



Pets, fall for them, not due to them

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Summary:

- Pet ownership offers numerous health benefits to older people, promoting physical activity, improving mental health and increasing social engagement
- Although uncommon, falls in older people who own pets can lead to injuries including fractures
- Behaviour training for pets and managing environmental hazards can help to reduce pet-related fall risk whilst allowing older people to enjoy the benefits of pet ownership

Australians love their pets, with an estimated 28 million owned across 69% of Australian households. Common pets include dogs (48% households), cats (33% households), fish (12% households) and birds (11% households) [1]. There are many benefits to pet ownership, including improved physical and mental health. A systematic review found dog owners undertook significantly more walking and physical activity than non-dog owners [2]. While only 60% of dog-owners in this review reported walking their dogs, the median minutes per week walked was 160 minutes over four walks. In addition, a longitudinal study conducted in older people found that dog owners who walked their dogs had higher usual and fast walking speeds compared to non-dog owners and dog owners who did not walk their dogs [3]. The usual and fast walking speed in dog owners who walked their dogs was comparable to non-dog owners who walked at least three times per week, and this level of activity was maintained over a three-year period. In Japan, cross-sectional studies have reported relationships between reduced frailty and both current [4] and past dog ownership [5] in older people. Importantly, a history of dog ownership was associated with reduced frailty incidence, suggesting the benefits of pet ownership can have lasting effects. Pet ownership has also been linked to better emotional well-being and social functioning [6], including reduced feelings of loneliness [7]. Pet ownership may also provide increased social opportunities, whether through meeting people in the neighbourhood on walks [8], or as a social connector with family and friends [7]. This may be particularly important during periods of isolation, such as during the recent COVID-19 pandemic [9].

Despite the many benefits to pet ownership, pets have been identified as a risk factor for falls [10]. This is of particular importance to older people, since one in three people aged 65 and over experience at least one fall every year [11] and falls are the leading cause of injury-related hospitalisation and mortality in Australia [12]. A small number of studies have investigated the causes and consequences for pet-related falls. It has been estimated that 29.7 injuries per 100,000 people occurred due to pet-related falls each year in the US between 2001 and 2006 [13]. While significant, it should be noted this represents only a small percentage of more than 4,500 injurious falls per 100,000 older people that occurred in the US each year over a similar period [14]. The recorded injurious pet-related falls involved both dogs (88%) and cats (12%) [13]. Falls due to pets occurred predominately around the home (62% with dogs, 87% with cats) [13], and involved tripping over the pet itself, being pulled over by a dog on a leash or falling in response to another action of the pet e.g. after a cat leant against legs when reaching down to pick up the cat's food bowl [15].

Pet-related falls often result in injuries including fractures (30%) and abrasions (26%) [13]. While pet-related fall injuries occur to people of all ages, the severity of injury varies, with fractures being the most common in older people [13, 15]. One study recorded the presentations of older people to a Sydney metropolitan emergency department who experienced a fracture following a pet-related fall over an 18-month period [15]. The pets involved included dogs, cats, birds, a goat and a donkey, with cats and dogs accounting for 75% of the 16 incidents reported. Another study conducted in an emergency department in South-East England documented presentations of soft-tissue injury and fracture where a dog was an external cause over a two-month period [16]. A total of 37 patients were identified, with common mechanisms of injury being slipping over while walking the dog, being pulled over while holding the dog leash and tripping over or being jumped on by the dog. Most of the people presenting with such injuries were adults, particularly people aged 50 years or older. These studies highlight the nature and potential seriousness of injuries due to pet-related falls in older people.

Despite the evidence for pet ownership as a risk factor for falls, there appears to be a discrepancy in the perception of this risk between health professionals on the one hand and caregivers and older people on the other. For example, in a study by Bibbo et al. (2022), the risk of falls with pet ownership was raised as a concern by health professionals (such as nurses and social workers who visited the homes of older people) 50% of the time, placing it as one of the top three ranked concerns. In contrast, pets as a fall risk were raised only 12% of the time by older people owning pets and 18% of the time by caregivers, placing it amongst the lowest out of a list of 12 concerns. This may reflect health professionals drawing attention to a risk that is potentially amenable to intervention, even though the proportion of all falls and injurious falls that are pet-related is small. However, this discrepancy may also be due to a lack of awareness by older people of the fall-related risks of pet ownership and the consequences of falls.

There are many benefits of owning a pet, particularly for older people, such as providing companionship, social opportunities and promoting engagement in physical activity. The few research studies conducted on pet-related falls have shown that whilst pet-related fall injuries are uncommon in older people, they can be severe [15, 16]. Education, highlighting the risks that pets can pose as environmental hazards contributing to falls in and outside the home and behavioural strategies for preventing falls while dog walking (i.e. avoiding excessively long leashes, having treats ready as a distraction when encountering something that attracts the dog (a bird, cat or another

dog), and letting go of the leash if the dog is strong and takes off), and the importance of dog behaviour training may help in reducing the risk of pet-related fall injuries.

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