



*Preserving the Human-Canine Bond*

## Summary Report on Dog Bite-Related Fatalities, 2000-2012

---

DOG BITE-RELATED FATALITIES ARE EXCEEDINGLY RARE.

There were 35 verified dog bite-related fatalities (DBRFs) in the US in 2012.\* They occurred within a canine population estimated at between 70 and 83 million and a human population of 313 million.

We have combined the verified results from the 2012 investigations with those of all the cases dating from 2000.

MULTIPLE FACTORS CONTINUE TO CO-OCCUR THAT ARE WITHIN THE CONTROL OF OWNERS.

We have analyzed these incidents according to the methodology described in the comprehensive, ten-year study published in December 2013 in the *Journal of the American Veterinary Medical Association (JAVMA)*.<sup>1</sup> The National Canine Research Council (NCRC) developed the research methodology and compiled the data for this study.

As we have for many years, NCRC contacted officials in each case, to obtain the most accurate and complete information available. We re-interviewed sources the media had reached, and located others they had not, among whom were police investigators, animal control officers, coroners, veterinarians, health department officials, dog owners, and primary witnesses. We obtained incident reports, bite reports, human and animal autopsy reports, and crime scene data and photographs. While not all, or even any, of these sources and reports were available with respect to each individual case, our comprehensive method reveals that official reports often do not agree with news accounts and/or contain important information that was either unavailable or not of interest to reporters. Many cases involved lengthy investigation by local authorities, and as such, important information relative to the dog(s), owner, and/or victim was not available until the investigations were concluded.

We have investigated DBRFs occurring over a period of more than 20 years. The results have supplemented or corrected initial media reports with relevant, material information in over 90% of the incidents

The comprehensive study published in *JAVMA* reliably identified seven factors that co-occurred, in various combinations, in the DBRFs during the 10-year period 2000 - 2009:

- absence of an able-bodied person to intervene;
- incidental or no familiar relationship of victims with dogs;
- owner failure to spay or neuter dogs;
- compromised ability of victims to interact appropriately with dogs;
- resident dogs kept isolated from regular positive human interactions versus family dogs;
- owner prior mismanagement of dogs;
- owner history of abuse or neglect of dogs.

Four or more of these factors, all within the control of dog owners, co-occurred in 80.5% of the incidents during that 10-year period.

The co-occurrence of these factors has remained consistent over the longer period. For the 13-year period 2000 - 2012, four or more of these same controllable factors co-occurred in 79% of the incidents.

We will continue to investigate each incident employing NCRC's comprehensive methods. We expect to add the data from succeeding years to that obtained for the period 2000 - 2012.

**MOST OF THE DOGS INVOLVED HAVE BEEN RESIDENT DOGS, NOT FAMILY DOGS.**

Among the DBRFs that occurred during the 13-year period 2000-2012, 72.7% of the dogs involved were resident dogs, not family pets.

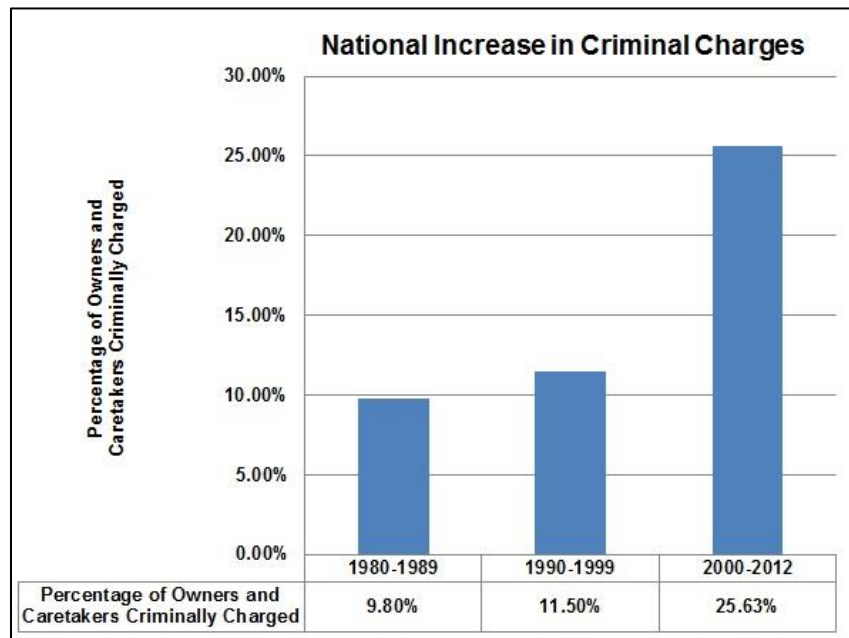
Resident dogs are dogs, whether confined within a dwelling or otherwise, whose owners maintain them in ways that isolate them from regular, positive human interactions. Isolation and lack of exposure to the family unit may result in the display of behaviors different from family dogs. Owners may keep resident dogs isolated on chains, in yards, kennels, crates, garages, basements, or allow them to roam unattended. Owners of resident dogs often fail to provide basic humane care for their dogs resulting in animals that suffer from malnutrition or chronic illness.

[Resident dogs cannot be expected to exhibit the same degree of social competence\\*\\* as family dogs who are integrated into the family unit and afforded the opportunity to learn appropriate behaviors through positive and humane interaction with people on a regular basis.](#)

## RECKLESS OWNERS AND CARETAKERS DISREGARD THE SAFETY AND WELFARE OF PEOPLE AND DOGS.

Among the DBRFs that occurred during the 13-year period 2000-2012, there is evidence of mismanagement and/or neglect -- or abuse -- of the dog or dogs involved in almost half of the cases.

