



Social Return on Investment (SROI) in Supporting Human-Animal Bonds Resource Collection

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By [Maggie Lynch and Heather Kalman](#)

This collection is a living document. It will be updated periodically as we review additional sources.

SROI Defined

Social Return on Investment (SROI), loosely defined, is a way of evaluating and communicating the social and environmental value of program interventions. It can help you understand the impact of your activities beyond financial terms alone. In more formal analyses, the aim is also to calculate the financial gains that can result from supporting a social good. In the collection here, the sources primarily address the many social benefits from supporting human-animal bonds.

What's in the Collection

The following is a curated collection of research studies and other supporting resources detailing evidence for the many benefits of human-animal bonds along with obstacles to maintaining them.

The collection is not meant to be comprehensive, nor is it meant to be read as a whole. Instead it offers a shortcut to sources that are particularly useful in making the case that programs and policies that support human-animal bonds offer a social return on investment. These would include the types of programs and policies recommended by HASS for pet support services and partnerships between human and animal service organizations. A few of the sources included have directly calculated economic advantages possible from well-supported human-animal bonds.

Also included are sources that provide data and research on ways that human-animal bonds are interrupted, such as through housing restrictions. These help in describing the scope and nature of human problems that create obstacles for maintaining human-animal bonds.

Though we are aware of the gaps in methodologies and limitations of the findings in some of the research, the available evidence also opens discussion around the human-animal bond and inspires thinking about the ways pets and their people can be supported together to the benefit of both. Counter evidence is not the focus here, though some key papers are included for consideration of the opportunities for improvement in this area of research.

Intended Uses

The collection has been assembled with busy professionals in mind, who may not have capacity to conduct the time-consuming first few layers of research into topics covered or who may not have access to research databases, but who need to cite evidence-based research findings or statistics to help make a strong case for new programs or budget increases, write strong funding proposals, support stakeholder buy-in or policymaking, or make the case for partnerships between human and animal services.



The collection allows quick access to evidence and data that has been reviewed for quality and screened for relevance. Each source included is annotated to show a snapshot of the types of data and qualitative statements each one has to offer. Sources are broken into sections to allow users to jump to topics of interest. Guidance on use of keywords is included to quickly find other sources useful to the topic.

The collection additionally offers an entry point for anyone wishing to learn about the many different ways that bonds with companion animals can offer benefits both to individuals and to communities overall, along with the many obstacles to maintaining these bonds.

Tips

- To dig deeper into the research on human-animal bonds, use the bibliographies of sources listed here to find additional information.
- Users will also find sources covering topics of interest by doing a “find” search of this document, as many address multiple topics and are listed only in sections where they are most relevant. For example, searching “Older Adult” will identify all sources that touch on older adults’ experience even if not listed in the section covering benefits to Older Adults.

Definitions and Tags

Topic Highlight - For each section of this curated collection, a source found to be particularly useful or comprehensive is highlighted. Highlighted sources are selected from both “research” and “resource” types. These highlights may be changed from time to time, as we follow new publications and add new research to the collection. Each highlighted source is listed again among the research and resources included in the section and may have additional annotations.

Research - Sources listed under “Research” are publications of studies conducted, and will include discussions of the methodology used in carrying out the research, along with detailed descriptions of findings, and their limitations. These studies vary in quality. They are, however, generally more trusted as evidence and are likely to be more effective when used to make the case for supporting human-animal bonds in funding proposals and policy papers, for example, than sources we have listed as “Resources.”

Resources - These sources are useful as quick sources of statistics. They are based on research and may quote data drawn from surveys and research studies but do not include discussions of methodology, limitations of findings, etc. In this curated list, all resources listed are from trusted organizations. The snapshot statistics and qualitative statements from the Resources are especially useful as a quick source for social media posts, blogs, and webinars, and can supplement research evidence cited in funding proposals and policy papers.

Tag (●) - Sources tagged with this symbol are particularly useful for guidance on building partnerships across human and animal welfare agencies, as examples of the many types of partnerships mutually beneficial to people and pets, or that contain direct quotes calling for human-animal welfare partnerships.



Sections

Sources in each section of the collection are listed alphabetically by title. Each section includes a highlighted article, and two types of sources: Research and Resources (see definitions above). The title for each source will offer a live link to the article itself.

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[Addressing Human Needs and Structural Disparities to Protect Human-Animal Bonds](#)

[Gaps in Access to Veterinary Care](#)

[Social Work as the Bridge for Human and Animal Services](#)

[Pet-inclusive Housing Challenges](#)

[Unhoused Populations and Co-Sheltering](#)

[Domestic Violence](#)

[Natural Disasters](#)

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Benefits of Human-Animal Bonds

Pet ownership and caregiving has been associated with numerous benefits, enhancing quality of life. These benefits include, but are not limited to, physical, mental, and social health benefits. Research goes on to demonstrate benefits particular to children and older adults interacting with pets. Pets have also been found to benefit many aspects of the workplace. Consistently, companion animals have been shown to benefit their caregivers and those around them in a multitude of ways. Included in this section are also some preliminary studies that demonstrate how supporting human-animal bonds may also offer a financial return on investment.

Human-Animal Bond (General)

Sources with a wealth of statistics on the overall benefits of human-animal bonds and pet ownership.



Topic Highlight

The [Survey of U.S. Pet Owners](#) by the Human Animal Bond Research Institute (2021) offers a comprehensive set of statistics from pet owner survey data. Key findings from the survey cover health benefits associated with the human-animal bond and with support for pets in society.

Resources

1. [HABRI Data and Downloadable Materials](#) (Human Animal Bond Research Institute, n.d.)
 - a. The following are projects and resources by the Human Animal Bond Research Institute that can be found at the link above:
 - i. International Survey of Pet Owners & Veterinarians
 - ii. Pet Owners Survey
 - iii. Health Care Savings of Pet Ownership
 - iv. Physicians Survey
 - v. Nationwide/HABRI Pet-Friendly Workplace Survey
 - vi. Pet-Inclusive Housing Survey
 - vii. Cat Allergens Survey
 - viii. HABRI Shareable Infographics
 - ix. Social Isolation, Loneliness and Companion Animals
 - x. Older Adults and Animal Programming: A Handbook for Senior Citizens
 - xi. The Pet Effect Graphics
 - xii. Human Animal Bond Lecture Series
 - xiii. Pet Week on Capitol Hill
2. [Pets for Better Wellbeing: Mars Pet Nutrition North America 2022 Report - Better Cities For Pets™](#) (Mars Pet Nutrition, 2022)
 - a. “92% of pet parents say their relationship with their pets **improved their mental and physical wellbeing** in the last three years.”
 - b. “Pet parents say that pets improve their wellbeing by providing **companionship** (77%), **emotional support** (70%), **a sense of purpose** (52%) and **a reason to exercise** (31%).”
 - c. “Among those considering a pet, 66% are concerned about **affordability**, 47% about **being away** for work or travel, and 42% about **finding pet-friendly housing**.”
 - d. “52% of pet parents **plan to bring their pets when they resume traveling [after COVID]**.”
 - e. “61% of those intending to adopt or foster will turn to **animal shelters or rescues**, a decision that is more critical than ever due to the current shelter crisis.”
 - f. “When pet parents struggle, here's what they say would help them keep their pets: **short-term support for pet costs** including food (35%), **pet-friendly housing options** (29%), and **affordable training** for pet behavior issues (24%).”
3. [The Science Behind The Human-Animal Bond](#) (Human Animal Bond Research Institute, n.d.)
 - a. “People are happier and healthier in the presence of animals. Scientifically-documented benefits of the human-animal bond include decreased blood pressure, reduced anxiety, and enhanced feelings of well-being.”



4. [Survey of U.S. Pet Owners](#) (Human Animal Bond Research Institute, 2021)
 - a. **“Pet owners believe society should be more pet friendly and should act on the scientific research that shows pets improve human health.”**
 - i. “93% of pet owners agree the government should provide service animals to veterans with PTSD”
 - ii. “69% of pet owners (83% of millennials) agree the government should help make it more affordable to own a pet”
 - iii. “84% agree health and life insurance companies should give discounts for owning a pet”
 - iv. “87% would be more likely to buy products from pet-friendly businesses”
 - v. “58% of pet owners (74% of millennials) agree employers should consider allowing employees to bring pets to work”
 - b. **“Pets are family.”**
 - i. “98% of pet owners agree that their pet is an important part of their family”
 - ii. “95% of pet owners could not imagine giving up their pet for any reason”
 - c. **“There is strong support for pets in society:** Pet owners agree that society should be more pet-friendly, and that the benefits of pet ownership are important to public health.”
 - i. “87% of pet owners say they would be more likely to buy products or services from pet-friendly businesses”
 - ii. “92% of pet owners agree that hospitals, schools, etc. should welcome/have therapy animal programs available”
 - iii. “92% of pet owners agree that the government should provide service animals to qualifying veterans suffering from PTSD”
 - iv. “90% of pet owners agree that emergency and temporary housing should accommodate pets”
 - v. “84% of pet owners agree that there should be fewer restrictions on pets in rental housing”
 - vi. “82% of pet owners agree the government should encourage pet ownership for a healthier society”

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Health Benefits

Sources on human physical and mental health benefits of the human-animal bond.

Topic Highlight

[Examining How Dog ‘Acquisition’ Affects Physical Activity and Psychosocial Well-Being: Findings from the BuddyStudy Pilot Trial](#) by Potter et al. (2019) found that fostering a dog resulted in increased physical activity, improved mood, and facilitated meeting of new people in the participant's neighborhood. Though the findings are based on a small sample size (11), an advantage of this study is that the researchers were able to randomly assign pets to people who did not have a pet before the study, which allows better control over seeing the effects of introducing a dog into the household.



