STATE OF IOWA DEPARTMENT OF Health and Human services

A Dog Walks into a Hospital: Infection Prevention and Control Best Practices for Animal Visitations

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Learning Objectives

- Review differences between service animals, assistance animals, animal-assisted therapies, and animal-assisted activities.
- Explain the zoonotic disease risks of animals in healthcare settings.
- Review national guidelines and best practices related to animals in healthcare settings.
- Discuss strategies to minimize infection risks in facilities during animal visits.







Pets Alleviate Stress

Owning a pet is linked to significantly lower heart rate and blood pressure in response to stress. In one study of cardiovascular reactivity to stress, those with pets had significantly lower resting baseline heart rates and blood pressure and faster recovery of these parameters to baseline after cessation of stress.¹

A national poll of older adults (50-80) conducted by the University of Michigan asked about the health benefits of pets. The majority of pet owners believed that animals connect them to other people, provide companionship, reduce stress, help them be physically active, and cope with physical and emotional symptoms, including pain. Many respondents reported that their pets positively contribute to their health and well-being. Among pet-owning respondents, 79% reported reduced stress, 73% reported a new sense of purpose, 65% reported easier connections with others, and 64% reported they are more physically active.²



Pets Fight Depression

According to a HABRI survey of family physicians, 87% said their patients' mood or outlook had improved as a result of pet ownership. Another study found that pets, through serving as a distraction from typical symptoms and encouraging activity, helped people cope with depression and other long-term mental health issues.³

Research has also demonstrated that pet owners laugh more – one study found that those with dogs or cats laughed more in their daily lives than people without pets. Pet owners reported laughing more on a daily basis, including reactions to their pet and spontaneous laughter, compared to non-pet owners.⁴







Pets Address Social Isolation & Loneliness

Pets can provide people with the kind of social support that can help reduce feelings of loneliness and isolation. A survey commissioned by HABRI and Mars Petcare⁵ found that 85% of respondents (pet owners and non-pet owners) believe pet interaction can help reduce loneliness and 76% agree human-pet interactions can help address social isolation.

A 2016 study explored the role of pets in the social networks of people managing a long-term mental health problem. The study found that pets contributed to individuals developing routines that provided emotional and social support.⁶

> In older adults, the role of pet ownership may provide a sense of purpose and meaning, reducing loneliness and increasing socialization. These benefits may also increase resilience in

older adults against mental health disorders, which may positively influence their mental health outcomes.⁷



Pets Improve Physical Fitness & Encourage Activity

Research demonstrates that owning a dog can lead to lower rates of obesity and increased weekly exercise. One study⁸ analyzed data from the 2005 Michigan Behavioral Risk Factor Survey to assess the overall impact of dog walking on the level of total walking and leisure-time physical activity, including exercise and recreational activities. Results found that dog walking was associated with a significant increase in walking activity and physical activity. Compared with non-dog owners, the odds of obtaining at least 150 minutes per week of total walking were 34% higher for dog walkers, and the odds of doing any physical activity were 69% higher.







Pets Facilitate Healing & Resiliency

Several studies have demonstrated an association between pet ownership and a lower risk of cardiovascular diseases and heart-related health issues.⁹ Dog ownership has been associated with a lower incidence of cardiovascular disease and a reduced risk of mortality.¹⁰

Pet ownership has also been linked to increased coronary artery disease survival.¹¹ In a study of individuals with one or more cardiac risk factors, pet ownership was associated with greater adaptability to disturbances in the cardiovascular system.¹² A study of 2,400 cat owners concluded there was a significantly lower relative risk for death due to cardiovascular diseases, including stroke and heart attack, compared to non-owners during a 20-year follow-up.¹³



Differences Between Service Animals, Assistance Animals, Animal-Assisted Therapies, and Animal-Assisted Activities



Service Animal Definition: Americans with Disabilities Act Title II and Title III

- Any dog that is individually trained to do work or perform tasks for the benefit of an individual with a disability, including a physical, sensory, psychiatric, intellectual, or other mental disability.
- Not considered a pet.
- Tasks performed include, but are not limited to:
 - pulling a wheelchair
 - retrieving dropped items
 - alerting a person to a sound
 - reminding a person to take medication
 - pressing an elevator button
- Single exception* to the rule: miniature horses.

Service Animal Definition: Americans with Disabilities Act Title II and Title III (cont'd.)

- Examples of dogs that fit the ADA's definition of "service animal" include, but are not limited to:
 - Guide Dog or Seeing Eye[®] Dog
 - Hearing or Signal Dog
 - Psychiatric Service Dog
 - Sensory Signal Dog or Social Signal Dog (SSigDOG)
 - Seizure Response Dog
- Recognized under Americans with Disabilities Act (ADA), Fair Housing Act (FHA), and Air Carrier Access Act (ACAA)

Service Animal Definition: Americans with Disabilities Act Title II and Title III (cont'd.)

- When it is not obvious what service an animal provides, only limited inquiries are allowed. Staff may ask two questions:
 - Is the dog a service animal required because of a disability?
 - What work or task has the dog been trained to perform?
- Staff <u>cannot ask</u> about the person's disability, require medical documentation, require a special identification card or training documentation for the dog, or ask that the dog demonstrate its ability to perform the work or task.



