## 'One health' promotion in a model city for dog aggression policy: a qualitative inquiry in the city of Calgary

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**Background:** Dog-bite injuries remain a perennial problem, especially in pediatric emergency services. Nonetheless, few researchers have examined how local-level policies may contribute to primary prevention. We do so with qualitative research and an emphasis on implementation. This study highlights the potential benefit of coordination in Alberta between municipalities and emergency health services.

**Implementation:** This study mainly took place in the City of Calgary, which has earned a sterling reputation, in Canada and internationally, for the results of its animal-control policy in reducing dog-aggression incidents. We attribute part of this achievement to the high compliance of licensing in Calgary. The City estimates 80-90% of all dogs in Calgary have been licensed (by comparison, the City of Toronto estimates 35% compliance with mandatory licensing for dogs). The City of Calgary earmarks revenue from licensing for human-animal services, including public education, assessment of dogs' behavior, and a state-of-the-art shelter oriented towards rehoming. Here, we frame the City of Calgary's dog-aggression policy as a 'One Health' issue. This concept refers to human-animal-environment interdependencies as the basis for health. Whereas most One Health research has focused on preventing zoonotic infections or environmental toxins, our approach emphasizes health promotion, in which 'caring for one's self and others' as the foundation for improving longevity and quality of life. Over the years, we have informed and learned from the City of Calgary's implementation of its dog-aggression policy framework.

**Evaluation Methods:** Related research (Caffrey et al., 2019) has analyzed the City of Calgary's administrative data on dog-bite incidents, statistically and spatially. Previously our team partnered with the Emergency Services Strategic Clinical Network on an analysis of emergency services utilization for dog-bite injuries across Alberta (Jelinski et al., 2016). We have also highlighted risks to occupational health and safety amongst officers who enforce dog-aggression policies, in Alberta and worldwide (Rault et al., 2018). In this presentation, we delve into how these officers act on municipal data when investigating dog-aggression incidents in the City of Calgary. Our main sources of information were semi-structured interviews and participant-observation.

**Results:** High compliance with dog-licensing bylaws in Calgary assists officers in efficiently locating dogs following a dog-aggression complaint. In turn, citizens lodge complaints because they view the City of Calgary's human-animal services as effective and humane.

## Advice and Lessons Learned:

1) Encourage nurses to document the circumstances of the dog aggression incident in greater detail. This could assist with public health surveillance, investigations, and ultimately injury prevention.

2) Strengthen procedures for nurses to report the injury to public health authorities and their municipal government (animal control officers). Reporting rates are extremely low, so the full impact of dog aggression incidents is poorly understood.

3) Support families to report to their local municipal government (animal control officers) and veterinarian. Officers can help reduce the risk of dog aggression by encouraging responsible pet ownership, and veterinarians can address behavioural issues.

## References

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