Research

5. [Beyond Cuddling Canines: Exploring Students' Perceptions of the Importance of Touch in an On-Campus Canine-Assisted Intervention](#) (Green & Binfet, 2023)
 - a. "Participants' responses revealed that **direct contact with therapy dogs was more likely to elicit benefits in positive affect, including reducing stress and improving mood**, than those in the indirect or handler-only groups. Conversely, spending time with the handlers [of the dogs] only was more likely to elicit social benefits, such as feeling more connected and less homesick."
6. [Companion Animals as Buffer against the Impact of Stress on Affect: An Experience Sampling Study](#) (Janssens et al., 2021)
 - a. "In conclusion, having a companion animal around alleviates negativity, interacting with it increases positivity, and, when an individual is under stress, simply having your cat or dog around helps you to retain your positive feelings."
7. [Efficacy of Animal-Assisted Therapy in Treatment of Patients With Traumatic Brain Injury: A Randomized Trial](#) (Horton et al., 2023)
 - a. "Patients with traumatic brain injury receiving canine-assisted therapy demonstrated significant improvement compared with a control group."
8. [Examining How Dog 'Acquisition' Affects Physical Activity and Psychosocial Well-Being: Findings from the BuddyStudy Pilot Trial](#) (Potter et al., 2019)
 - a. "In the BuddyStudy, we used dog fostering to mimic dog acquisition, and examined how taking a dog into one's home affected physical activity and psychosocial well-being. **Nearly half of study participants saw large increases in physical activity and nearly three-quarters saw improvements in mood after fostering for six weeks. More than half met someone new in their neighborhood because of their foster dog.** Most participants adopted their foster dog after the six-week foster period, and some maintained improvements in physical activity and well-being at 12 weeks. The results of this pilot study are promising and warrant a larger investigation."
9. ["I Couldn't Have Asked for a Better Quarantine Partner!": Experiences with Companion Dogs during Covid-19](#) (Bussolari et al., 2021)
 - a. "Results highlighted a strong human-animal appreciation, and that dog ownership during this pandemic diminished participants' sense of isolation and loneliness, as well as supported their mental/physical health."
 - b. "**The majority of respondents (76.8%) stated that having a dog reduced their level of distress...**"
10. [Pet Ownership, but Not ACE Inhibitor Therapy, Blunts Home Blood Pressure Responses to Mental Stress](#) (Allen et al., 2001)



- a. In comparing the effects on blood pressure of medication (lisinopril) and pet ownership: “We conclude that ACE inhibitor therapy alone lowers resting blood pressure, whereas **increased social support through pet ownership lowers blood pressure response to mental stress.**”
 - b. “These results suggest that **persons with low social support systems are likely to benefit in particular from the enhanced environment that pets can provide.**” (*Additional key term: Health Benefits*)
11. [Pets as safe havens and secure bases: The moderating role of pet attachment orientations](#) (Zilcha-Mano et al., 2012)
- a. “Physical or cognitive pet presence reduced blood pressure during distress-eliciting task.”
 - b. “Pet presence also increased number of life goals generated and confidence in goal attainment.”
 - c. “These beneficial effects of pet presence were reduced by pet attachment insecurities.”
 - d. “The findings confirm the ability of a pet to provide a safe-haven and a secure-base for its owner.”
 - e. “The findings also confirm the moderating role of pet attachment insecurities.”
12. [Pets' Impact on Your Patients' Health: Leveraging Benefits and Mitigating Risk](#) (Hodgson et al., 2015)
- a. “Healthy pets contribute to healthy families. **Pets enhance emotional well-being and physical health, are sources of social capital, and strongly affect nonmedical determinants of health.** Family physicians who know of pets in their patients' families have identified a motivator for the patient to make positive and healthier lifestyle choices and have discovered another potent contributor to treatment plans.”
 - b. Human physicians should ask their clients if they own pets: “Asking about pets gives physicians a new approach to exploring a patient's home life with a few simple and innocuous questions when taking an environmental history.”
 - c. “**Zooeyia**—the human health benefits of companion animals—affects the physical, emotional, and community spheres.⁸ Zooeyia is taken from the Greek root words for animal (*zoion*) and health (Hygeia was the ancient Greek goddess of health, the same source as “hygiene”).”

Resources

13. [Heart Health Month: The Top Benefits Of Pet Ownership For Healthy Hearts](#) (Human Animal Bond Research Institute, 2021)
- a. Key statements regarding benefits of pet ownership for healthy hearts:
 - i. “Decreased stress”
 - ii. “Lower blood pressure and cholesterol”
 - iii. “Increased physical activity”
 - iv. “Improved recovery”
 - v. “Increased longevity”



14. [Pets and Health: Family Physician Survey](#) (Human Animal Bond Research Institute, 2014)
 - a. *This is a fact sheet that can be readily distributed.*
 - b. “Most Doctors have successfully worked with animals in medicine.”
 - c. “Doctors overwhelmingly believe there are health benefits to owning pets.”
 - d. “The majority of doctors have recommended a pet to a patient.”
 - e. “Most doctors have seen their patients’ health improve as a result of pet ownership.”
 - f. “Doctors are willing to prescribe pets.”

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Social Benefits

Sources on the social benefits of the human-animal bond, both for individuals and for communities overall.

Topic Highlight

[More Than a Furry Companion: The Ripple Effect of Companion Animals on Neighborhood Interactions and Sense of Community](#) by Bulsara et al. (2007) identified a correlation between pet ownership and various social factors, such as increased social interactions, civic engagement, and sense of community. Though older, this study’s findings are particularly relevant because they extend our view of individual benefits of human-animal bonds to the community level. If a newer citation is desired, use McConnell, et. al., 2011, below.

Research

15. [Friends with benefits: On the positive consequences of pet ownership.](#) (McConnell et al., 2011)
 - a. “Study 1 found in a community sample that **pet owners fared better on several well-being (e.g., greater self-esteem, more exercise) and individual-difference (e.g., greater conscientiousness, less fearful attachment) measures.** Study 2 assessed a different community sample and found that **owners enjoyed better well-being when their pets fulfilled social needs better, and the support that pets provided complemented rather than competed with human sources.** Finally, Study 3 brought pet owners into the laboratory and experimentally demonstrated the **ability of pets to stave off negativity caused by social rejection.** In summary, **pets can serve as important sources of social support, providing many positive psychological and physical benefits for their owners.**”
16. [“I Couldn’t Have Asked for a Better Quarantine Partner!”: Experiences with Companion Dogs during Covid-19](#) (Bussolari et al., 2021)
 - a. “Results highlighted a strong human–animal appreciation, and that dog ownership during this pandemic diminished participants’ sense of isolation and loneliness, as well as supported their mental/physical health.”
 - b. “**The majority of respondents (76.8%) stated that having a dog reduced their level of distress...**”
17. [More Than a Furry Companion: The Ripple Effect of Companion Animals on Neighborhood Interactions and Sense of Community](#) (Bulsara et al., 2007)



- a. "...this paper explores the potential role of pets as facilitators of social interactions and sense of community."
 - b. "In both qualitative and quantitative research, **pet ownership positively associated with social interactions, favor exchanges, civic engagement, perceptions of neighborhood friendliness, and sense of community.** Pets appeared to ameliorate some determinants of mental health such as loneliness. **Findings suggest pets have a ripple effect extending beyond their guardians (owners) to non-pet owners and the broader community.**"
 - c. "A total of 40.5% of pet owners indicated that they had got to know other people in their suburb through their pets. Three quarters of dog owners (75.8%) indicated that owning a dog encouraged them to walk in their suburb more frequently. Of those who walked their dogs, more than four-fifths (83.8%) talked to other pet owners when doing so. Pet owners were more likely to feel that people in their suburb generally say hello to each other (89.5% pet owners compared with 79.1% of non-pet owners [$p = 0.008$])."
 - d. "Pet owners were 57% more likely to be civically engaged than were non-pet owners (OR 1.57; 95% CI 1.01-2.43)."
 - e. "Pet owners were 74% more likely to have a high social capital score compared with non-pet owners."
 - f. "In the survey, 63.6% of dog owners who walked their dogs ($n=99$) indicated that owning a dog helped them to feel safer when out walking. Among all dog owners ($n=126$), 82.5% felt safer in their homes because of owning a dog."
 - g. "Pet owners were significantly more likely to report excellent or very good health (rather than good to poor health) compared with non-pet owners ($p = 0.019$). Although not statistically significant, fewer pet owners reported a diagnosed mental health problem (17.5%) compared with non-pet owners (21.6%)."
 - h. "Social interactions and networks, social support, and sense of community are recognized as protective factors for mental health (Almedom, 2005); hence, our research highlights some pertinent congruencies between pet ownership, particularly dog walking and mental health promotion at the neighborhood level."
 - i. "...our research suggests that pets also influence broader social interactions and perceptions, experiences of sense of community, and social capital at the neighborhood level."
 - j. "...neighborhoods that embrace pets for their positive and tangible contribution to human health and well being have much to gain."
18. [Pawsitive Connection: Widowers' Life Experiences on Therapeutic Value of Owning Domestic Pets](#) (Manero et al., 2023)
- a. "...it was also revealed that pets have aided widowers to cope with the mentioned challenges; (1) sense of security; (2) relief and delight through pet, and; (3) attachment and companionship. Their insights are, (1) ease loneliness and longing; (2) provide comfort and warmth; and (3) provide entertainment and happiness. Moreover, **the study concluded that pets have an influence on the coping capacity of widowers and owning pets keep**



- them from developing pervasive depression and loneliness.” (Additional key term: Older Adults)
19. [Pets as safe havens and secure bases: The moderating role of pet attachment orientations](#) (Zilcha-Mano et al., 2012)
 - a. “Physical or cognitive pet presence reduced blood pressure during distress-eliciting task.” (Additional key term: Health Benefits)
 - b. “Pet presence also increased number of life goals generated and confidence in goal attainment.”
 - c. “These beneficial effects of pet presence were reduced by pet attachment insecurities.”
 - d. “The findings confirm the ability of a pet to provide a safe-haven and a secure-base for its owner.”
 - e. “The findings also confirm the moderating role of pet attachment insecurities.”
 20. [Relationships Between Emotional Comfort From Companion Animals and Victimization and Psychological Well-Being Among Sexual and Gender Minority Emerging Adults](#) (McDonald et al., 2022)
 - a. “These findings underscore the potential role of emotional comfort derived from relationships with companion animals in supporting psychological well-being following gender-based victimization, as well as **the importance of community collaboration between human and animal support services.**” (Additional key term: Human and Animal Service Partnerships)
 21. [Social Support and Wellbeing in Cat and Dog Owners, and the Moderating Influence of Pet-Owner Relationship Quality](#) (Hardie et al., 2023)
 - a. “This study **investigated social support and wellbeing (positive functioning) in cat and dog owners**, informed by social support theory, attachment, and social exchange theories.”
 - b. “These findings indicate that **pets may improve psychological functioning and that emotional closeness** is an important moderating factor.”
 22. [The Pet Factor - Companion Animals as a Conduit for Getting to Know People, Friendship Formation and Social Support](#) (Wood et al., 2015)
 - a. “This research suggests companion **animals can be a catalyst for several dimensions of human social relationships** in neighborhood settings, ranging from incidental social interaction and getting to know people, through to formation of new friendships. For many pet owners, their **pets also facilitated relationships from which they derived tangible forms of social support**, both of a practical and emotionally supportive nature. Given growing evidence for social isolation as a risk factor for mental health, and, conversely, friendships and social support as protective factors for individual and community well-being, **pets may be an important factor in developing healthy neighborhoods.**”
 23. [Mechanisms of Pet Engagement in the Formation and Strengthening of Urban Social Support Networks: A Sociological Investigation](#) (Wei-tong, 2023)



- a. “Based on the interview results of this study, almost all interviewees indicated that they had formed some level of friendship through their pets. **Pets serve as a beneficial channel for understanding others and are a tangible form of social support.** As the bonds created by pets deepen, the levels of social support provided by both parties in their interactions continue to increase. Pets, as important sources of social support networks, can transcend blood, geographical, and occupational boundaries, forming subtle relationships that bridge different ages and personalities. **This makes the bond-based pet social support network more solid than other types of support networks.** The social support network established through pets effectively addresses issues of isolation and social disconnection within specific segments, enhances individuals' sense of identity and belonging to society, and contributes to the further strengthening of social support networks. A well-established social support network serves as a strong protective factor for community friendships and individual life satisfaction, while also providing a neutral and safe platform for dialogue in social interactions.”

