



July 29, 2010

MEDICAL HEALTH OFFICER HEALTH GUIDANCE STATEMENT ON: PARK USE BY DOGS

For many people, dogs provide an irreplaceable source of companionship, friendship and security. In Canada, approximately one third of all households own a dog (Ipsos Canada, 2001). Increasing urbanization and a growing urban dog population contributes to pressures on park space where both people and dogs can exercise, play and socialize.

In response to a request from the City of Kelowna, Interior Health Medical Health Officers have been asked to comment on the public health impacts of dogs in parks. In the City of Kelowna there are 259 parks. Dogs are permitted in 81 of them, 7 of which are designated as off-leash dog parks.

The review of the issue is hampered by the relative lack of baseline information, much of the data is suggestive of problems but good data collection has not apparently been undertaken.

Public parks have an important role to play in facilitating physical activity. Environment is critical for increasing opportunities for exercise and is an important area to address sedentary behaviours associated with a variety of chronic illnesses (Cohen *et al.*, 2007). Dog owners complete significantly more minutes of walking and total physical activity. Parks which are open to dogs provide for animal socialization activities, physical and mental stimulation and exercise for active dogs.

Having a pet dog improves both physical and mental wellbeing (Wells, 2007). Directly, there is the obvious effect of increased physical activity, however there are important indirect effects of pet ownership brought on by increased social contact and the possibility that the human-dog bond provides a psychological buffer against stress. Additionally, pets can have a positive influence on a child's development and self esteem (Lang & Klassen, 2005)

Dog owners perceived that they had more social support to walk and do other forms of physical activity and reported higher neighbourhood cohesion than did non-owners (Cutt *et al.*, 2008). Additionally, there are educational advantages and opportunities for owners to learn about dogs through observation and discussion with more experienced owners when interacting at public parks.

Effectiveness of current enforcement of City by-laws designed to reduce negative consequences of dog ownership.

Currently, the City of Kelowna outlines the responsibilities of dog owners to clean up after their dogs, train their dogs to obey commands, license and vaccinate their dogs, use a leash no longer than 2 meters and stay at least 10 meters away from playgrounds. These bylaws are often not enforced, and much of the public health concerns of allowing dogs in

all of Kelowna's parks can be managed by promoting strong local ordinances and uniform enforcement, as well as by implementing community-wide education programs. Ultimately, dog owners must take the initiative to be responsible and conscientious, ensuring that their actions support the privilege of sharing parkland and open spaces with the community.

While most dogs are friendly with no intentions to cause harm to anyone, at times, some dogs may act aggressively towards humans or other dogs. Dog bites are a serious and often underestimated medical and public health problem, and continue to be a source of preventable injury (Shuler *et al.*, 2008; Voelker, 1997).

While most dogs may be well intentioned and trained, dogs may bite humans under a variety of conditions. The peak incidence of dog bites is from June to August. The likelihood of a child sustaining a dog bite in their lifetime is approximately 50% (Beck & Jones, 1985).

In Canada, 81% of reported dog bites occur in children aged 14 years or younger (CHIRPP, 2006). Children aged 5-9 represent the higher risk group for dog attacks (Lang, 2005). The psychosocial consequences of trauma caused by a dog bite can affect the quality of life of the injured child and his or her family (Kahn *et al.*, 2003). Injuries to the upper body occur more frequently in younger children and the body part most often affected is the face (40.5%) (CHIRPP, 2006). Scarring is a common consequence related to dog bites, and the resulting emotional distress should not be underestimated, particularly for face wounds (Schmitt, 1998).

Most injuries are caused by a dog known to the victim (Lang & Klassen, 2005). While dog bites are a concern in public parks, most injuries occur at the victim's own home (34%) or other home (30%) with 3% of injuries occurring in a public park.

Prevention is the best method for avoiding injury. It has been suggested that the risk of bite injuries reinforces the need for owners to be vigilant about socializing and training their dogs. Prevention strategies should focus on public education and training of dogs and their owners.

Current compliance with existing City of Kelowna bylaws on the use of leashes to control dogs is not known but anecdotally, it is less than ideal. While many animals can be well trained, all dogs have the potential in certain circumstances to become aggressive. Even the best trained of animals, such as guide animals and police animals are maintained on-leash. Off-leash parks should be limited for the purposes of dogs without other human activities occurring in such areas.

While most dogs are friendly, some people can have exacerbations of underlying disease when exposed to dogs, others may become anxious or fearful when approached by a dog.

