

Will breed-specific legislation reduce dog bites?

James H. Bandow

A study by University of Washington researchers, which was recently published in *PEDIATRICS*, the publication of the American Academy of Pediatrics, found that children are more often bitten by their own dogs or those belonging to neighbours than by stray animals.

Of the attacks studied, 21 of the dogs belonged to a neighbour, 13 were from the children's own household, and only three were strays. Three of those attacks were fatal, and one-third of the victims required treatment in an intensive care unit. Children under the age of five faced the greatest risk of being bitten by a dog, and medium and large breeds, including German Shepherds, Shepherd mixes and Rottweilers were the breeds most frequently identified as the biting dogs.

I found similar facts in my own detailed study of dog bites in the City of Toronto. While the University of Washington Study only looked at a small number of children who had been bitten, I did not restrict my study only to children but reviewed all of the 628 animal bites (human victims) reported to the Toronto Department of Public Health in 1993. Although the Toronto study confirmed that young children tend to be victims of more serious bites, they do not make up the majority of victims.

There may have been other bites that were not reported by the victims, those were probably not serious enough for the victims to seek medical attention.

My study looks at dog bites only. Of the 628 reported bites, 419 (67%) were caused by dogs, 159 (25%) were inflicted by cats, and 50 (8%) represented bites by other animals.

Age of bite victims:

Since there tends to be a general concern about children being victims of animal bites, I divided bite victims into one adult group over 18 years of age and three groups representing victims under 18 years of age. I found that bite victims fell into the following age categories:

Victims to 6 yrs. old: 8.6% (36)

Victims 7 to 12 yrs. old: 15.0% (63)

Victims 13 to 17 yrs. old: 7.6% (32)

Victims 18 yrs. and older: 68.8% (288)

General Manager, Animal Control Services, Department of Public Health, City of Toronto, 19 River Street, Toronto, Ontario M5A 3P1.

Reprinted with permission from The AASAO Journal, Vol. 8, No. 1, Winter/Spring 1995/96 published by the Association of Animal Shelter Administrators of Ontario.

Those percentages may be surprising, since it is often suggested that children are the most frequent bite victims.

Wound location — all bite victims

When I looked at the location of the bite wounds, I found that most victims were bitten on the hands or arms, although children up to 12 years of age were three times as frequently bitten in the face than bite victims in other age groups.

Bitten on hands and/or arms: 49.8%

Bitten on feet and/or legs: 32.9%

Bitten in face: 10.9%

Bitten on torso: 6.4%

Wound location — victims up to 12 years of age only

Bitten on hands and/or arms: 33.9%

Bitten on feet and/or legs: 29.6%

Bitten in face: 29.9%

Bitten on torso: 6.6%

The most vulnerable areas for all groups appear to be the arms and hands. This should not come as a surprise since this is the area most frequently reachable by dogs. It should also not come as a surprise that children are more frequently bitten in the face when one considers the size and stature of most youngsters up to 12 years of age and the size of the dogs which are most frequently identified as having bitten.

Age of victims

The records indicated that males of all ages were more likely to get bitten than females. In 1993, 58.2% of human dog bite victims were male and 41.8% were female.

Medical treatment — all victims

One of the concerns, particularly with younger bite victims is the severity of the bite. Although the records I checked did not include complete medical histories, they did indicate the following general type of treatment received by dog bite victims:

No treatment: 4.6%

Wound cleaned only: 29.4%

Wound cleaned and antibiotics given: 12.6%

Wound cleaned, tetanus inoculation: 22.7%

Stitches required: 9.5%
Wound cleaned and rabies vaccine: 1.2%

Medical treatment — victims to 12 years of age only

No treatment: 16.9%
Wound cleaned only: 46.7%
Wound cleaned, antibiotics given: 9.1%
Wound cleaned, tetanus inoculation: 7.8%
Stitches required: 19.5%
Wound cleaned, rabies vaccine: 0.0%

The University of Washington Study, referred to earlier, suggested that children are more likely to be bitten by their own dog or a dog belonging to a neighbour rather than a stray or unknown dog. My study came up with the same results. Of the 99 children under 12 years of age bitten by a dog in Toronto, 85% knew the dog that bit them.