Resources

24. [Addressing the Social Isolation and Loneliness Epidemic with the Power of Companion Animals](#) (Consortium on Social Isolation and Companion Animals, 2018)
 - a. “Results from this nationally representative market research are consistent with observations about the importance of the social bond between humans and pets. Of those surveyed, **80 percent of pet owners say their pet makes them feel less lonely.** When it comes to both pet owners and non-pet-owners, 85 percent of respondents believe interaction with a companion animal can help reduce loneliness and 76 percent agree human-animal interactions can help address social isolation. Further, pet owners with the closest bond to their pet see the highest positive impact on their feelings of loneliness and social isolation.”

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Benefits for Children

Sources on the benefits of human-animal bonds specific to children are the focus of this section. These are particularly relevant for those considering partnering with agencies that serve this population, or for agencies that serve this population considering pet-inclusive programs.

Topic Highlight

[The relationship between dog ownership, dog play, family dog walking, and pre-schooler social-emotional development: findings from the PLAYCE observational study](#) by Wenden et al. (2021) investigated the benefits of dog ownership on child development. Their evidence suggested that playing with and walking a dog may be associated with social-emotional benefits for children.

Research



25. [Can dogs reduce stress levels in school children? effects of dog-assisted interventions on salivary cortisol in children with and without special educational needs using randomized controlled trials](#) (Meints et al., 2022)
 - a. “Animal-assisted interventions (AAI) have shown beneficial effects on health and wellbeing, however, robust knowledge on stress mediation in children is lacking.”
 - b. “**Dog interventions lead to significantly lower stress in children with and without special educational needs** compared to their peers in relaxation or no treatment control groups.”
 - c. “These findings provide crucial evidence that **dog interventions can successfully attenuate stress levels in school children** with important implications for AAI implementation, learning and wellbeing.”

26. [Child and Pet Care- Planning During COVID- 19: Considerations for the Evolving Family Unit](#) (Adams et al., 2021)
 - a. “**About 65% of pet owners with children perceived the presence of household pets to be positive for children...**”
 - b. “Parents often described more than one specific way that having pets during COVID-19 affected their children... (a) child–pet interactions; (b) child emotional well-being and coping, and (c) assisting in child development.”

27. [Companion Animals and Child/Adolescent Development: A Systematic Review of the Evidence](#) (Purewal et al., 2017)
 - a. “The review found evidence for an association between pet ownership and a wide range of **emotional health benefits from childhood pet ownership; particularly for self-esteem and loneliness**. The findings regarding childhood anxiety and depression were inconclusive. Studies also showed evidence of an association between pet ownership and educational and cognitive benefits; for example, in perspective-taking abilities and intellectual development. Evidence on behavioural development was unclear due to a lack of high quality research. Studies on pet ownership and social development provided evidence for an association with increased social competence; social networks; social interaction and social play behaviour. Overall, pet ownership and the significance of children’s bonds with companion animals have been underexplored; there is a shortage of high quality and longitudinal studies in all outcomes. Prospective studies that control for a wide range of confounders are required.”

28. [An investigation into the efficacy of therapy dogs on reading performance in 6-7 year old children](#) (Wohlfarth et al., 2014)
 - a. The presence of a therapy dog enhanced the reading performance of 6-7 year old children.

29. [The relationship between dog ownership, dog play, family dog walking, and pre-schooler social–emotional development: findings from the PLAYCE observational study](#) (Wenden et al., 2021)
 - a. “Young children from dog-owning families had lower peer problems and conduct problems, and **higher prosocial behaviors** than children from non-dog-owning families.”



- b. “Children of dog-owning families who walked or played with their dog more often also had **better prosocial behaviors.**”
- c. “**Positive social-emotional development** was associated with dog ownership, family dog walking, and dog play in young children.”
- d. “Highlights that the social-emotional benefits of owning a dog may begin early in childhood.”
- e. “Due to the high level of pet ownership in households with children, these findings suggest having a dog and interacting with it through play and walking may be important mechanisms for facilitating young children’s social-emotional development.”

30. [Social Behaviors Increase in Children with Autism in the Presence of Animals Compared to Toys](#) (O’Haire et al., 2013)

- a. “These results suggest that the presence of **an animal can significantly increase positive social behaviors among children with ASD.**”

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Benefits for Older Adults

Sources on the benefits of pet ownership and interaction for older adults are particularly relevant for partnering with agencies that serve this population, or agencies that serve this population wanting to create pet-inclusive programs. See also “Buddy or Burden” in another section below, and search for “older adult” to find more references in other sections on this topic. Also search for “loneliness,” a significant problem among some older adults, for more sources pertinent to this topic.

Topic Highlight

[The role of pets in the support systems of community-dwelling older adults: a qualitative systematic review](#) by Reniers et al. (2022) describes the benefits of pet ownership for older adults as well as risk factors for those without access to pet care services or support systems in place. The authors urge human healthcare organizations to develop guidelines to support older adults with pets.

Research

31. [Effectiveness of the dog therapy for patients with dementia - a systematic review](#) (Klimova et al., 2019)
- a. *In this study, AAT refers to “animal assisted therapy.” The study is particularly relevant to programs for older adults.*
 - b. “The findings of this review, based on significant effect sizes, reveal that AAT may work as a beneficial and effective complementary treatment, especially in the area of behavioral and psychological symptoms, for patients with different degree of dementia severity if AAT is targeted at their specific needs and interests.”
 - c. “For individuals with dementia, AAT has the following specific benefits:



- i. it contributes to slightly higher physical activity; people can pet the animal, such as a dog, or in better cases, they can go for a walk [[15](#), [16](#)];
- ii. it can relieve the so-called sundown syndrome, which manifests itself in increased agitation, restlessness, disorientation and aggressive behavior [[15](#), [17](#)];
- iii. it can improve short-term memory and communication skills [[15](#), [18](#)];
- iv. it enhances eating habits [[16](#)];
- v. it reduces loneliness [[15](#), [17](#), [18](#)].
- vi. In fact, when patients pet or cuddle their animal, their body releases endorphins and other hormones such as oxytocin, prolactin and dopamine. This contributes to the benefits described above [[19](#)].”

32. [The Impact of Pets on Everyday Life for Older Adults During the COVID-19 Pandemic](#) (Applebaum et al., 2021)

- a. "It is estimated that **at least 50% of older adults in the U.S. have pets**"
- b. "Conclusions: **Pets may fulfill some social and emotional needs for older adults during this particularly isolating event**; equally important to consider are the **challenges that may be precipitated by and/or exacerbated by this public health emergency.**"
- c. "A total of **94 participants (80.34%) discussed the pros of living with pets during the pandemic, dominating the responses.**"
- d. "**Company** (also referred to as companionship) **was discussed by 48 participants (41.03%), making it the most discussed topic of the pros identified.** Participants emphasized that their pets were “excellent company” and due to the pandemic, pets “keep [participants] company because [participants are] home more.”
- e. "Older adults also reported **pets’ ability to provide support during the pandemic.** Participants explicitly shared how their pet supported them **emotionally...**"
- f. "Following the discussion of pros, **cons were mentioned by 32 participants (27.35%). Topics associated with cons included general worry, limitations in participation, access to veterinary care, difficulty obtaining supplies, and financial concerns.** Further sub-themes explored older adults’ worries of becoming sick, separation from their pet, and their ability to meet the needs of their pet."
- g. "Our findings suggest that **pets may be an important source of support and normalcy for older adults during the COVID-19 pandemic and beyond, and most view them as family members.** Our results also provide useful insights of **potential challenges older pet owners may face in the event another pandemic or similar hardship occurs.** The pandemic’s disruption may have revealed more of the nuanced benefits (e.g., emotional support) and disadvantages (e.g., another stressor) of pet ownership among older adults. Findings suggest the pandemic has increased worry among older adults caring for pets and as a result, **older adults with pets may benefit from special assistance during public health emergencies.** For example, to mediate these concerns, **families, friends, and communities may provide assistance with safely procuring pet supplies and food, support for pets with behavioral issues, or making arrangements for contingency care in the event of owner illness. We recommend incorporating consideration of pets into**



family social services, particularly for economically vulnerable older adults, with **the goal of keeping multispecies families together through adversity.**"

33. [Pet ownership and maintenance of cognitive function in community-residing older adults: evidence from the Baltimore Longitudinal Study of Aging \(BLSA\)](#) (Friedmann et al., 2023)
 - a. "This study provides the first longitudinal evidence relating pet ownership and dog walking to reduced deterioration in cognitive function with aging for generally healthy older adults residing in community settings. Policy makers can use these findings to support inclusion of pets in care plans, designing housing and neighborhoods for seniors that are friendly for dog walking ^{67,68,69} and developing programs to support pet ownership and care for older adults' pets while they are temporarily unable to do so¹³."
34. [The role of pets in the support systems of community-dwelling older adults: a qualitative systematic review](#) (Reniers et al., 2022)
 - a. "Older adults reported not only on **positive aspects of pet ownership such as the emotional support** their pets provided but also on **negative aspects such as postponing personal medical treatment.**"
 - b. "**Older adults perceived pets as important for their health and wellbeing.** This implies that care workers may be able to improve home care by accounting for the role of pets of older adults receiving home care. Based on our findings, **we suggest that community healthcare organisations develop guidelines and tools for care workers to improve care at home for clients with pets.**"

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Benefits of Pets in the Workplace

Sources on the benefits of pets in the workplace are listed here.

Topic Highlight

The Human Animal Bond Research Institute provides valuable survey data on the perception of pet workplace policies from over 2,000 full-time employees in their information sheet [Pet-Friendly Companies Better Attract, Engage and Retain Employees](#) (2017). Additionally, a summary of research and an expanded list of statistics from their survey data are available at [Workplace Wellness](#) (Human Animal Bond Research Institute, n.d.).

Research

35. [Dogs at home and at the workplace: effects on allergies and mental health](#) (Pali-Schöll et al., 2023)
 - a. "In summary, most studies suggest that the mere presence of a dog has a positive effect on people's perceptions of the workplace, interactions, stress management, and possibly physical activity."
36. [Perceptions of Dogs in the Workplace: The Pros and the Cons](#) (Hall et al., 2017)



- a. “Respondents made generally positive comments about having dogs at work (43.1%), referring to specific benefits including increased social interactions and reduced stress and improved atmosphere of the office. The implications of these findings are discussed for businesses and the development of “dog in the workplace” policies.”