Dog bites represent an unwanted interaction between humans and dogs who are misbehaving. Some people have health concerns that would be impacted by a close interaction with the best trained animals. Asthma and dog specific allergies can be exacerbated. The prevalence of these diseases are respectively about 11% and 4% of

child populations. The risk for exacerbation of underlying disease of individuals can vary considerably and consideration must be given to the most sensitive and high risk persons in policy development. Some persons may become fearful or avoid interactions with specific animals, including dogs. The prevalence of phobias or discomfort amongst persons approached by a dog is not known.

Even when dogs are not aggressive, some animals get excited and can run towards, jump on or sniff other visitors to the park. Injuries other than bites may result although data are lacking on the frequency of such circumstances. While some people enjoy the opportunity to play with a friendly dog, others do not and may feel it is an intrusion of their own enjoyment of the public park. There is a lack of data in the literature on the public park experiences of people who do not own dogs, however this should be considered when evaluating the use of public parks for all community members.

Uncollected dog waste (fecal and urine) can negatively affect park aesthetics as well as public health and safety. In natural parks or along the edge of water bodies, accumulating dog waste can adversely impact sensitive habitat areas. Where animal wastes are left in public parks, risk for zoonotic disease is increased.

Kelowna Dog Regulation and Impounding Bylaw (No. 5880-88) require that all owners pick up their dog's fecal waste; however these rules are not always followed, particularly when dogs are off-leash (Holland *et al.*, 1991). Public education has greatly increased awareness of the connection between uncollected feces and zoonotic disease, yet a proportion of pet owners, even if in the minority, do not pick up their pets' waste. Dog urine has the potential to carry pathogens that can cause human illness. Exposure by persons is more likely from activities that involve other than walking across an area (e.g. lying on beaches, picnicking, sport and fun games). Children are more likely to be exposed to such pathogens (Seah *et al.*, 1975).

The risk of these diseases can be reduced by strict enforcement of existing bylaws concerning dogs. The current effectiveness of by-laws in eliminating canine fecal contamination is not known for Kelowna.

Hand-washing is important in reducing the risk for infection in a park utilized by dogs and appropriate washing facilities should be available where dogs are permitted.

Public health impacts of dogs in parks are a factor of how a park is actually used by pet owners, rather than simply the accessibility of the area to animals (Ludlam & Platt, 1989). Providing dog waste bags and conveniently placed receptacles in popular dog walking areas can increase the rate of compliance with dog waste bylaws. Dog waste left in public spaces can contribute to tension between those park users with and those without dogs.

As previously indicated to the City of Kelowna, good beach operation should include efforts to reduce fecal contamination from all sources. The 2007 study by the City of Kelowna demonstrated the contribution of E. Coli in beach recreational water attributable to canines was of the order of 15%, second only to geese (24%). Further, the use of beaches by persons playing or lying on the ground is a strong rationale for excluding dogs from beaches used by humans.

Summary:

Policy development on expanding access to parklands by dogs is compromised by the lack of information related to:

- Public opinion and public preferences.
- Current compliance with municipal bylaws related to use of leashes and removal of dog feces.
- Impact on behaviour and concerns of non-dog owners who may actively avoid contact with areas where dogs frequent.
- Risks to persons with underlying health conditions.

Changes in policy should be accompanied by evaluation of impacts on persons affected by the policy change.

While the majority of dog owners are responsible, the current effectiveness of signage, enforcement and education activities is questioned in respect to dog owners who do not comply with expectations outlined in bylaws.

Recommendations:

1. Pet ownership should be encouraged as a health promoting activity, both from the perspective of the intrinsic value of companionship as well as the increased physical activity incurred, particularly amongst dog owners.
2. Dogs should be prohibited from playgrounds, locations where children frequent for play purposes (playing fields, school yards etc.) and beaches with their adjacent park strips that are used by people.
3. Information on public opinions, public behaviours of non-dog owners and current compliance with leash and clean-up bylaws should be obtained to help inform policy changes.
4. If increased access to park space is to be provided to dogs, that this be undertaken in a measured fashion, so that impacts can be monitored on the majority of persons who are not dog owners.
5. Sufficient resources for education and enforcement should be dedicated to ensure that the benefits of expanding access to parks by dogs exceed the risks.
6. Parks where dogs can be permitted should also provide good hand-washing facilities.
7. Off-leash parks should be limited for the purposes of dogs without other human activities occurring in such areas.

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¹ References available