

Insights into dog attacks from recent South Australian research

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1. Background

While dogs provide many benefits to individuals and society, they have a significant downside – dog bites. In Australia, on average 2,061 people were hospitalised per year as a result of dog bite injuries between 2001 and 2013 (1). Dog bites are not only associated with physical injuries but also long-term psychological distress (1). They are also associated with financial costs to the person injured, to the public medical system, and to the insurance industry. In 2024 the US paid out \$1.6 billion in dog-related claims (2). As well as injuries to people, there is also a significant cost from injuries to other animals (3).

In Australia data on dog bites can be obtained at a community level, from reports of dog bites to local councils, or from hospital emergency visit and admission data. Most published data is from hospital admissions (1), which is likely to greatly underestimate the total number of dog bites in the community. In a study in a semi-rural area of Cheshire published in 2018, a third of the total number of dog bites required medical treatment but only 0.6% of victims were hospitalised (4). To our knowledge there has been no data published on community-level dog bites in a representative sample of the population from Australia.

Accurate and current information is necessary for public health programs to reduce dog bites. This presentation provides information on two research projects with the aims:

- 1) Determine the incidence and factors related to dog bites in a representative sample of South Australians, and
- 2) Evaluate attitudes to dog bites and dog management behaviours before and after a public health campaign designed to increase awareness any dog can bite.

2. Incidence of dog bites in South Australia

The presentation will summarise results from a survey of a representative sample of 2,003 households from across South Australia. Results include incidence of dog bites per person in the last 12 months, severity of the bite, whether the victim knew the dog, and context of the bite (what the dog and victim were doing before the bite, where the bite occurred).

1. Monti L, Kotzalidis GD, Arcangeli V, Brozzi C, Iacovino R, Giansanti C, et al. Psychological Sequelae of Dog Bites in Children: A Review. *Children*. 2024 Oct;11(10):1218.

3. A public health campaign to increase awareness of dog bites

In 2023 and 2024 a public health campaign was run by the Dog & Cat Management Board of South Australia, titled Good Dogs Have Bad Days. The main message of the campaign was that we love dogs but any dog has the potential to bite if triggered.

The campaign included social media posts, TV and radio and posters on the back of buses and in bus shelters. Images included a range of victims (children, adults, dog) with an image of an injury and overlying it some misconceptions people may hold about dogs, such as 'My dog is great with kids' with an image of a young child with a facial injury. A market research company completed public surveys pre- and post- the campaign launch.

There were 400 responses in the pre-survey and 401 responses after the campaign was completed (5). Response to 'My children play with my dog without supervision' decreased from a 61.2% to a 54.2% agreement ($p=0.025$) following the campaign. Other questions did not change but provide useful information to benchmark behaviours around dogs that may increase risk, for example only around 40% of respondents agreed they separate their dog from visitors or delivery people.

A statistical model was constructed to determine factors associated with agreeing with the statement 'Do you think any dog has the potential to bite?' For all respondents, having seen the campaign, having better knowledge of when a dog might bite, and being female were associated with a higher agreement with this statement. For dog owners only, the same factors were associated with agreement along with dog-owners with more safe attitudes towards human-dog interactions (e.g. "I let children pat my dog without permission").

4. Conclusions

Findings from this research demonstrate many dog bites occur in the community, with the minority requiring hospitalisation. Although most bites do not result in significant injuries, they may predict future bites. Findings will frame important areas for future research.

References

1. Rajshekar M, Blizzard L, Julian R, Williams AM, Tennant M, Forrest A, et al. The incidence of public sector hospitalisations due to dog bites in Australia 2001–2013. *Aust N Z J Public Health*. 2017;41(4):377–80.
2. Insurers Pay \$1.6B in Dog Bite Claims, as Frequency Soars [Internet]. *Insurance Journal*. 2025 [cited 2025 May 21]. Available from: <https://www.insurancejournal.com/news/national/2025/04/25/821236.htm>
3. Heyward CL, Hazel S, Peacock R, Nielsen T. Characteristics and outcomes of dog attacks to dogs and cats in Melbourne, Australia: A retrospective study of 459 cases (2018). *Prev Vet Med*. 2022 Apr 1;201:105609.

4. Westgarth C, Brooke M, Christley RM. How many people have been bitten by dogs? A cross-sectional survey of prevalence, incidence and factors associated with dog bites in a UK community. *J Epidemiol Community Health*. 2018 Apr 1;72(4):331–6.
5. Hazel SJ, Iankov I. A public health campaign to increase awareness of the risk of dog bites in South Australia. *Prev Vet Med*. 2024 Oct 1;231:106298.