Resources

37. [Pet-Friendly Companies Better Attract, Engage and Retain Employees](#) (Human Animal Bond Research Institute, 2017)
 - a. **Additional research summaries and statistics on pets in the workplace:** [Workplace Wellness \(Human Animal Bond Research Institute, n.d.\)](#)
 - b. 91% of employees in pet-friendly workplaces feel fully engaged in their work vs. 65% in non-pet friendly workplaces.
 - c. 88% of employees in pet-friendly workplaces would recommend their place of employment to others vs. 51% in non-pet friendly workplaces.
 - d. 91% of employees in pet-friendly workplaces feel the company supports their physical health and wellness vs. 59% in non-pet friendly workplaces.
 - e. 89% of employees in pet-friendly workplaces feel the company supports their mental well-being vs. 53% in non-pet friendly workplaces.

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Economic Benefits

Sources included here have begun to offer some ways to calculate a financial return on investment from supporting human-animal bonds alongside their social benefits.

Topic Highlight

The [Health Care Cost Savings](#) report by the Human Animal Bond Research Institute identified that “Pet ownership saves \$22.7 billion in health care costs.” The report details statistics for the impact of pet ownership on various facets of physical and mental health.

Research

38. [Emergency Animal Boarding: A Social Return on Investment](#) (Ma et al., 2023)
 - a. “The most valuable changes were being able to keep their companion animal and improved mental health and wellbeing. **We estimate that this program results in social value worth AUD 8.21 for each AUD 1 invested into running the program.** This study shows the importance of considering companion animals as part of the family unit and supporting people experiencing a crisis to keep their companion animal.”
 - b. Note that the sample size, 13, for this study is small. It is included in our review because it is one of the few that translates the social benefit of support to a financial benefit.
39. [Legislating Components of a Humane City: The Economic Impacts of the Austin, Texas "No Kill" Resolution \(City of Austin Resolution 20091105-040\)](#) (S. Hawes et al., 2017)



- a. “Over the period of study (2010-2016), the regional economic impact of the Resolution has been conservatively measured as follows: \$157,452,503 (total economic impact).”
- b. “In addition to exploring the specific economic impacts of Resolution 20091105- 040, this report also outlines, but does not quantify, the potential broader impacts of the Resolution on human, animal, and environmental health. These areas of impact include: public health, social capital, and community engagement.”
- c. “Overall, this report concludes that a high Live Release Rate is achievable on a community-wide level. However, Resolution 20091105-040 has resulted in a considerably higher than average cost per animal served by Austin Animal Center when compared to previous City of Austin expenditures and several other major U.S. cities¹. These costs are balanced by a series of economic and public health benefits that may be accrued across the community.”
- d. “The costs associated with implementing the Resolution appear to have been more than offset by a series of economic benefits to the community. The majority of the positive economic impacts result from increased employment within animal services as well as the increased use of pet care and pet retail services. An additional benefit appears to be the positive contribution of Austin’s progressive animal welfare policies to its brand equity. This impact is important as municipalities compete with each other to attract employee demographics that in turn draw new business and new economic growth to their area. Although not included in the final economic impact calculation, the potential impacts of progressive animal welfare policies on larger social and environmental outcomes, including public health, social capital, and community engagement, have important implications for Austin’s ability to promote and sustain the health and well-being of both its human and animal residents.”

Resources

40. [Health Care Cost Savings Report](#) (Human Animal Bond Research Institute, n.d.)
 - a. **Summary of key findings and infographics: [Health Care Cost Savings of Pet Ownership](#) (Human Animal Bond Research Institute, n.d.)**
 - b. Annual health care cost savings associated with pet ownership: “Pet ownership saves \$22.7 billion in health care costs.”
 - c. “Looking at a key measure of general health, **pet owners are estimated to visit the doctor less than non-pet owners** on an annual basis producing a costs savings of \$15 billion.”
 - d. “Dog owners who regularly walk their dogs have **lower levels of obesity**, leading to a \$4.5 billion reduction in health care spending.”
 - e. “Pet ownership correlates to a **14% reduction of C. difficile reinfection cases for hospitalized individuals** with a treatment cost savings of \$90.47 million.”
 - f. “**Children (ages 8-10) in households with a dog have a 9% lower probability of having a clinical diagnosis of anxiety.** Dog ownership can therefore be linked to \$672 million in annual mental health care cost savings.”



- g. “Older Americans with pets are **less likely to suffer from health maladies connected to loneliness and social isolation**, lowering annual Medicare spending by an estimated \$1.8 billion.”
- h. “Overall spending on treatment for PTSD is projected to be \$688 million lower for veterans with service animals and emotional support animals.”

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Obstacles to Maintaining Human-Animal Bonds & Paths to Solutions

Though benefits of the human-animal bond have been shown to be significant, research has identified risk factors associated with pet owners seeking to keep their pets in the face of adversity, marginalization, and limited access to human and animal services. A lack of support causes harm to people with bonds to a pet, especially for those in vulnerable situations. Sources in this section provide extensive details on what gets in the way of human-animal bonds and thereby endangers the benefits of those bonds. Some point to solutions to these obstacles, including by employing a OneHealth, One Welfare approach in proposing that services inclusive of pets can help humans. The sources in this section help make the case for elevating the importance of human-animal bonds in both animal and human services, including through partnerships between human and animal service providers.

Addressing Human Needs and Structural Disparities to Protect Human-Animal Bonds

This section brings together sources describing the wide variety of ways that human-animal bonds are put at risk, while many also point the way to possible solutions. Increasingly, the available research is showing the interdependence between human and animal well-being. This body of research often suggests that while understanding and overcoming the risks to pets lies with understanding the issues that affect pet owners' ability to care for them, there are also significant benefits for humans when programs offer support for their animal companions. For example, human health improves when people in need of medical care accept it because they are offered care for their pets while they recover. Be sure to also check the section on Gaps in Access to Veterinary Care, a subset of this larger section on obstacles faced by pet-owners.

Topic Highlight

● [Reimagining Healthcare: Human-Animal Bond Support as a Primary, Secondary, and Tertiary Public Health Intervention](#) by Hoy-Gerlach and Townsend (2023) calls for a One Health One Welfare approach to healthcare, in recognition that the well-being of people, animals and the environment are interdependent. The study proposes that human-animal support services (HASS) be recognized as important to public health. Like other sources here, the authors call for collaboration between human and animal welfare organizations to achieve better health outcomes for both humans and animals.

Research

41. [Adoption and relinquishment interventions at the animal shelter: a review](#) (Protopopova & Gunter, 2017)



- a. *While its main focus is on increasing dog adoptions, this study contains a literature review on the relinquishment of dogs to shelters, including for owner-related reasons, and points to a need for research into programs that may prevent relinquishment. This helps make the case for addressing the human needs of pet owners to prevent the separation of people and pets.*
 - b. *"It is likely that factors, unrelated to the dog, play a larger role than previously believed. Suggestions for further research include . . . programmes within the community focused on keeping dogs in their homes."*
 - c. *"...we believe that designing programmes based on factors influencing pet relinquishment and evaluating their efficacy is a logical next step in reducing pet abandonment."*
42. ● [Animal welfare deserts: human and nonhuman animal inequities](#) (Reese & Li, 2023)
- a. *This source supports the notion that there is an intimate connection between lack of access to human resources and lack of access to pet resources, further making the case that people and pets should be helped together when populations are distressed, and that helping one helps the other.*
 - b. *"The study concludes that the overlap between human economic distress and pet resource deserts presents a threat to the goals of One Health. Potential policy solutions are proposed to address inequities in the distribution of animal welfare resources."*
43. [Buddy or burden? Patterns, perceptions, and experiences of pet ownership among older adults in Switzerland](#) (Meier & Maurer, 2022)
- a. *This source provides a detailed list of the many varied benefits of pet ownership for older adults, and also outlines potential stressors, with attention to the influence of socio-demographic differences, along with findings from a biennial population-based longitudinal study of Europeans aged 50 years and older and a survey of those owning pets.*
 - b. *"These findings suggest that promoting pet ownership may help individual well-being and feelings of companionship, especially among women, older adults, and individuals without a partner but also points toward potential selection effects into pet ownership. Financial costs of pet ownership appear to be an important challenge for some older pet owners, notably those with relatively low levels of education and more limited financial resources."*
 - c. *"Given the above potential benefits and challenges associated with pet ownership at older ages, assessing pet ownership and the pet owners' actual perceptions and experiences of pet ownership can help highlight key opportunities and challenges for policies and interventions to promote and facilitate pet ownership among older adults."*
44. ● [Child and Pet Care-Planning During COVID-19: Considerations for the Evolving Family Unit](#) (Adams et al., 2021)
- a. *"Our results indicate that **those who did not know what they would do for pet care tended to have lower income, were unmarried/unpartnered, and had less social support.** This has implications for animal welfare because lower resourced pet owners may be forced to relinquish their pets to animal shelters if they do not have other options (Guenther, 2020)."*
 - b. *"Given the emotional consequences of isolation for everyone, but especially for children, and the benefits of having pets that parents describe here, **integrating care-planning to***



keep children and pets united could minimize additional disruption if a caregiver is incapacitated during a health emergency." (*Additional key term: Children and Pets*)

45. [The Concerns, Difficulties, and Stressors of Caring for Pets during COVID-19: Results from a Large Survey of U.S. Pet Owners](#) (Applebaum, Tomlinson, et al., 2020)
 - a. "Owners should be supported in accessing resources to mitigate any issues that may jeopardize the human-animal bond and increase the risk of relinquishment or abandonment. **Especially important are resources and solutions that will be accessible and feasible to people who may be suffering from job loss, economic uncertainty, and housing insecurity.** Considering positive relationships with pets may buffer the deleterious effects of stressful or adverse circumstances [22,66], pets could be a source of comfort and normalcy during the pandemic and any resulting fallout, economic or otherwise. Communities can support families and individuals with pets by **forming partnerships between human and animal social services** in order to meet the needs of the holistic family unit; **hence, pet relinquishment prevention is in service of healthy communities."**
46. [Goodbye to a Good Friend: An Exploration of the Re-Homing of Cats and Dogs in the U.S.](#) (Weiss et al., 2015)
 - a. "**Services that might have helped pet retention** were examined for the lower income category since the services listed were all described as free or low cost. The service that was selected most commonly as something that might have helped respondents was free or low cost veterinary care (40%). Other service options were free or low cost training or behavior help (34%, more common for dog owners), access to pet friendly housing (33%), free or low cost spay/neuter services (30%), free or low cost pet food (30%), free or low cost temporary pet care or boarding (30%) and assistance in paying pet deposits (17%)."
47. [How pets factor into healthcare decisions for COVID-19: A One Health perspective](#) (Applebaum, Adams, et al., 2020)
 - a. "Results from this study indicate that pet owners experience unique obstacles to accessing healthcare related to COVID-19, which has implications for future public health emergencies."
 - b. "In this study, we examined how pets may factor into decision making for healthcare related to COVID-19. **We found that 10% of pet owners might delay or avoid testing, and over 10% might delay or avoid treatment for COVID-19 due to concern for their pet's welfare.** This could have major public health implications due to the popularity of pet ownership in the U.S. Level of attachment to one's pet and respondents' access to socioeconomic resources contributed to decisionmaking."
 - c. "Communities need to adopt a One Health/One Welfare approach for human and animal social services to work in concert to support vulnerable pet owners and their animal companions [28] while reducing risk of COVID-19 spread. This could include progressive public policy around pet companionship [29], and/or supporting pet owners financially or instrumentally to address human and pet needs together [30]. In the interest of public health, we recommend community collaboration to provide services and resources to



circumvent obstacles that arise for people and their pets during public health emergencies. **Fostering partnerships between human and animal health and social workers to encourage public safety and health-planning as a holistic family unit, inclusive of pets, could reduce delays in receiving healthcare by ensuring bonded owners that their pets will be cared for in their absence [31]."**

