetts) 167 (70):1,7; March 25, 1987.
- 35. Oliphant, J.: Dog bill passes both houses. Next step for legislation on vicious animals up to Celeste. *Dayton Daily News.* (Dayton, Ohio) 110 (295):6, July 1, 1987.
- 36. Anonymous. Toledo says one dog is enough for homeowners. *Columbus Dispatch* (Columbus, Ohio) 118 (272):D-5; March 29, 1989.
- 37. Anonymous: Owner charged after pit bulls kill other dogs. *Cleveland Plain Dealer* (Cleveland, Ohio) 141 (334):E-1, November 30, 1982.
- 38. Schroeder, J.A.: Connecticut canine perspective. Workshop, *Dog Aggression and the Pit Bull Terrier* A.N. Rowan, Editor Proceedings. Tufts Center for Animals. 33-35; July 17, 1986.
- 39. Anonymous: Get involved. Help solve animal control problems. *Pet Veterinarian*. 2 (6).12; November-December, 1990.
- 40. Beasley, D.: Dog that bit Avondale girl shot to death by police. *Cincinnati Enquirer*. (Cincinnati, Ohio) 141 (173):C-1; September 29, 1981.
- 41. Rutter, J.: How it works. Self defense in a palm-sized spray. *New York Times*. National Edition. Printed in Ohio. (New York, New York) 142 (49, 221):Y-15; January 24, 1993.

- 42. Jones, A.: Lucky so far, but officers want guns. *Kalamazoo Gazette*. (Kalamazoo, Michigan) 154 (254):A-1, A-2; June 30, 1987.
- 43. Jennings, K.: Animal control denied weapons against pit bulls. *Kalamazoo Gazette*. (Kalamazoo, Michigan) 154 (319):A-1, A-2; September 4, 1987.
- 44. Milligan, S.: How to eschew an attack. *New York Daily News*. National Edition. (New York, New York) 69 (22):C-3; July 22, 1987.
- 45. Voith, V.L. and Borchelt, P.L.: Dealing with your overactive dog. *Vet. Tech.* 8 (8):400-401, 404; September, 1987.
- 46. Bailey, M.E. Postal service refusing to deliver mail to street of vicious pit bull. *Tribune.* (Oakland, California) 114 (115):A-8; April 25, 1987.
- 47. Anonymous: 2 dogs that killed a woman in Kansas will be destroyed. *New York Times.* (New York, New York) 133 (45,842): A-21; October 25, 1983.
- 48. O'Shaughnessey, L.: Dog owner convicted in death by mauling. *Kansas City Times*. (Kansas City, Missouri) 116 (212):A-1, A-6; May 11, 1984.
- 49. Vogler, M., Pit bull dilemma. Friend or Foe. 16 local letter carriers attacked by dogs in '85. Sun Tattler. (Hollywood, Florida) 51 (209). A-10; September 2, 1985.
- 50. Plummer, W. and Sanderson, J.: Terrified of her neighbors pit bulls, a Memphis teacher is their final victim. *People.* 34 (1): 39-40; July 9, 1990.
- 51. Norton, D., Pit bulls sent to battle in secret "sport." *Times* (Seattle, Washington) 109 (83):G-1, G-2; April 10, 1986.
- 52. Anonymous: Tijeras attorney says ban on pit bulls will hold up. *Albuquerque Tribune*. (Albuquerque, New Mexico) 62 (279):A-8; May 15, 1984.
- 53. Anonymous: Pit bull killed after attacking boy. *Item.* (Lynn, Massachusetts) 216 (100):10; April 5, 1986.
- 54. Anonymous: An Exposition on Dogfighting. Department of Field Investigation. The Humane Society of the United States, 2100 L Street, Washington, District of Columbia:1-8; December, 1980.
- 55. Klinghammer, E.: Personal Communication. July 8, 1992.
- 56. Blackman, J.H.: Two pit bull pups face trial, possible death for escape. *Post.* Final Edition. (Denver, Colorado) 96 (103):B-3; November 11, 1987.

