

FINAL REPORT ON DOG BITE-RELATED FATALITIES

2020

DOG BITE-RELATED FATALITIES ARE EXCEEDINGLY RARE.

The interactions between dogs and humans are so numerous and complex that no one factor can be considered, in isolation from any other factors, to be the sole cause.

There were 46 verified dog bite-related fatalities (DBRFs) in the US in 2020.¹ They occurred within a human population of 328.2 million and a canine population estimated at between 75 and 90 million (based on surveys conducted by the American Veterinary Medical Association and the American Pet Products Manufacturers Association, respectively). What this means is that 1 dog out of approximately 2 million is involved in one of these incidents.

National Canine Research Council continues to thoroughly investigate DBRFs using the same methodology described in the comprehensive, ten-year study published December 2013 in the *Journal of the American Veterinary Medical Association*.²

With events of such extreme rarity, no meaningful statistical conclusions can be drawn based on a single year's data, which is why we continue to include a summary of the decade-long study mentioned above in these annual reports.

The findings in the ensuing years have remained remarkably stable as the subsequent 6- year updated study demonstrates.³

INVESTIGATIONS TAKE TIME TO CAPTURE ACCURATE INFORMATION

Since January 2020, the National Canine Research Council had been actively investigating 49 potential DBRFs which occurred in 2020, collecting data from official reports, legal proceedings, interviews with law enforcement, and media reports, which are then subjected to the same rigorous analysis used in the study.

These investigations have resulted in the finding that 46 of the 49 cases initially reported meet NCRC protocol to be classified as a DBRF for 2020 statistics.^{3,4}

DOG BITE-RELATED FATALITIES IN 2020:

The majority of the 46 DBRFs were adults 60.9%, children (aged 12 or under) comprised 34.8%, and 4.3% (n=2) were teenagers (aged 13 and 14 years).

Criminal Charges:

Criminal charges against a parent or dog owner were known to be filed in 19% (n=9) of the 46 cases of DBRFs in 2020.

Breed Identification:

As has been the case throughout the 2 decades of data collection and analysis breed could not be identified as a factor related to incidence. Once again in 2020, in only 15.2% (n=7) of the 46 cases of DBRFs was there any evidence of the dogs' genetics or pedigree. In all the other cases (n=39), there was no available documentation or genetic information to support an evidence-based breed identification.⁵

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








The December 2013 study is the most comprehensive multifactorial study of DBRFs to be completed since the subject was first studied in the 1970s. Covering all incidents that occurred during the ten-year period 2000 - 2009, it is based on investigative techniques and data developed by National Canine Research Council not previously employed in dog bite or DBRF studies.

The study reliably identified seven factors potentially within the control of dog owners and caretakers that co-occurred, in various combinations, in the overwhelming majority of DBRFs the authors examined.

Another important way to think about these factors would be as aspects of a positive relationship between the dog and the people he or she lived with that were missing from these dogs' social environments, possibly limiting their opportunities to develop social competence, (the term in psychology that basically means the skills needed to get along with others).

Undoubtedly the vast majority of dogs who do without these opportunities never hurt anyone.

However, DBRF study findings show a strikingly high commonality of owners that did not foster or provide positive interactions with their dogs.

<u>FACTORS</u>	<u>CASES FROM 2000-2009 WITH THIS FACTOR PRESENT</u>
NO PERSON PHYSICALLY ABLE TO INTERVENE PRESENT	87.1% 
THE VICTIM HAVING NO FAMILIAR RELATIONSHIP WITH THE DOG(S)	85.2% 
THE DOG(S) OWNER FAILING TO NEUTER/SPAY THE DOG(S)	84.4% 
A VICTIM'S COMPROMISED ABILITY, WHETHER BASED ON AGE OR PHYSICAL CONDITION, TO MANAGE THEIR INTERACTIONS WITH THE DOG(S)	77.4% 
THE OWNER KEEPING DOG(S) AS RESIDENT DOG(S), RATHER THAN AS FAMILY PET(S)	76.2% 
THE OWNER'S PRIOR MISMANAGEMENT OF THE DOG(S)	37.5% 
THE OWNER'S ABUSE OR NEGLECT OF DOG(S)	21.1% 

The study, as had DBRF studies published previously, found no evidence that one kind of dog is more likely to injure a human being than another kind of dog.

THESE FACTORS CO-OCCUR: THERE IS NO SINGLE FACTOR.

Four or more of the factors identified co-occurred in 80.5% of the incidents during the ten-year period studied. Only very rarely (in 2.5% of the cases) was there only one factor identified. Serious and fatal dog bite incidents are complex, multifactorial events.

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.^{5,6}

Updated March 28, 2022.

SOURCES and NOTES:

1. See "National Canine Research Council Protocol: Definition of a DBRF": <http://www.nationalcanineresearchcouncil.com/injurious-dog-bites/dog-bite-related-fatalities>
2. 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. <https://avmajournals.avma.org/doi/abs/10.2460/javma.243.12.1726>
3. See "Update: Dog Bite Related Fatalities in the United States, 2000-2015:" https://www.nationalcanineresearchcouncil.com/sites/default/files/Update-Dog-Bite-Related-Fatalities-In-The-United-States-2000-2015_0.pdf
- 4: Two cases were included as DBRFs for 2020 despite the fact that in both cases the owners of the dogs were charged with murder for not only inflicting additional physical injury to the victim, but also actively encouraging their dogs to continue to bite the victim .
5. In 41% of the 39 cases where there was no evidence as to the genetic make-up of the dog, attempting breed identification was even more problematic as conflicting breed descriptions were reported among media sources, law enforcement, and animal control officials.
6. American Veterinary Medical Association. (2016). Dog Bite Prevention. Retrieved from: <https://www.avma.org/public/pages/Dog-Bite-Prevention.aspx>