48. [The Impact of Pet Care Needs on Medical Decision-Making among Hospitalized Patients: A Cross-Sectional Analysis of Patient Experience](#) (Polick et al., 2021)
 - a. **"Respondents (n = 113) expressed interest in a low/no-cost pet-boarding or foster program for adult patients struggling to find pet care assistance.** The majority of respondents (n = 71; 63%) reported challenges securing pet care during a prior hospitalization, and/or knew someone who encountered similar challenges. Respondents also indicated that these challenges had a negative impact on health, recovery, or their own decision to receive medical care. Pet care challenges during hospitalization are likely common and have the potential to hamper medical decision-making and health outcomes of inpatients."
49. [The Impact of the Social Determinants of Human Health on Companion Animal Welfare](#) (McDowall et al., 2023)
 - a. *This study calls for a more comprehensive approach to understanding what factors influence both the health of humans and the health of their companion animals, thereby leading to better outcomes for both. It calls for using a model that integrates the social determinants of health into our understanding of the issues. (Social determinants of health include the physical, social and economic factors that can influence health.) The study includes an extensive bibliography on the subject.*
 - b. "Understanding the influence of these factors (i.e., income and access to veterinary care, education levels, community involvement and equity) on humans and, consequently, their companion animals enables the development of interventions aimed at enhancing the welfare outcomes of both the companion animal and their guardian."
 - c. "In a study of rehomed companion animals, 40% of the participants identified that free or low-cost veterinary care could have prevented relinquishment [57]."
50. [Longitudinal associations between allostatic load, pet ownership, and socioeconomic position among U.S. adults aged 50+](#) (Applebaum et al., 2023)
 - a. *Note that "allostatic load"(AL) refers to the wear and tear on the body as a result of stress. This study may have particular relevance to the topic of pets and older adults.*
 - b. "Increasing support for pet ownership may promote health among marginalized groups; however, it must be paired with broader efforts to increase overall health equity by undressing the underlying causes of population health disparities."
 - c. "Pets may provide benefits that are associated with lower AL; however, identities of pet owners, and their individual and social resources and experiences, may modify how pets impact health and/or counteract chronic stress."



- d. "...pets may be a net benefit to health in moderately stressful contexts, but less so in high stress environments, where pets could potentially even become an added stressor or burden."
51. [Measuring Changes in Perceptions of Access to Pet Support Care in Underserved Communities](#) (S. M. Hawes et al., 2021)
 - a. "Understanding social, economic, and structural barriers to accessing pet care services is important for improving the health and welfare of companion animals in underserved communities in the U.S. "
 - b. "The urban community with the Pets for Life [a program of the Humane Society of the U.S.] intervention was associated with a higher overall measure of access to pet care compared to the urban site that did not have the Pets for Life intervention. When assessing each of the six measures of access to care, the urban community with the Pets for Life intervention was associated with higher access to affordable pet care options and higher access to pet care service providers who offer payment options than the community without the Pets for Life intervention. Further analyses with a subset of Pets for Life clients comparing pre-intervention and post-intervention survey responses revealed statistically significant positive trends in perceptions of two of the six measures of access to pet care. This study provides evidence that community-based animal welfare programming has the potential to increase perceptions of access to pet support services."
 52. [At the Periphery: Applying One Health to Explore Joint Provision of Human and Animal Healthcare in Marginalised Communities](#) (Sullivan & Cousquer, 2023)
 - a. This article reviews literature "to identify examples of co-provision ('joint') of human and animal healthcare. All examples entailed marginalised communities. Half of the examples related to provision of care to people experiencing homelessness (PEH), up to 20% of whom have companion animals. . . ."
 - b. "Maintaining the humananimal bond, addressing animal health, coping with trauma, and building trust were healthcare needs. Challenges included managing stigmatisation and inconsistencies in care provision, healthcare access issues, incorporating the third sector, Covid-19 impact and individual limitations of service providers. Joint healthcare is being practised in limited ways, largely via ad-hoc collaboration between service providers. There are strong indications for the development of joint healthcare but logistical and ethical barriers. The study concludes that this context presents an excellent example of application of One Health."
 53. [Punishment to Support: The Need to Align Animal Control Enforcement with the Human Social Justice Movement](#) (S. M. Hawes et al., 2020)
 - a. *This paper finds that supporting pet owners is more cost-effective than taking animals into shelter custody.*
 - b. "Reallocating the resources that have historically gone towards enforcement in communities to efforts that provide support in addressing the root causes of animal



- welfare concerns is needed to improve outcomes for pets in historically underserved communities.”
- c. “This approach can also be more cost-effective than a punitive approach. For example, Rochester Animal Services (Rochester, NY, USA) spends an average of \$160 per animal served through Pets for Life, compared to an average cost of \$300 per cat and \$375 per dog if that animal were to be taken into the custody of the shelter [40]. Salt Lake County Animal Services (Salt Lake City, UT, USA) spends an average of \$400 per animal to implement an enforcement approach that includes officer response, veterinary needs, in-shelter care, overhead, supplies, and pet placement. In contrast, the average cost per pet served through the Pets for Life model in Salt Lake County is \$116 [36].”
54. ● [Reimagining Healthcare: Human-Animal Bond Support as a Primary, Secondary, and Tertiary Public Health Intervention](#) (Hoy-Gerlach & Townsend, 2023)
- a. “In order to operationalize the potential of One Health approaches into actionable change for increased well-being, collaboration across a range of societal sectors is necessary. . . . **cross-sector collaboration from human and animal health/welfare organizations** has been critical in achieving positive outcomes for vulnerable and interdependent people and animals.”
 - b. Highlights the history of grassroots efforts to support human-animal bonds.
 - c. Emphasizes the One Health, One Welfare (OHOW) approach, which promotes the well-being of humans, animals, and the environment.
55. ● [The Role of Human-Animal Bonds for People Experiencing Crisis Situations](#) (Oosthuizen et al., 2023)
- a. “Our findings were that human-animal bonds are highly valued by people experiencing crisis situations, and can affect people’s ability to seek help or refuge, and to help people recover after a crisis. Human-animal bonds provided companionship and catalyzed interpersonal connections, which improved mental health and coping during a crisis. However, separation from a pet can cause stress and anxiety, which can dissuade pet owners from seeking help. Programs such as the RSPCA NSW Community Programs address pet safety and remove cost barriers, providing relief and encouraging help-seeking. Human-animal bonds provided structure and companionship, which by improving mental health, aided in recovery, post-crisis. Additionally, the absence of a pet post-crisis negatively affects people’s recovery.”
56. ● [The role of pets in the support systems of community-dwelling older adults: a qualitative systematic review](#) (Reniers et al., 2022)
- a. “Older adults reported not only on **positive aspects of pet ownership such as the emotional support** their pets provided but also on **negative aspects such as postponing personal medical treatment.**”
 - b. “**Older adults perceived pets as important for their health and wellbeing.** This implies that care workers may be able to improve home care by accounting for the role of pets of older adults receiving home care. Based on our findings, **we suggest that community**



healthcare organisations develop guidelines and tools for care workers to improve care at home for clients with pets.”

57. [Social Support and Attachment to Pets Moderate the Association between Sexual and Gender Minority Status and the Likelihood of Delaying or Avoiding COVID-19 Testing](#) (Matijczak et al., 2021)

- a. *In this study, “SGM” refers to “sexual and gender minority individuals.”*
- b. “Practitioners and community organizations working with SGM populations should implement strategies to address barriers to seeking healthcare services both during and beyond the COVID-19 pandemic. Based on these findings, it is critical that services targeting SGM individuals include alternative care plans for pets, such as boarding or fostering services.”

58. [Coping with Pet Food Insecurity in Low-Income Communities](#) (Arluke, 2021)

- a. *This article highlights the importance of pet food access for food-insecure families and helps with understanding common responses to food insecurity and incorporate this into planning programs offering access to food.*
- b. “Respondents commonly reported worrying about running out of pet food or actually doing so. Approximately 55% often worried about running out of pet food, while 30% sometimes worried. **And approximately 38% often actually ran out of food, while 38% sometimes ran out.**”
- c. “Many respondents experienced pet food insecurity, worrying about or having to cut back on the quantity and/or quality of food they could feed their animals. **This concern, and how it was dealt with, closely paralleled the experience of human food insecurity . . .** Some people use these strategies episodically when human food insecurity becomes intolerable, while others cope with it as an ongoing feature of their lives (Bank, 1986; Cafer & Kaiser, 2016; Frankenberger, 2003; Kaiser & Cafer, 2017; Kicinski, 2012). . . **With the help of the food pantry and other strategies,** they hoped to get through difficult and temporary periods, whether due to sudden infirmity, job loss, household crisis (e.g., fire), or temporarily loss of a key household provider (e.g., going to jail). When the insecurity was chronic, they routinely used these strategies, sometimes every day.

These coping strategies enabled most respondents to feel they were being responsible pet owners, given their definition of the term. . . The bottom line of this self-perception was that **no matter how difficult things got financially, most claimed their pets “were taken care of”** and did not suffer. . . Further enabling respondents to think of themselves as responsible owners, **the strategies they used to cope with pet food insecurity made it possible to keep animals rather than surrender them to shelters or animal control departments,** where euthanasia was a distinct risk given the age, size, behavior, and breed of most pets (very few were puppies or kittens most desired by adopters, while most were older pit mixes or mixed breeds that were less desired).”



Resources

59. [Community Services Database \(CSD\)](#) (Shelter Animals Count, n.d.)
 - a. **2022 report available here: [Community Services Data Report 2022 - Shelter Animals Count \(Shelter Animals Count, 2023\)](#)**
 - b. “Shelter Animals Count Community Services Database (CSD) began collecting services data in 2021 to **capture the most common ways shelters, rescues, and service-based organizations are supporting pets and people in our communities.** These services exist to help keep pets in their homes and out of the shelters, and also to help people during difficult times.”
60. [New report: Helping people and animals together](#) (Vancouver Humane Society, 2021)
 - a. “People from all backgrounds enjoy the companionship and mental health benefits of animals, but people who are placed-at-risk—those experiencing poverty or systemic discrimination, who are often at a higher risk of dealing with past traumas—can face barriers in caring for their pets. This new report discusses opportunities in the animal services sector to address these barriers, ensure equitable services for all people and animals, and prevent worker burnout and compassion fatigue.”

