



**K9 Aggression -  
Don't shoot the  
dog...just yet!**

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OSU Behavior Service

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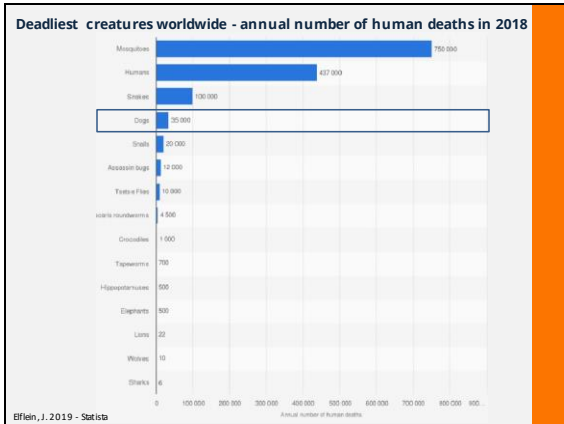
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## Bite statistics

- # 1 behavior problem in dogs
- 4.7 million dog bites a year in the US (1% require hospitalization)
- Average 43 deaths/year (2011-2021)
- 46 fatal attacks in 2022 – 1000 ER visits/day
- More than half of cases involve children 5 – 9 years old
- 2 million children/year
- 85% dog bites
- 10% cats and other animals, 5% human



CDC 2021

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Highest percent of fatal dog attacks victims aged 0-2 years according to a 13-year period (2005-2017)  
**70.4% fatalities were NOT family pets**



DogsBite.org, May 2018  
 National Canine Research Council, 2015

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## Who are the culprits?

1. "Unknown" (unable to identify)
2. Pit Bull (16.6% of fatalities – 87.4% passed a temperament test (Amer. Temperament Test Society, 2017))
3. Mixed Breed 66-100 lbs
4. German Shepherd (85.3% passed temp. test)
5. Terrier
6. Rottweiler

Issig et al., 2019 - Dogbite injuries to the face: Is there risk with breed ownership? A systematic review with meta-analysis.

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## More numbers, cause Why not?

Dog Bite Claims Statistics from 2019-2020

- We are approaching 90 million dogs in the US
- In 2020 U\$854 million paid in insurance claims
- 50,245 average cost per claim

### What does Covid 19 have to do with it?

26.6% increase in bites to children after covid  
81 fatalities in 2021

- More time spent at home
- Increased tension in the home
- Anxious people = anxious pet




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## Why children?

### Risk factors/behavioral circumstances

- Most children bitten by dogs with no bite history
- High anxiety levels in the dog population, 77% of dogs
- 44% bites associated with resource guarding
- 23% territory guarding, 42% food guarding
- 53% unfamiliar children



Behavioral assessment of child-directed canine aggression. Ilana R Reisner, Frances S Shofer, Michael L Nance Injury Prevention 2007;13:348-351

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## Classification of aggression

### Territorial aggression

- Equally common in males and females



### Protective aggression

- Dogs can show protective aggression to people/dogs
- Puppies start showing it as they mature.




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## Classification of aggression

### Resource guarding/possessive aggression

- Competition for resources, guarding belongings from others, toys, food, water, attention. Common in puppies.



### Fear/defensive aggression

- Fearful animals will show flight response first.....bites when fail to recognize signals.




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## Classification of aggression

### Social aggression

- Need to maintain group cohesiveness, resolve conflicts between members of a group.



### Pain-elicited aggression

- Physical or psychological pain
- Chronic conditions (arthritis, glaucoma, anxiety)




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## Classification of aggression

### Frustration-elicited aggression

- Arousal by a stimulus, unable to reach/approach/retreat



### Redirected aggression

- Animal redirects aggression that was supposed to be towards one individual
- Very common in cats




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## Classification of aggression

### Sex-related aggression

- Males competing for females in heat



### Predatory aggression

- High prey drive
- Directed to small mammals or cats




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## Classification of aggression

### Inter-dog aggression

- Familiar dogs is more common, same gender
- Past negative experiences with other dogs (fear)




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### What has changed

- Environmental pressures
- Dog-human relationship
- **HAB compromise**

CARTOON BY JEFF SMITH. THE DOG IS A COWDOG.  
PULPBOOK.COM / OFF THE LEASH ONLY DOG CREATIONS

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### Just don't!

**X** Dogs don't like hugs and kisses from kids. They may tolerate this, they may not.  
This is a major cause of facial bites to children by the family dog.

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**AT FIRST GLANCE YOU MAY THINK THIS IS CUTE.**  
**ACTUALLY, IT IS HIGHLY IRRESPONSIBLE AND VERY DANGEROUS.**  
**THIS DOG IS GIVING MANY WARNING SIGNALS THAT IT'S VERY UNCOMFORTABLE AND STRESSED.**

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## Aggression vs. Dominance



- Aggression and Dominance are not the same process
- It's only applied to wolves
- Dogs are not pack animals

Animal Behavior, Dugatkin, 2 Ed.

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## Aggression and dominance myth

- Domestication
- Dogs recognize species
- Dogs and wolves probably share a common ancestor
- Dogs are not dominant over people!



Hare, Wobber, and Wrangham. 2012 The Self-domestication Hypothesis

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## Aversive methods




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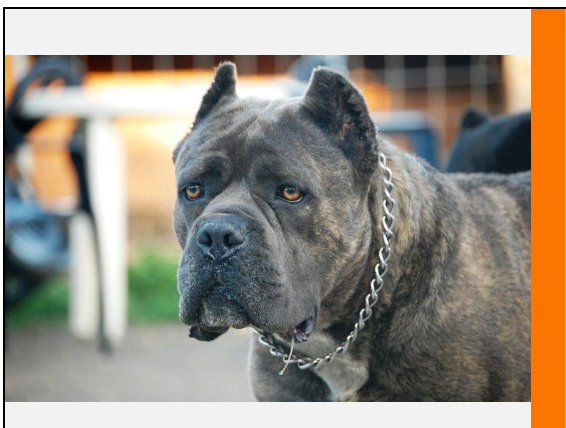
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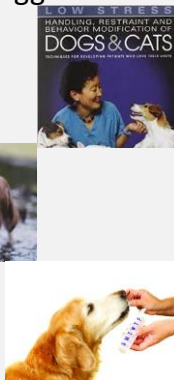
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### Current protocol for aggression

- Appropriate assessment by trained professional
- Behavior modification protocol – safety measures
- Environmental management
- Pharmacological intervention if needed




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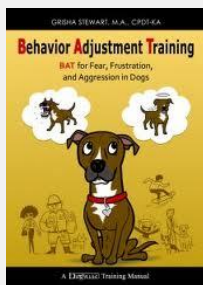
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### Good reads




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It is our job!




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Questions




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