Reasons given why dog bit

Next I looked at the reasons given by victims under 12 years of age, or by their parents or custodians, why the victims had been bitten. These were the reasons given:

Play with owned/known dog: 36.4%
Disturbing dog while eating: 26.0%
Trying to pet dog: 11.7%
Victim trespassing on dog property: 6.5%
Bitten by uncontrolled dog on public property: 6.5%
All other reasons given: 12.9%

This information is of particular significance for individuals or agencies which are providing information and education programs in schools and for community groups. It would appear that at least 80% of dog bites in young children are preventable. In response to this information, Toronto Animal Control Services has changed the focus of its school program from a program with a general theme of responsible pet ownership to a specific program on bite prevention.

Where bites occurred

58% of all dog bites occurred either on a dog owners' property or on some other private property where the biting dog was either visiting with its owner, or where it was being kept on behalf of the owner. The other 42% occurred on public property.

Bites caused by uncontrolled dogs

Of the 179 dog bites which occurred on public property, 123 (69%) occurred while the biting dog was under leash control and only 56 bites (31%) were inflicted by uncontrolled dogs or dogs-at-large. Some of those bites occurred while victims were trying to break up fights between their own dog and another dog or between two dogs, unknown to them. Following then is a summary of what my study has revealed about dog bite victims:

Young victims under 18 years of age:

1. Children under 18 years of age represented less than one-third of all reported dog bite victims.

2. Because of their size and the way they behave around dogs, children were more frequently bitten in the face, and those injuries frequently required stitches.
3. Most (85% in 1993) of dog bite victims under 12 years of age were bitten either by their own dog or by a dog they knew.
4. Most children who were bitten on the property where the biting dog lived were either the dog owners' children, or children of the dog owners' relatives or friends, or friends of the dog owners' children.
5. Nearly 75% of all children were bitten as a result of play activity with the biting dog, or as a result of teasing or trying to pet a dog.
6. In 1993, only 6.5% of the children under 12 years were bitten by an uncontrolled dog on public property.

Adult Victims:

1. Nearly one-half of adult victims were bitten on the arms and/or hands.
2. Adults who were bitten on dog owners' properties were mostly service personnel, mail carriers or delivery persons.

Reasons why dogs bite

There are three main reasons why dogs bite people:

1. The dog is intentionally or inadvertently provoked;
2. The dog is owned by someone who is ignorant about the characteristics and behavior of the dog breed and has done nothing to familiarize him/herself with the breed; or
3. The dog is not properly confined, controlled or socialized.

Which dogs bite most often?

As soon as a serious dog bite is reported some people immediately know what happened, "it must have been a Pit Bull," and away we go again on another *Ban the Pit Bull* campaign. I remember when we had similar *Ban the Doberman* campaigns about 20 years ago.

From time to time certain breeds attract the public's attention and are termed a public menace that warrants special attention. Since the mid 1940's, a number of breeds have fallen into such disrepute. In addition to the Pit Bull and the Doberman, they have included the Chow Chow, Rottweiler, German Shepherd and even the St. Bernard.

As part of my review of the 1993 City of Toronto bite reports I also made a list of the breeds of the dogs which had been identified as the biting animals. I compared this with the City of Toronto licence register to determine how frequently those breeds showed up in the licence register. I wanted to determine which of the breeds bit more frequently than they appeared in the licence register. I will admit that this part of the study is flawed, since it relies on bite victims being able to correctly identify the straying dogs that bit them, and relies on dog owners to correctly identify their dogs at time of registration. The latter is especially important when we deal with dogs that are not registered pure bred or with mixed breeds. Owners often see the breed they want to see when they identify their dogs for licensing purposes.