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Gaps in Access to Veterinary Care

While many of the sources in this section on obstacles to maintaining human-animal bonds refer to a lack of access to veterinary care within their discussions, this subsection includes sources with a tighter focus on veterinary care gaps. The inaccessibility of vet care for many social groups is an especially important concern for all agencies working to support companion animals, and, as some sources discuss here, inaccessible vet care may also affect human and public health. Sources here also address the importance of culturally competent engagement with community members to improve access to veterinary care.

Topic Highlight

[Access to Veterinary Care—A National Family Crisis and Case for One Health](#) (Blackwell & O’Reilly, 2023) discusses the harm caused by lack of access to veterinary care for both human and nonhuman members of communities, and brings a social justice lens to this issue.

Research

61. [Access to Veterinary Care—A National Family Crisis and Case for One Health](#) (Blackwell & O’Reilly, 2023)
 - a. “Due to the significance of the human–animal bond in our society, the lack of veterinary care negatively influences both human and nonhuman members of communities.”
 - b. “More than 1 out of 4 families struggle to access veterinary care in the United States.”
 - c. “Barriers to veterinary care are human-related, requiring a One Health solution.”
 - d. “Access to veterinary care is the social justice call to action of veterinarians”



62. [Assessment of canine health and preventative care outcomes of a community medicine program](#) (Mueller et al., 2018)
- While focused primarily on improving the health and well-being of owned dogs, this study explores disparities in access to vet care, which can be a major impediment to maintaining human-animal bonds. An inability to afford costs of pet care is known to be a significant reason for relinquishment of pets to shelters. When cost puts care for a beloved pet at risk, it also introduces stress to a human-animal bond.*
 - The study hypothesizes that “the racial, ethnic, and socioeconomic disparities that exist with regard to access to high quality human health services, especially related to preventative care,” are likely similar in regard to access to preventative vet care for the dogs of underserved communities.
 - “Existing research exploring the impact of affordability in veterinary care has found that pet owners with lower incomes (less than \$35,000 a year) or who are unemployed were less likely to have taken their pet to a veterinarian within the previous year. . . (Volk et al., 2011).”
 - “Capitalizing on low-cost, community health models that have been successful in human healthcare settings may be an effective method of addressing access to veterinary care (particularly preventative care) in underserved canine populations”
63. [Development and initial validation of the Animal Welfare Cultural Competence Inventory \(AWCCI\) to assess cultural competence in animal welfare](#) (Gandenberger et al., 2021)
- “This study provides initial evidence that increasing the use of culturally competent engagement strategies has the potential to increase service utilization for pets in historically underserved communities.”
64. [A Pilot Program to Assess and Address the Veterinary Health Care Needs of the Hispanic Community in Knoxville, TN](#) (Weisent et al., 2023)
- “Key survey results (n=45) showed that 28% of Centro community members obtained pets through an animal shelter or rescue organization, friends or family gifted 28%, and 26% came from breeders or pet stores. The primary reason for pet ownership included a love of animals and the perspective that the pet is part of the family (76%). Forty-eight percent reported that pets were not spayed or neutered (s/n), and of these, 39% said s/n was too expensive, whereas 22% did not know where to receive s/n services. Respondents reported that they would access local veterinary services for annual exams (56%), vaccinations (82%), and parasite prevention (58%). Twenty-six percent identified a time over the past two years when they could not get needed treatment for a sick pet, the primary reason being lack of affordable care. Other reasons included not knowing where to find care (22%), language barrier (11%), and a concern that the care provider would think badly of them for not seeking care earlier (22%). Participants said they would be interested in services and resources on vaccines and parasite prevention (64%), training and behavior (36%), information on clinics, and pet care resources (29%).”
 - “The survey findings led to implementation of a vaccine clinic for Knoxville’s Latino community. The municipal shelter attended, and local resources and AVMA brochures in



Spanish were provided on pet ownership, internal parasites, external parasites, vaccines, heartworm disease, and spay-neuter options.”

65. [Race and ethnicity are not primary determinants in utilizing veterinary services in underserved communities in the United States](#) (Decker Sparks et al., 2018)
- This study offers important evidence that structural inequalities and biased assumptions, not the attitudes of racial and ethnic groups, are the primary barriers to use of spay/neuter services.*
 - “When veterinary and animal welfare organizations deliberately remove structural barriers embedded with racial inequalities, individuals, regardless of race and ethnicity, proceed with companion-animal sterilization. Therefore, service providers must use unbiased, informed, and culturally competent practices to improve companion-animal welfare through the optimization of veterinary services, including spay and neuter.”

Resources

66. [More Than a Pet](#) (The Humane Society of the United States, n.d.)
- “20M+ pets live in poverty and that's three times more than the number who enter animal shelters every year.”
 - “70% of pets living in poverty have never seen a veterinarian.”
 - “28% of pet owners are unable to access veterinary care.”
67. [Veterinary Care Accessibility Score Map](#) (The Veterinary Care Accessibility Project, n.d.)
- “The Veterinary Care Accessibility Score is an index that describes the accessibility of veterinary care in counties across the contiguous lower 48 states of the United States*. The index incorporates data on issues that affect access to care: income, transportation, language, veterinary hospitals.”
 - “The VCAS is a tool. We intend for it to be used to **help stakeholders make decisions regarding efforts related to veterinary access to care.** For example: a foundation could use the VCAS to focus funding for projects; an industry executive may use it to strategize around bringing service to untapped markets; a county representative may use it to grow their tax base by creating a more pet friendly city.”
68. [An open letter to veterinary students: What would a community care model look like?](#) (Protopopova, 2022)
- This letter from a leading animal welfare researcher advocates for a community care model in veterinary medicine. It contains valuable research citations and is presented in a well-written narrative, ready to distribute.

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Social Work as the Bridge for Human and Animal Services

Sources here provide the rationale for bringing a focus within social services to the roles animals play in the lives of their humans, and for recognizing the human dimensions within animal services, with both clients and shelter



workers. These sources are particularly useful in making the case for animal shelters as an additional entry point for social services through the integration of social workers in animal services.

Topic Highlight

[Human-Animal Relationships and Social Work: Opportunities Beyond the Veterinary Environment](#) by Arkow (2020): “This article identifies six reasons why social workers should be cognizant of human-animal relationships and introduces nine ways, with action steps, in which social workers can include these relationships into training and practice outside the more developed field of veterinary social work. These venues include: agencies working in child protection and child sexual abuse; children’s advocacy centers and courthouse facility dogs; animal shelters; domestic violence shelters; public policy advocacy; clinical practice; agencies working with older and disabled populations; veterinary sentinels for intimate partner violence; and pet support services for homeless populations.”

Research

69. ● [Human-Animal Relationships and Social Work: Opportunities Beyond the Veterinary Environment](#) (Arkow, 2020)
 - a. “This article identifies six reasons why social workers should be cognizant of human-animal relationships and introduces nine ways, with action steps, in which social workers can include these relationships into training and practice outside the more developed field of veterinary social work. These venues include: agencies working in child protection and child sexual abuse; children’s advocacy centers and courthouse facility dogs; animal shelters; domestic violence shelters; public policy advocacy; clinical practice; agencies working with older and disabled populations; veterinary sentinels for intimate partner violence; and pet support services for homeless populations.”
 - b. “More homes in the U.S. are said to have companion animals than have children (Vincent, McDonald, Poe, & Deisner, [2019](#)).”
 - c. “In addition to appreciating a client’s individual and familial attachments or antipathy toward pets, social workers can achieve a fuller understanding of a client’s connectivity or isolation from the community by seeing human-animal relationships in a social context.”
 - d. “Social capital . . . is the connectivity among people which enhances cooperation for mutual benefit.”
 - e. “Hoy-Gerlach et al. ([2019](#)) described promising opportunities for social work field placements in community animal shelters, including: reducing staff and volunteers’ compassion fatigue in an exceedingly difficult and emotionally draining work environment; placement of shelter pets as Emotional Support Animals; strengthening community responsiveness to violence through assessing overlaps and differences between child, elder and animal abuse investigations; creating and implementing educational programming across child and animal protection systems; and increasing community awareness of the link between violence to animals and violence to humans.”
70. [Rediscovering connections between animal welfare and human welfare: Creating social work internships at a humane society](#) (Hoy-Gerlach et al., 2018)



- a. "Increased awareness of the potential relevance of human–animal interaction across social work practice settings allows for explicit identification of/response to clients' human–animal interaction-related strengths and concerns, ultimately supporting the well-being of both humans and animals."

71. [Social Workers in Animal Shelters: A Strategy Toward Reducing Occupational Stress Among Animal Shelter Workers](#) (Hoy-Gerlach et al., 2021)

- a. **Social workers to support animal shelter workers:** "Within this paper, occupational risks and protective factors for ASWs are summarized, and the emergence of social work within animal shelter settings as one strategy for helping to ameliorate the occupational stress experienced by ASWs is delineated."

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Pet-inclusive Housing Challenges

Resources on the need for more accessible and affordable pet-inclusive housing are included here.

Topic Highlight

[Preventing Eviction and Housing Loss: Taking Advantage of a One Health Approach and the Human-Companion Animal Bond](#) by Uhlig et al. (2023) makes the case for animal shelters as an entry point for human services. Many clients surrendered their companion animals while under financial stress, particularly prior to eviction or housing loss. These observations suggest that it might be possible to learn more about the facts leading up to housing loss by looking at companion animal relinquishment. This also opens the possibility that intervention strategies at the point of companion animal relinquishment could delay or prevent housing loss. If such strategies were implemented and found to be effective, they would have the immediate benefit of preventing housing loss for both companion animals and their owners.

Research

72. [Pet-Friendly for Whom? An Analysis of Pet Fees in Texas Rental Housing](#) (Applebaum et al., 2021)
 - a. "...low-income communities and communities of color were more likely than higher income and predominantly White communities to pay disproportionately higher fees to keep pets in their homes."
 - b. "The burden of pet rental fees may contribute to both housing insecurity and companion animal relinquishment."
 - c. "Overall, our findings indicate that, within Texas, the costs associated with housing a family that includes a pet disproportionately harm populations that are already economically disadvantaged. Specifically, pet-friendly rental units come at a higher relative cost for low-income communities and communities of color."
73. [Preventing Eviction and Housing Loss: Taking Advantage of a One Health Approach and the Human-Companion Animal Bond](#) (Uhlig et al., 2023)
 - a. **Makes the case for animal shelters as an entry point for human services:** Many clients surrendered their companion animals while under financial stress, particularly prior to



eviction or housing loss. These observations suggest that it might be possible to learn more about the facts leading up to housing loss by looking at companion animal relinquishment. This also opens the possibility that intervention strategies at the point of companion animal relinquishment could delay or prevent housing loss. If such strategies were implemented and found to be effective, they would have the immediate benefit of preventing housing loss for both companion animals and their owners.