- 57. Anonymous: Pit bulls bred as rat killers; popular for aggressiveness. *USA Today*. (Washington, District of Columbia) 5 (102):A-8; February 6, 1987.
- 58. Roush M.: Police, pit bull owner differ in account of latest shooting of pit bull dog. *Kalamazoo Gazette*. (Kalamazoo, Michigan) 154 (231):B-3;June 7, 1987.
- 59. Anonymous: Grand Jury weighs pit bull attack. *Cleveland Plain Dealer* (Cleveland, Ohio) 146 (143):B-4; May 23, 1987.
- 60. Anonymous: Tire caper puts "Angel" in dog house. *Post-Courier.* (Charleston, South Carolina) 16 (16):A-2; July 23, 1988.
- 61. Butterfield, B.: For Jake, pit bulls are born to live and die with true grit. *Journal*. (Providence, Rhode Island) 96 (15):A-1, A-18; April 13, 1980.
- 62. Nicholas, A.K.: *Staffordshire Bull Terriers*. T.F.H. Publications, Inc., Neptune City, New Jersey, 1990; pp. 84, 111.
- 63. Erk, L.: Attack victim, 74, satisfactory. *Kalamazoo Gazette* (Kalamazoo, Michigan) 154 (237):A-3; June 13, 1987.
- 64. Anonymous: Citations issued in dog attack. *Lima News.* (Lima, Ohio) 103 (170):A-4; June 19, 1987
- 65. Anonymous: Girl, 2, mauled, killed by 2 dogs. *Toledo Blade*. Final Home Edition. (Toledo, Ohio) 137 (271):11; September 28, 1987.
- 66. Ariar, A.: Phoenix neighborhood fears 2 pit bull terriers after attacks. *Republic*. (Phoenix, Arizona) 97 (109): A-1, A-2; September 4, 1986.
- 67. White, M.: Pit bulls attack: Police officer shoots dogs; 1 dies. *Times-Herald* (Newport News, Virginia) 86 (131):B-1, B-3; June 2, 1986.
- 68. Uehling, M.D. and Hutchison, S.: "The macho dog to have." Pit bulls may prove to be a dangerous fad *Newsweek*. 108 (2):40; July 14, 1986.
- 69. Anonymous: DA undecided about charges in regard to fatal dog attack. Local Briefs. *Rocky Mountain News*. Final Edition. (Denver, Colorado) 128 (190):26; October 29, 1986.
- 70. Anonymous: Boy, 2 1/2, is killed by a pit bull terrier. *Columbus Dispatch*. Final Home Edition. (Columbus, Ohio) 116 (350):A-6; June 15, 1987.

- 71. Plott, M.: Boy mauled to death by 3 pit bull dogs. 4-year-old is attacked near his DeKalb home. *Atlanta Journal*.(Atlanta, Georgia) 104 (262):A-1, A-14; November 22, 1986.
- 72. Vogler, M.: Pit bull dilemma. Breeder: Education is best solution. Sun-Tattler. (Hollywood, Florida) 51 (210):A-3; September 3, 1985.
- 73. Paternoster, L.: 3 to appear in court in dogfighting case. *Houston Post.* (Houston, Texas) 97 (209):A-22; October 30, 1981.
- 74. Perry, L.: A matter of prejudice. Dog World. 68 (11):4, 6; November, 1983.
- 75. Marder, A.R.: Aggression in animal behavior. Workshop, *Dog Aggression and the Pit Bull Terrier*. A.N. Rowan, Editor. Proceedings. Tufts Center for Animals. 30-32; July 17, 1986.
- 76. Robertson, R., Dogs kill 1st grader on her way to school. *Gazette*. (Phoenix, Arizona) 90 (130):B-1,B-2; September 25, 1979.
- 77. Marrison, B.: My dogs are not killers. Pit bull ban unneeded, owners say. *Toledo Blade*. (Toledo, Ohio) 136 (231):13; August 19, 1986.
- 78. Anonymous: Girl, 2, injured in pit bull attack. *Toledo Blade.* (Toledo, Ohio) 138 (112),25; April 21, 1988
- 79. Vogler, M.: Pit bull dilemma. Friend or foe. "Until he has had enough." *Sun Tattler*. (Hollywood, Florida) 51 (209):A-1, A-10; September 2, 1985.
- 80. Rosen, S. Dog attack terrifying, mysterious. Victim recalls battle with snarling foes. *Cincinnati Inquirer*. (Cincinnati, Ohio) 140 (175):A-1, A-2; December 26, 1980.
- 81. White, M. and Shawgo, R.: Police investigate attacks by 2 dogs. *Daily Press.* (Newport News, Virginia) 91 (154):B-3; June 3, 1986.
- 82. Anonymous. Tieras girl critical after pit bull attack. *Albuquerque Journal* (Albuquerque, New Mexico) 104 (80).A-1, A-3; March 20, 1984.
- 83. August, J.R.: Dog and cat bites. *J Amer Vet Med Assoc.* 193 (11) 1394-1398; December 1, 1988.
- 84. Anonymous: Doctor's dog bite death is declared accidental. *Columbus Dispatch*. (Columbus, Ohio) 116 (291):C-3; April 17, 1987.
- 85. Landers, A.: Pit Bulls shouldn't rule neighborhood. *Toledo Blade*. (Toledo, Ohio)

