

# Characteristics, treatment, and outcome of 99 cases of aggression between dogs Cornell University, NY

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## Abstract

Cases of aggression between dogs ( $n = 99$ ) treated at the Animal Behavior Clinic, Cornell University (1983–1993) were analyzed retrospectively. Data were obtained from case histories; follow-up information was collected by telephone interviews and mailed questionnaires. Aggression occurred in two contexts. The primary complaint was conflict between dogs in the household in 73 cases, and aggression directed at non-household dogs in 26 cases.

Dogs that started fights were pure-bred in 70 cases (71%); German Shepherd Dogs were most numerous of 38 breeds represented. Compared with American Kennel Club registrations, household aggression was less frequent among toy and sporting breeds, and more numerous among herding and non-sporting breeds ( $P \leq 0.054$ ).

Terrier breeds were more prevalent among cases of non-household aggression ( $P < 0.01$ ).

Overall, more females initiated household aggression, whereas more males attacked non-household dogs ( $P < 0.05$ ).

For household aggression, same-sex pairs, especially females, were far more numerous than opposite-sex pairs ( $P < 0.001$ ).

Of dogs that started household fights, 58% were younger and 59% arrived in the home more recently than the target dog. Household fights were more injurious than fights with outsiders ( $P < 0.001$ ); fights between female housemates tended to be more severe than other gender combinations ( $P = 0.057$ ).

Excitement was the most frequent trigger of household fighting. Treatments most often recommended for household aggression were desensitization with

counter conditioning and obedience training; neutering and a head halter were most often suggested for non-household aggression.

In owners' opinions, treatment improved 59% of household cases and 52% of non-household cases. After treatment, 56% of dogs exhibiting household aggression could be together when supervised, whereas 76% of those exhibiting non-household aggression could be around outsiders under leash control.

Cases of household aggression in which the attacking dog was younger than its target, a person had been bitten, or the owner could not predict aggressive episodes were less likely improved than cases in which these situations did not occur ( $P < 0.05$ ).

Manifestations of aggression between housemates and toward non-household dogs are similar to dominance conflicts and territorial defense, respectively, in wolves. Comparisons between dog and wolf behavior may lead to improved treatment and resolution of aggression between dogs.

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