Resources

74. [Pet Eviction Calculator](#) (Human Animal Support Services, 2021)
 - a. Utilize this calculator to identify the number of pets facing eviction in your community.
75. [2021 Pet-Inclusive Housing Report](#) (Michelson Found Animals Foundation & Human Animal Bond Research Institute, 2021)
 - a. The 2021 Pet-Inclusive Housing Report identified that **72% of residents report that pet-friendly housing is hard to find**. Additionally, 24% of renters with pets said that "my pet has been a reason for me needing to move," which means as many as **6 million people have experienced a move related to pet ownership** at some point in their lives.
76. [Eviction Tracking System](#) (Eviction Lab, n.d.)
 - a. To estimate the prevalence of evictions in your community as well as nationwide, use the data, maps and reports at this site. The site also has links to local organizations that offer housing assistance and are potential partners in working with people with pets that are housing insecure.

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Unhoused Populations and Co-Sheltering

This section focuses on sources covering pet ownership among unhoused populations and on co-sheltering people and their pets. Sources are particularly relevant for partnerships between agencies that serve those experiencing homelessness and animal welfare organizations. See also the article above, "At the Periphery."

Topic Highlight

[The Value of Companion Dogs as a Source of Social Support for Their Owners: Findings From a Pre-pandemic Representative Sample and a Convenience Sample Obtained During the COVID-19 Lockdown in Spain](#) by Bowen et al. (2021) identified the significant level of social support dogs provided for their owners experiencing homelessness. The researchers concluded that dogs could "substitute for humans as sources of some kinds of social support."

Research

77. [Homeless People who are Animal Caretakers: A Comparative Study](#) (Cronley et al., 2009)
 - a. "Findings suggest that first-time homeless, Euro-American **women who were homeless due to domestic violence were the most likely to say they were caring for animals**. The



use of such an information system could aid in identifying this subpopulation and coordinating services for animal care.”

78. [● The Impact of Pet Ownership on Healthcare-Seeking Behavior in Individuals Experiencing Homelessness](#) (Ramirez et al., 2022)
 - a. “Themes emerging from the qualitative research included that persons experiencing homelessness with animals place a high value on the health and welfare of their pets, that the animals can pose a barrier to traditional health services and access to overall services, and that the owner’s need for animal companionship and support is high. These findings suggest that utilizing the human–animal bond and creating integrated (human and animal), interprofessional health services using a One Health approach for unhoused populations owning pets can reduce barriers to services and improve both human and animal health. In an integrated health clinic setting, the owner may seek care for their animal but stay for the human healthcare.”
79. [A Multilevel Intervention Framework for Supporting People Experiencing Homelessness with Pets](#) (Kerman et al., 2020)
 - a. “At the public level, educational interventions are needed to improve knowledge and reduce stigma about the relationship between homelessness and pet ownership. At the service delivery level, direct service providers can support pet owners experiencing homelessness by recognizing their strengths, connecting them to community services, being aware of the risks associated with pet loss, providing harm reduction strategies, documenting animals as emotional support animals, and engaging in advocacy.”
80. [Pet Ownership among Homeless Youth: Associations with Mental Health, Service Utilization and Housing Status](#) (Rhoades et al., 2015)
 - a. **“As many as 25% of homeless persons have pets.”**
 - b. “The majority of pet owners reported that their pets kept them company and made them feel loved; nearly half reported that their pets made it more difficult to stay in a shelter. Pet owners reported fewer symptoms of depression and loneliness than their non-pet owning peers. Pet ownership was associated with decreased utilization of housing and job-finding services, and decreased likelihood of currently staying in a shelter. These findings elucidate many of the positive benefits of pet ownership for homeless youth, but importantly highlight that pet ownership may negatively impact housing options. Housing and other services must be sensitive to the needs of homeless youth with pets.”
81. [The Value of Companion Dogs as a Source of Social Support for Their Owners: Findings From a Pre-pandemic Representative Sample and a Convenience Sample Obtained During the COVID-19 Lockdown in Spain](#) (Bowen et al., 2021)
 - a. “Our findings indicate that **dogs can substitute for humans as sources of some kinds of social support** when conventional sources are unavailable. Our conclusion is that where a dog is present in a household, it should be regarded as an important resource for social



support. This should be considered when designing clinical interventions and when public health decisions are being made.”

82. [StayWitch's Peer-Support, Wellbeing & Life Skills Program: Final Evaluation Report](#) (Wood & Turvey, n.d.)
- "To facilitate the MRC/StayWitch's being pet friendly, staff drew up a **pet policy and agreement** for residents with pets to sign (see Appendix 4). The case study below describes the first 'beneficiaries' of this pet friendly approach, and highlights the ripple effect **benefits for other residents and staff.**"

Resources

83. [Co-Sheltering People and their Companion Animals: An Exploratory Study](#) (Lunghofer & Newton, 2020)
- Summary of full report:** [Co-Sheltering People and their Companion Animals: Findings from an Exploratory Study](#) (Animals & Society Institute & My Dog is My Home, n.d.)
 - "Shelter policy that allowed **accommodation of animals was a critical factor** in people's decision to leave the street and seek shelter."
 - "Despite some shelter administrators' concerns that accommodating animals would result in animals flooding the shelter, **only about 5-10% of the clients at each shelter had animals.** In some cases, the shelters rarely accommodated more than one or two animals at a time.
84. [Keeping People and Pets Together](#) (National Alliance to End Homelessness & Petsmart Charities, 2020)
- "Animal welfare organizations can **use this publication to determine optimal ways to engage with and build partnerships with social services partners and deliver coordinated service provision** to both people and pets."
85. [What is the Cost of Homelessness?](#) (DuBois, 2022)
- Combined with the source above finding that exclusion of pets in shelters prevents some unhoused people from leaving the streets, this data would be useful support for programs proposing add-on assistance for their pets.*
 - "[According to the National Alliance to End Homelessness](#), a person experiencing chronic homelessness costs the taxpayer an average of **\$35,000 a year** (2016). [In another study](#) of 5,000 people experiencing Severe Mental Illness (SMI) and homelessness in New York City, the average annual cost of service use was calculated to be around **\$40,500 per person.**"
 - "Father Joe's Villages piloted a program called [Project 25 that provided housing and intensive services to San Diego's top 25-40 most frequent users of public services](#). We found that before individuals started the program, the average annual cost of public services per person was nearly **\$111,000.**"

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Domestic Violence

Sources here address the link between domestic violence and animal abuse and the significant barriers to receiving services and safety for survivors with pets. Sources are highly relevant for partnerships between animal service agencies and those that serve domestic violence survivors.

Topic Highlight

[The PALS Report and Survey - National Survey on Domestic Violence and Pets: Breaking Barriers to Safety and Healing](#) by the Urban Resource Institute and National Domestic Violence Hotline is the “largest nationwide survey in the United States of domestic violence survivors focused on the impact of pets on survivors’ ability to leave a dangerous situation.” The [report’s Executive Summary](#) highlights key findings and statistics. Primary findings detail the importance of preserving the human-animal bond for survivors of domestic violence, as “97% of respondents said that keeping their pets with them is an important factor in deciding whether or not to seek shelter” and separation from a pet is a traumatic event.

Research

86. [Animal cruelty as an indicator of family trauma: Using adverse childhood experiences to look beyond child abuse and domestic violence](#) (Bright et al., 2018)
 - a. “Youth who engage in animal cruelty are known to be at increased risk of perpetrating violence on other people in their lives including peers, loved ones, and elder family members. These youths **have often been exposed to family violence**, including animal cruelty perpetrated on their beloved pets by violent adults.” (Additional key term: *Children and Pets*)
87. [Battered Pets and Domestic Violence: Animal Abuse Reported by Women Experiencing Intimate Violence and by Nonabused Women](#) (Ascione et al., 2007)
 - a. **“Women residing at domestic violence shelters (S group) were nearly 11 times more likely to report that their partner had hurt or killed pets than a comparison group of women who said they had not experienced intimate violence (NS group).** Reports of threatened harm to pets were more than 4 times higher for the S group. Using the Conflict Tactics Scale, the authors demonstrated that severe physical violence was a significant predictor of pet abuse. The vast majority of shelter women described being emotionally close to their pets and distraught by the abuse family pets experienced. **Children were often exposed to pet abuse, and most reported being distressed by these experiences. A substantial minority of S-group women reported that their concern for their pets’ welfare prevented them from seeking shelter sooner.** This seemed truer for women without children, who may have had stronger pet attachments. This obstacle to seeking safety should be addressed by domestic violence agencies.” (Additional key term: *Children and Pets*)
88. [Exploring the Link Between Pet Abuse and Controlling Behaviors in Violent Relationships](#) (Simmons & Lehmann, 2007)



- a. "Findings indicate that **batterers who also abuse their pet (a) use more forms of violence and (b) demonstrate greater use of controlling behaviors than batterers who do not abuse their pets.** Likewise, positive correlations are found between specific controlling behaviors and cruelty to pets."
89. [Homeless People who are Animal Caretakers: A Comparative Study](#) (Cronley et al., 2009)
 - a. "Findings suggest that first-time homeless, Euro-American **women who were homeless due to domestic violence were the most likely to say they were caring for animals.** The use of such an information system could aid in identifying this subpopulation and coordinating services for animal care."
 90. [Pets in danger: Exploring the link between domestic violence and animal abuse](#) (Newberry, 2017)
 - a. "A number of DV victims reported that **companion animals were one of their main sources of support, and many chose to stay in an abusive relationship because DV shelters did not have the facilities to house their pets.**"
 91. [Positive Engagement with Pets Buffers the Impact of Intimate Partner Violence on Callous-Unemotional Traits in Children](#) (Murphy et al., 2022)
 - a. *In this study, "IPV" refers to "intimate partner violence."*
 - b. "Our findings suggest that **children who form close relationships with their pets** in the context of IPV appear to **derive important support from these animals;** safeguarding the well-being of these animals may be critical to their long-term emotional health." (*Additional key term: Children and Pets*)
 92. [Part of the Family: Children's Experiences with Their Companion Animals in the Context of Domestic Violence and Abuse](#) (Callaghan et al., 2023)
 - a. "The implications of our analysis are considered in relation to providing support for children impacted by domestic abuse, and the **importance of ensuring companion animals are provided for in housing policy and planning** for domestic abuse survivors."