Seven breeds were identified in bite reports disproportionately to the percentage they represented in

Table 1. Dog bites identified by breeds compared with their representation in the City licensing file

	Representing % of Reported Bites	Representing % of Breed in Licensing File
1. Not specifically identified breeds	15.2%	*
2. German Shepherd cross-breed	12.7%	*
3. German Shepherd	8.8%	5.8%
4. Collie cross-breed	5.6%	*
5. Pit Bull Terrier cross-breed	5.5%	*
6. Labrador Retriever cross-breed	4.7%	*
7. Rottweiler	4.5%	1.7%
8. Misc. Terrier cross-breed	4.1%	*
9. Pit Bull Terrier	4.0%	1.1%
10. Collie	3.3%	0.7%
11. Poodle	2.9%	2.3%
12. Doberman	2.4%	1.1%
13. Golden Retriever	2.1%	4.2%
14. All Terriers (Except Pit Bull Terr)	1.9%	8.2%
15. All Spaniels	1.8%	3.7%
16. Labrador Retriever	1.7%	4.8%
17. Beagle	1.4%	1.9%
18. Spaniel cross-breed	1.2%	*
19. Husky cross-breed	1.1%	*
19. Lhasa Apso	1.1%	1.4%
19. Great Dane	1.1%	0.2%
19. Shitzu	1.1%	1.3%
19. Border Collie	1.1%	1.0%
19. Bishon Frise	1.1%	1.3%
20. All other pure breeds combined	9.6%	45.2%
Total	100%	85.9%

Note: * identifies various mixed breeds in the City's dog licence file. Although dogs are entered by their primary identification (e.g., Spaniel-mix; Collie-cross; etc) the computer licence files permit sorting by pure bred dogs only. All mixed breeds, which represent 14.1%, are lumped together.

the licence register. These breeds were: the German Shepherd, Pit Bull Terrier, Rottweiler, Collie, Doberman Pinscher, Great Dane and Poodle. Collectively those seven breeds represented 12.9% of licensed dogs but 27% of the dogs identified as having bitten.

Breed specific legislation

During the last 10 years we have seen a number of attempts by jurisdictions in North America and Europe to specifically control the "pit bull dog." However, experiences in jurisdictions such as New York City and Winnipeg illustrate the difficulty in defining this breed. Experience has shown that many people who have not had any specific dealings with some of the Terrier breeds, when asked to describe a Pit Bull terrier, will offer a description that will more correctly identify either a Bull Terrier (e.g.: "it looks like TV personality Don Cherry's dog) or a Bullmastiff. Therefore this calls into question at least some of the identifications made by those who claim that they were bitten by a "stray pit bull."

Central to the issue is the fact that there is no one "pit bull" breed. Pit bull is more a generic term like setter, retriever or spaniel, and refers to any of a number of breeds of dogs and their crosses that have similar phenotypic characteristics. A pit bull is often identified as belonging to a class of smooth haired, large headed, sturdy dogs in the Terrier group that include the Bull

Terrier, the American Staffordshire Terrier (also known as the American Pit Bull Terrier) and the Staffordshire Bull Terrier, which at times are crossed with some other breeds to enhance certain characteristics that are of particular interest to certain owners, particularly those who want to enhance a dog's fighting ability.

The problem with banning dogs

No one will argue that some pit bulls have been known to inflict serious injuries to both humans and to dogs and other domestic animals. Nor, I suspect, will anyone argue that any dog which is known to be a danger to the community should be properly restrained, which may include muzzling, and when warranted should also include destruction. However, such actions should be taken against any **dangerous dog**, regardless of breed.

Breed-specific legislation has three basic weaknesses: vagueness, and over and under inclusiveness. When we consider pit bulls, vagueness and overinclusiveness have to do with the difficulty of spelling out exactly what a pit bull is. As an example, the Winnipeg By-law, enacted to regulate the keeping of pit bulls includes "dogs that have the appearance and physical characteristics predominantly conforming to the Staffordshire Terrier."

There is another problem. Some owners like to refer to their dogs as "pit bulls," although they often have no characteristics that would suggest any relationship to any

of the breeds previously discussed, and still other owners refer to their pit bulls as "bulldogs," further complicating identification and terminology.

We also need to accept, whether a dog has been correctly identified or not, the fact that a dog anatomically resembles any one of the breeds or crossbreeds referred to as pit bulls is not a predictor of its behaviour. The majority of animals in this category are not aggressive towards people or other pets and are kept as family pets.

Underinclusiveness has to do with the fact that all dogs can and occasionally do bite, and that dogs referred to as "pit bulls" are not the only breeds that have the fighting instinct. Outside North America, the Neapolitan Mastiff, the Akita, the Tosa and the Shar-pei have all been used for fighting.