- 135 (142):31; May 22, 1985.
- 86. Burks, S.: Pit bull case settled as trial begins. *Albuquerque Journal*. (Albuquerque, New Mexico) 109 (347):D-1; September 13, 1989.
- 87. Anonymous: Pit bull frenzy. In Our Opinion. *Hampshire Gazette*. (Northampton, Massachusetts) 201 (270):6; July 23, 1987.
- 88. Palumbo, N.: Vet's corner. *Hawaiian Humane Society Newsletter.* (Honolulu, Hawaii) NV (NI):6; Summer, 1987.
- 89. Clifford, D.H., Boatfield, M.P. and Rubright, J.: Observations on fighting dogs. *J Amer Vet Med Assoc.* 183 (6):654-657; September 15,1983.
- 90. Clifford, D. and Segrest, M.: Are pit bulls different? Part II. Community Animal Control. 5 (5):16-17,20-29; September-October,1986
- 91. Bodie, J. and Phillips, S.: Housing fighting dogs. *Community Animal Control.* 3 (2):12-14, March-April, 1984.
- 92. Anonymous: Celeste signs dog bill that has some teeth. *Cleveland Plain Dealer*. (Cleveland, Ohio) 146 (192).B-1; July 11, 1987.
- 93. Clifford, D.: Pit bulls pose risk to other animals, clinicians, clients. Professional Liability. *The AVMA Trust Report.* 5 (1):4; 1986.
- 94. Anonymous: Arming of wardens to wait until foe gives go-ahead. *Lorain Journal*. (Lorain, Ohio) 109 (24):14; July 21, 1987.
- 95. Jones, A.: \$9,000 price tag for pit bull gear *Kalamazoo Gazette*. (Kalamazoo, Michigan) 154 (276):B-1,B-2; July 22, 1987.
- 96. Clifford, D.H., Green, K.A. and Pollock, J.: Doors and windows in veterinary security. *J Amer Vet Med Assoc.* 190 (3): 266-276; February 1, 1987
- 97. Green, K.A. and Clifford, D.H.: Security in the research laboratory. Part 1. Perimeter and internal control. *Lab Animal.* 15 (2) 27-28,31,34,36. March, 1986.
- 98. Clifford, D.H. and Green, K.A.: Security in the research laboratory. Part 2. Communications personnel and publicity. *Lab Animal* 15 (3):23-24.28-29; April, 1986.
- 99. West, J.: 11 pit bulldogs seized in raid must find home or die. *Republic.* (Phoenix, Arizona) 95 (287):B-1, B-6; March 2, 1985.

100. Pothier, D.: Eight pit bulls seized in W. Phila. home. *Philadelphia Inquirer*. (Philadelphia, Pennsylvania) 315 (106):B-3; October 14, 1986.

101. Jagodzinski, D.M.: TV or not TV. Dog World. 77 (3):121-124; February, 1993.