Resources

93. [The Link Between Violence to People and Violence to Animals](#) (National Link Coalition, n.d.)
 - a. Summary booklet that contains a Research Summary on the Link.
94. [National Statistics](#) (National Coalition Against Domestic Violence, n.d.)
 - a. Extensive collection of statistics by the National Coalition Against Domestic Violence.
95. [The PALS Report and Survey - National Survey on Domestic Violence and Pets: Breaking Barriers to Safety and Healing](#) (Urban Resource Institute & National Domestic Violence Hotline, n.d.). Also see the [Executive Summary](#).
 - a. This is the first study of its kind to interview survivors in a moment of outreach and decision-making, in contrast to studies of survivors already settled in a shelter and removed from their abusive environment. The results confirmed and expanded upon



- numerous such studies of survivors in shelter who similarly reported harm and threats to their pets had kept them from leaving an abusive situation.
- b. “97% of respondents said that keeping their pets with them is an important factor in deciding whether or not to seek shelter.”
 - c. “91% indicated that their pets’ emotional support and physical protection are significant in their ability to survive and heal.”
96. [Resource Materials](#) (National Link Coalition, n.d.)
- a. Extensive library with materials from the National Resource Center on The Link between Animal Abuse and Human Violence.
97. [The Violence Link in Practice: An empirical examination of the implications of the Violence Link for family justice professionals](#) (Humane Canada, 2023)
- a. “Despite research documenting the link between intimate partner violence (IPV) and animal abuse, research attention has not been paid to how family law professionals, specifically family lawyers and mediators, encounter and deal with the Violence Link in their practices. **Given that family law professionals are often among the first to encounter those aiming to end an abusive relationship, their perspectives are key to understanding how to better serve the victims/survivors impacted by the Violence Link.** This study sought to understand the perspectives of family law professionals in Canada using a self-administered online survey and 12 in-depth follow-up qualitative interviews.”
98. [The Violence Link: Review of the Literature](#) (Humane Canada, n.d.)
- a. “There is a widely accepted notion that violence begets violence, which has led researchers in recent decades to look into the correlation between violence toward animals (animal cruelty) and violence toward people (interpersonal crime) in order to find new preventative measures for both forms of criminal behaviour.”
 - b. 56% of survivors delayed leaving a violent partner out of concern for their pets (Barrett et al., 2017, as cited in Humane Canada, n.d.)

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Natural Disasters

Sources here detail the critical importance of including pets in disaster planning, education, and preparedness efforts. Much of the evidence supports pet-friendly sheltering during disasters as a means of supporting human health and safety. The One Health benefits of pet evacuation solutions are evident throughout the literature on this topic.

Topic Highlight

[Evacuation of Pets During Disasters: A Public Health Intervention to Increase Resilience](#) by Robin Chadwin, DVM, MPVM (2017) is a comprehensive literature review that details the global need for pet evacuation solutions and how “... disregard for companion animal welfare during a disaster can have public health consequences.” The author concludes that: “Companion animal welfare is important to pet



owners, especially during times of stress. Pet-friendly sheltering has benefits to public health, and increases resilience in a potentially vulnerable subset of the population. . . . By protecting and improving the welfare of companion animals during disasters, public health of owners is also improved.”

Research

99. [All Creatures Safe and Sound: The Social Landscape of Pets in Disasters](#) (DeYoung et al., 2021)
 - a. “All Creatures Safe and Sound is a comprehensive study of what goes wrong in our disaster response that shows how people can better manage pets in emergencies—from the household level to the large-scale, national level. Authors Sarah DeYoung and Ashley Farmer offer practical disaster preparedness tips while they address the social complexities that affect disaster management and animal rescue. They track the developments in the management of pets since Hurricane Katrina, including an analysis of the 2006 PETS Act, which dictates that animals should be included in hazard and disaster planning. Other chapters focus on policies in place for sheltering and evacuation, coalitions for animal welfare and the prevention of animal cruelty, organizational coordination, decision-making, preparedness, the role of social media in animal rescue and response, and how privilege and power shape disaster experiences and outcomes.”
 - b. *While this book must be purchased to read, this blog contains an interview with the book’s authors and is free to view: [Shelter from the storm: The social landscape of pets in disasters](#) (University of Delaware, 2021)*
100. [Disaster Dilemma: Factors Affecting Decision to Come to Work During a Natural Disaster](#) (Davidson et al., 2009)
 - a. “The objective of this study was to identify factors influencing decision to come to work during a fire disaster. . . . Employees experienced tension between obligations to family, community, and organization. **Pets were seen as family and as important as biological family.** . . . Hospital leaders may influence disaster response by establishing a caring connection, **providing resources for family members/pets**, and promoting perceived importance of the employee.”
101. [Evacuation of Pets During Disasters: A Public Health Intervention to Increase Resilience](#) (Chadwin, 2017)
 - a. “During a disaster, many pet owners want to evacuate their pets with them, only to find that evacuation and sheltering options are limited or nonexistent. **This disregard for companion animal welfare during a disaster can have public health consequences.**

Pet owners may be stranded at home, unwilling to leave their pets behind. Others refuse evacuation orders or attempt to reenter evacuation sites illegally to rescue their animals. Psychopathologies such as grief, depression, and posttraumatic stress disorder are associated with pet abandonment during an evacuation. Health care workers may refuse to work if their animals are in danger, leaving medical facilities understaffed during crises. Zoonotic disease risk increases when pets are abandoned or left to roam, where they are more likely to encounter infected wildlife or unowned animals than they would if they



were safely sheltered with their owners. These sequelae are not unique to the United States, nor to wealthy countries.

Emergency planning for companion animals during disasters is a global need in communities with a significant pet population, and will increase resilience and improve public health.”

- b. “Companion animal welfare is important to pet owners, especially during times of stress. **Pet-friendly sheltering has benefits to public health, and increases resilience in a potentially vulnerable subset of the population.** . . . Recognizing the importance of pets to their owners and their role in public health is an important first step in ameliorating a public health problem that has been seen repeatedly in the past and is unlikely to change in the future. Sheltering companion animals during disasters is an attainable objective when there is appropriate planning. Emergency management groups should seek the expertise of the many animal welfare groups and resources available to help create and implement their animal emergency preparedness protocols, and ensure that the health and welfare of the companion animals in their community are met. **By protecting and improving the welfare of companion animals during disasters, public health of owners is also improved.”**
102. [Facing disasters together: how keeping animals safe benefits humans before, during and after natural disasters](#) (Thompson, 2018)
- a. “This paper outlines the **negative implications of failing to account for animals in disaster plans and/or to accommodate them in shelters.** It also outlines how including animals in disaster response can provide benefits for the physical and mental health and well-being of humans that extend well beyond the disaster event.”
 - b. “This paper discusses the relationship between animals, humans and natural disasters. Many animal guardians would risk their lives to save their animals. While this altruism can put the lives of humans and animals at risk, there is ample scope to reconfigure the risk factors of companion animal guardianship and animal attachment to protective factors. However, **keeping animals safe is not only a useful motivator for increasing natural disaster planning and preparedness; most animal guardians will improve their ability to cope** with the immediate and longer-term stress and psychological impact of disasters if they have their companion animal with them or know of its whereabouts.”
103. [Human and Pet-related Risk Factors for Household Evacuation Failure During a Natural Disaster](#) (Heath et al., 2001)
- a. *While published in 2001, this article provides valuable examples of interventions that can increase human and animal safety in natural disasters. For example, providing pet carriers or educating pet owners on the importance of having them on hand may increase the number of owners willing and able to evacuate a natural disaster.*
 - b. “Impediments to pet evacuation, including owning multiple pets, owning outdoor dogs, or not having a cat carrier, explained why many households that owned pets failed to evacuate. **Predisaster planning should place a high priority on facilitating pet evacuation through predisaster education of pet owners and emergency management personnel.”**



104. [Human-Animal Interactions in Disaster Settings: A Systematic Review](#) (Wu et al., 2023)
 - a. “Efforts to promote social and environmental justice for humans and their co-inhabitants should **support the welfare of both humans and animals** in disaster settings.”
 - b. “Zoonotic disease prevention, risk perception, and social and economic recovery should also be considered in all stages of disaster and emergency management to promote resilience for both humans and animals.”
105. [No Pet or Their Person Left Behind: Increasing the Disaster Resilience of Vulnerable Groups through Animal Attachment, Activities and Networks](#) (Thompson et al., 2014)
 - a. “Despite different vulnerabilities, **animals were found to be important to the disaster resilience of seven vulnerable groups** in Australia. Animal attachment and animal-related activities and networks are identified as underexplored devices for disseminating or ‘piggybacking’ disaster-related information and engaging vulnerable people in resilience building behaviors (in addition to including animals in disaster planning initiatives in general). Animals may provide the kind of innovative approach required to overcome the challenges in accessing and engaging vulnerable groups. As the survival of humans and animals are so often intertwined, **the benefits of increasing the resilience of vulnerable communities through animal attachment is twofold: human and animal lives can be saved together.**”
 - b. “This article critically evaluated the proposition that **animal attachment could be used to build disaster resilience [3] even for vulnerable groups**. It identified the importance of pets and other animals in the lives of vulnerable people as well as their potential contribution to disaster resilience. In particular, animal attachment and animal related activities and networks could be useful conduits for successfully accessing vulnerable people, communicating resilience building information, engaging pet and animal owners and guardians in resilience building behaviors and facilitating recovery.”
 - c. “Research and planning should therefore aspire to enable and motivate maximum disaster resilience for all members of the community—humans and nonhuman animals alike; pets and their people.”
106. [Responsibility-sharing for pets in disasters: lessons for One Health promotion arising from disaster management challenges](#) (Travers et al., 2022)
 - a. “To acknowledge the influence of people’s pets in disaster responses and recovery, we recommend five overlapping spheres of action: (i) integrate pets into disaster management practice and policy; (ii) create pet-friendly environments and related policies; (iii) engage community action in disaster management planning; (iv) develop personal skills by engaging owners in capacity building and (v) reorient health and emergency services toward a more-than-human approach.”
107. [The preparedness and evacuation behaviour of pet owners in emergencies and natural disasters](#) (Taylor et al., 2020)
 - a. “The results of this study highlight the complexity of pet composition and the requirement for detailed household evacuation planning and early enactment of plans. In addition, the



need for responsible pet ownership and pet-friendly destinations on evacuation was a clear requirement, with decisions to evacuate being influenced by this. It is hoped that the results of this study will provide a useful reference for emergency management agencies and aid planning and engagement with pet owners.”

Resources

108. [CDC/ATSDR Social Vulnerability Index \(SVI\)](#) (Agency for Toxic Substances and Disease Registry, 2022)
 - a. “Social vulnerability refers to the potential negative effects on communities caused by external stresses on human health. Such stresses include natural or human-caused disasters, or disease outbreaks. Reducing social vulnerability can decrease both human suffering and economic loss.

The CDC/ATSDR Social Vulnerability Index (CDC/ATSDR SVI) uses 16 U.S. census variables to help local officials identify communities that may need support before, during, or after disasters.”

109. [Disaster Preparedness](#) (ASPCA, n.d.)
 - a. *This resource includes practical tips for pet owners on disaster preparedness and special considerations for several different species.*

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