As we have pointed out, there are other breeds often suggested as making *good family pets* that do their share of biting.

All dogs, no matter what their breed are a product of their environment. A dog's personality is derived from a combination of genetics, treatment, training and socialization. While there are some traits common to all pit bull dogs, these traits by themselves do not make the dogs a threat to humans. Unfortunately, during the last 10 years, pit bulls have become a warped symbol of power. Because they are seen and promoted as aggressive, mean fighting machines by some, they are at times acquired by individuals looking to project a tough image.

Anyone who has ever looked at the way certain dogs become status symbols will recognize that even if it was possible to successfully ban pit bulls, it would not take very long before another breed of dog with some of the same traits that make the pit bull a certain status symbol would become the breed of choice.

Besides, we know that bans don't work successfully, and if "*pit bulls were outlawed, only outlaws would have pit bulls.*"

During the late 1980's a number of municipalities in North America attempted to ban pit bulls and ran into difficulties. A report in the May 1990 edition of the *Journal of the American Veterinary Medical Association* commented on the fact that during 1989, 164 out of 165 municipalities in the US considered breed-specific legislation but passed generic dog legislation instead.

New York City, for instance, passed a breed specific ordinance within the City's Health Code. It provided that effective April 1989 "pit bull dogs" were to be seized, tattooed, neutered, muzzled and indemnified with \$100,000 insurance, and that as of October 1, 1990 any such dog not so treated would be destroyed.

Litigants against the ordinance included the American Kennel Club, the United Kennel Club, the American Dog Owners Association, and the New York based American Society for the Prevention of Cruelty to Animals. Complaints were also filed by one veterinarian and eight dog owners who were concerned that their dogs might be mislabelled as "pit bull terriers" and could suffer harm as a result. **As well, New York's Licensing and Enforcement Agency filed an amicus curiae brief, indicating that it could not enforce the ordinance because of**

the difficulties in defining and identifying "pit bull dogs."

The City of Winnipeg enacted a breed-specific by-law in 1990 which describes a "Pit Bull Dog" as:

1. a Pit Bull Terrier; or
2. a Staffordshire Bull Terrier; or
3. an American Staffordshire Terrier; or
4. an American Pit Bull Terrier; or
5. any dog which has the appearance and physical characteristics predominantly conforming to the standards of any of the above breeds, as established by the Canadian Kennel Club or the American Kennel Club or the United Kennel Club and attached as Schedule B, as determined by a veterinarian licensed to practice in Manitoba.

That legislation has already faced a number of legal challenges because of the inability even by "expert witnesses" to reliably determine whether a dog is a pit bull.

Summary

So how do we deal with biting dogs? To start with, we must remind ourselves that biting is a natural activity of all dogs, and that there is potential for injury. All dog owners must understand this and must be made aware that they are fully responsible for the actions of their dogs. I am not convinced that this is universally understood by dog owners, nor am I satisfied that every dog owner takes the necessary steps to train and socialize their dog. Owners need to be encouraged to actively work at inhibiting biting behaviour when dogs are young. As well, all dogs should be socialized to accept children, regardless of whether or not there are children living with the dog.

Adults without dogs need to learn that dogs don't understand "people's rights," and that dogs should not be expected to act differently with different people. Adults also need to understand that young children should never be left alone with a dog (or a cat) without supervision, and that all children should be taught how to behave around dogs, particularly around dogs they don't know.

So long as we have dogs living with us there will be people who get bitten. The most effective way to prevent bites is to encourage dog owners to become knowledgeable about their animals and to train and socialize them so that they can become good dog neighbours.

Many municipalities already have by-laws that deal with animal bites, and in Ontario the *Dog Owners Liability Act* has proven to be effective in confining, restraining or disposing of biting or attacking dogs judged to be a definite threat to public health and safety, and when evidence warrants, there is always Section # 221 of the Criminal Code of Canada.

Most legislation deals with bites after the fact. If we want to prevent all bites, there is only one sure way and that is to ban all dogs. That is of course as unrealistic as trying to prevent bites by enacting breed specific legislation.