

Dog Bites: An Issue of Public Health and Education



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In October, 2000, a six-week-old baby was mauled to death in her Los Angeles home by the family dog, a tiny Pomeranian. On January 26, 2001, college lacrosse coach Diane Whipple was killed in her San Francisco apartment building in an attack by her neighbors' two Presa Canario dogs. That summer, ten-year-old Shawn Jones of Richmond, California, suffered severe injuries to his arms, neck, and face—losing both ears—after a neighbor's three pit bulls pulled him from his bicycle.

In recent years, highly publicized dog attacks have not only made headlines but also spurred research into what many experts now call an epidemic. A ten-year study published in the *Journal of the American Medical Association* shows that while the country's dog population rose only 2% from 1986 to 1996, the number of dog attacks in that same time period increased by 37%.

Who, What, Where, How Much...?

Each year, an estimated 4.7 million Americans are bitten by dogs. Serious dog-bite-related injuries send 334,000 people to the hospital, with emergency care costing \$102 million a year. Even more troubling is this: At least 60% of victims are under the age of 13, with peak incidence in elementary-school-aged children. According to the Centers for Disease Control and Prevention, dog-bite-related injuries are the number-one health problem for children in the United States, more common even than playground injuries.

...And Why?

Children are the most likely victims of

dog bites for a variety of reasons. Their small size, quick movements, underdeveloped motor skills, and high-pitched voices, which can trigger a predatory canine response, are all factors that make them more frequent or vulnerable targets for dog attacks. Still, experts agree, the vast majority of dog bites are preventable. Here's why.

Most dog attacks involve family pets or neighbors' dogs whose owners are unaware of their animals'—indeed, every dog's—potential for aggression. Equally significant is young people's lack of knowledge about dog safety. Children want to hug and kiss their pets. They want to comfort those who are hurt. When they're afraid, they scream. If they want to get away, they run. All of those behaviors are natural to a child. All of them are dangerous around dogs.

In a June 2001 report, "A Community Approach to Dog Bite Prevention," the American Veterinary Medical Association's Task Force on Canine Aggression and Human-Canine Interactions stressed that curbing the incidence of dog bites takes a coordinated, well-planned community effort—one that centers on education. "Education is key to reducing dog bites within a community," the report states, adding, "The list of those who may educate includes...humane society personnel, school nurses, teachers, and parents." So, why don't more schools include dog bite prevention in their curricula? And if they did, would it really work?

Putting Good Ideas to the Test

Writing in a study published in *Anthrozoös* (Vol. 13, No. 3, 2000), Ian Brett Spiegel noted that schools frequently participate in programs geared toward raising children's awareness of stranger danger, assault prevention, HIV/AIDS, fire safety, and drug and alcohol abuse. Despite the high incidence of dog bites, however, few schools incorporate this important public health and humane education topic into the curriculum.

To address the gap in safety and humane

education, Spiegel, a graduate student at Johns Hopkins School of Public Health, launched a pilot study in 1997 to measure the effectiveness of a school-based dog bite prevention program. He began by distributing questionnaires to 486 second-, third-, and fourth-grade students in seven public and private elementary schools in Maryland. Questions were designed to ascertain how much students knew about dog behavior, dogs' body language, and dog bite prevention.

Students then participated in the BARK (Be Aware, Responsible, and Kind) Dog Bite Prevention Program, developed with support from The Humane Society of the United States. The program was divided into three short sessions (90 minutes total) over a four-week period. It included a video, workbook assignments, and role-playing activities. Afterward, students were again given a questionnaire assessing their understanding of dog safety.

Kids Get with the Program

Results showed that BARK was highly effective at teaching kids how to prevent threatening situations involving dogs. Most notably, at the outset, fewer than 6% of fourth graders knew that neighborhood and family pets are most responsible for dog bites; after completing the program, that figure jumped to 65%. Almost 20% of third graders initially said they would run from a dog; that number dropped to fewer than 1%. Also encouraging, more than two-thirds of students shared BARK program materials with their families.

But will those lessons stick? When it counts, will children remember to "lie like a log," just as they know in case of fire to "stop, drop, and roll"? Will they avoid the mistakes that put them at risk with their own pets? Could responding safely to dog threats become as automatic as dialing 911 in emergencies?

Spiegel proposes that future studies assess changes not just in students' awareness but also their actions. In the meantime, we as educators must provide information that can help protect children, their furry companions, and the special bond between them.

—Lesia Winiarskyj

To learn about implementing the BARK program in your school or classroom, see our back cover.