An increasing percentage of the reckless owners or caretakers of dogs involved in DBRFs have been charged with crimes in connection with the incident.



## REPORTS REGARDING BREED ARE UNRELIABLE AND DIVERT ATTENTION FROM HOW DOGS LIVE IN OUR WORLD.

Since 1969, 46 different breeds of dogs have been reported in connection with DBRFs. It is not likely that more than handful of these dogs came with pedigrees. Only 40% of US dog owners, whatever breed name they use to describe their dogs, report that they obtained them from breeders or pet stores, sources from whom they might have obtained a pedigree.<sup>2</sup> Approximately half of the US dog population is believed to be mixed breed.<sup>3</sup>

We compile source material far more extensive than the news accounts that were the basis for other studies. For the thirteen-year period 2000 - 2012, in only 20% of the incidents have we been able to obtain documentation or other reasonable evidence of a dog's breed or genetic makeup.

### Dogs' personalities are more reflective of their relationships with people than of their breed.

There is no scientific evidence that one kind of dog is more likely to injure a human being than another kind of dog.<sup>4</sup> No single factor, including breed, has been shown to explain threatening or biting behavior in dogs. Most dogs do not present such behaviors in multiple contexts. Rather, they are learned responses to specific situations, and specific to the experience of the individual dog, rather than general personality characteristics.<sup>5</sup> Absent circumstances specifically associated with mating or maternal protectiveness, there is no evidence that intact status increases the likelihood of a dog threatening or biting human beings.

### THE CONCLUSION OF EXPERTS: SERIOUS AND FATAL DOG BITE-RELATED INJURIES ARE MULTIFACTORIAL.

Annual reports and detailed case histories considered in isolation will not enhance awareness of what the experts have agreed on. Minor annual fluctuations in co-occurrence of owner factors, or dramatic, one-of-a-kind case histories may, in fact, obscure rather than enlighten. No single factor has been shown, in isolation from other factors, to be the sole cause of a dog bite-related injury or fatality. Professionals studying dog bite-related injuries, even when venturing speculations regarding breed, have been remarkably consistent in their recommendation of pet ownership and child safety practices directly relevant to prevention, and against regulating dogs on the basis of breed or appearance.<sup>6</sup>

These recommendations, in combination with the failure of breed-specific legislation (BSL) to produce a reduction in dog bite-related injuries in jurisdictions where it has been imposed, have caused support for BSL to fade in recent years. From January 2012 to January 2014, seven times as many US municipalities either repealed BSL or considered and rejected it, as enacted it. [In August 2012, the House of Delegates of the American Bar Association passed a resolution urging all state, territorial and local legislative bodies and governmental agencies to repeal any breed discriminatory or breed specific provisions. In August 2013, the White House, citing the views of the Centers for Disease Control and Prevention, published a statement with the headline, "Breed-specific legislation is a bad idea."](#) BSL is also opposed by major national organizations, including the American Veterinary Medical Association, the National Animal Control Association, the Humane Society of the United States, the American Society for the Prevention of Cruelty to Animals, and Best Friends Animal Society.

An increasing percentage of American families consider their dogs to be members of the family.<sup>7</sup> We all have an interest in safe, humane communities that embrace people and pets. Effective use of public resources requires that we establish, promote, and enforce standards applicable to all dog owners. All dog owners have the unequivocal responsibility for the humane care (including proper diet, veterinary care, socialization and training), custody (including licensing and micro-chipping), and control of their dogs.

*\* We define a dog bite-related fatality as a death resulting from the mechanical trauma of a dog bite. Persons dying of causes such as infection following a dog bite or other trauma associated with a dog-related incident (eg, a fall) were not considered dog bite-related fatalities.*

**\*\*Ethologists define the dogs' "social competence" as sensitivity to human behavioral cues; the ability to adjust reactions according to the context of the interaction; and the utilization of various conflict-resolving behaviors, depending on the actual partners. These abilities enable dogs to fit in with human societies and to form peaceful mixed-species groups with us. It is clear that dogs have the capacity to learn this competence, and equally clear that we humans must honor our obligation to be the teachers.**

April 9, 2014

---

<sup>1</sup> Patronek, G.J., Sacks, J.J., Delise, K.M., Cleary, D.V., & Marder, A.R. (2013). Co-occurrence of potentially preventable factors in 256 dog bite-related fatalities in the United States (2000-2009). *Journal of the American Veterinary Medical Association*, 243(12), 1726-1736.

<sup>2</sup> American Pet Products Manufacturers Association, *2011-2012 National Pet Owners Survey*.

<sup>3</sup> American Veterinary Medical Association. (2012). *U.S. Pet Ownership & Demographic Sourcebook: 2012 Edition*. Schaumburg, IL: AVMA.

<sup>4</sup> Backgrounder AVMA Animal Welfare Division. (17 April 2012). "The Welfare Implications of The Role of Breed in Dog Bite Risk and Prevention." Retrieved from:  
<https://www.avma.org/KB/Resources/Backgrounders/Pages/The-Role-of-Breed-in-Dog-Bite-Risk-and-Prevention.aspx>

<sup>5</sup> Casey, R.A., Loftus, B., Bolster, C., Richard, G.J., & Blackwell, E.J. (2013). Human directed aggression in domestic dogs (*Canis familiaris*): Occurrence in different contexts and risk factors. *Applied Animal Behaviour Science*, 125, 52-63.

<sup>6</sup> American Veterinary Medical Association. (2014). *Dog Bite Prevention*. Retrieved from:  
<https://www.avma.org/public/pages/Dog-Bite-Prevention.aspx>

<sup>7</sup> American Veterinary Medical Association. (2012). *U.S. Pet Ownership & Demographic Sourcebook: 2012 Edition*. Schaumburg, IL: AVMA.