Assistance Animal Defined by the FHA and Section 504 of the Rehabilitation Act

- An animal that works, provides assistance, or performs tasks for the benefit of a person with a disability, or that provides emotional support that alleviates one or more identified effects of a person's disability.
 - For the purposes of the FHA, assistance animals refer to both service animals and emotional support animals.
 - Therefore, all assistance animals are NOT service animals, but all service animals are assistance animals.
- They are:
 - Not considered a pet
 - Not limited to dogs
 - Not formally trained

Animal-Assisted Therapies (AAT)

- Goal directed intervention in which an animal meeting specific criteria is included in a patient's treatment plan.
- Typically, AAT is certified through an organization offering training/certification.
 - Two examples: Pet Partners and Therapy Dogs International
- They are considered a pet.
- They are not limited to dogs, and typically are formally trained.
- AAT is documented and evaluated within an individualized treatment plan.
- Sessions generally have a fixed length.

Animal-Assisted Activities (AAA)

- Provide opportunities for motivation, education, or recreation to enhance quality of life.
- Delivered in a variety of environments by specially trained professionals, paraprofessionals, or volunteers in association with animals that meet specific criteria.
- Considered a pet
- Not limited to dogs
- No formal training
- No "goals" for each visit or set length
- Typically no detailed notes or documentation

Summary

	Legal Definition	Classified as Pets	Restricted to Dogs	Formal Training
Service Animals	Yes	No	Yes*	Yes
Assistance Animals	Yes	No	No	No
Animal-Assisted Therapies	No	Yes	No	Yes
Animal-Assisted Activities	No	Yes	No	No





How can you navigate this for your facility? Talk with your legal counsel



State-Specific Regulations

- Check with your agency that licenses healthcare facilities
 - i.e. those that send surveyors to your facility on an annual or semi-annual basis

Health Response and Licensure Health Facilities Unit

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Zoonotic Disease Risks of Animals in Healthcare Settings



Zoonotic Disease

Diseases caused by germs that spread between animals and people.

• They are common in the United States and around the world.

 Scientists estimate that more than 6 out of every 10 known infectious diseases in people can be spread from animals, and 3 out of every 4 new or emerging infectious diseases in people come from animals.

How do germs spread between animals and people?

Mitigation

 The process or result of making something less severe, dangerous, painful, harsh, or damaging

Source: Merriam-Webster



How Do Germs Spread Between Animals and People?

Direct contact:

- Coming into contact with the saliva, blood, urine, mucous, feces, or other body fluids of an infected animal. Example include petting or touching animals and bites or scratches
- Indirect contact:

Don't forget as animals as potential fomites

Coming into contact have been contaminated, with germs. Examples include aquarium tank water, pet habitats, chicken coops, barns, plants, and soil, as well as pet food and water dishes.

Vector-borne:

Being bitten by a tick, or an insect like a mosquito or a flea.

Foodborne:

 Each year, 1 in 6 Americans get sick from eating contaminated food. Eating or drinking something unsafe, such as unpasteurized (raw) milk, undercooked meat or eggs, or raw fruits and vegetables that are contaminated with feces from an infected animal. Contaminated food can cause illness in people and animals, including pets.

Waterborne:

Drinking or coming in contact with water that has been contaminated with feces from an infected animal.



Who is at a Higher Risk of Serious Illness From Zoonotic Diseases?

- Children younger than 5
- Adults older than 65
- People with weakened immune systems
- Pregnant women



Zoonotic Bacteria

Infectious Disease	Cats	Dogs	Fish	Birds	Rabbits	Reptiles*	Rodents [†]
Campylobacteriosis	+	+				+	+
Capnocytophaga canimorsus infection	+	+					
Cat scratch disease (Bartonella henselae)	+						
Leptospirosis	+						+
Mycobacteriosis			+	+			
Pasteurellosis	+	+			+		
Plague	+			+			
Psittacosis				+			
Q fever (<i>Coxiella burnetti</i>)	+						
Rat bite fever (Spirrillum minus, Streptobacillus monliformis)							+
Salmonellosis	+	+		+	+	+	+
Tularemia	+				+		+
Yersiniosis					+	+	+

* lizards, snakes, and turtles

[†] hamsters, mice, and rats

Zoonotic Viruses, Parasites, and Fungi

Infectious Virus	Cats	Dogs	Fish	Birds	Rabbits	Reptiles*	Rodents [†]
Rabies	+	+					

Infectious Parasites	Cats	Dogs	Fish	Birds	Rabbits	Reptiles*	Rodents [†]
Ancylostomiasis	+	+					
Cryptosporidiosis	+						
Giardiasis	+	+					
Toxocariasis	+	+					
Toxoplasmosis	+	+					

Infectious Fungi	Cats	Dogs	Fish	Birds	Rabbits	Reptiles*	Rodents [†]
Blastomycosis		+					
Dermatophytosis		+			+		+

* lizards, snakes, and turtles

[†] hamsters, mice, and rats



Is it possible an animal entering your facility could be carrying one of these germs?

Is it likely? Depends on the germ & animal

What can you do to make the risk as small as possible?

Talk with a veterinarian when developing your animal visitation policy



But what if my veterinarian has questions? They can speak with your state public health veterinarian .

www.nasphv.org



What Animals are At Highest Risk of Spreading a Zoonotic Infection?

- The young
- The old
- The sick
- Pregnant animals



AAHA-AVMA Preventive Healthcare Guidelines for Dogs and Cats

- Diagnostic plans:
 - Including internal parasite testing
- Therapeutic plans:
 - Including year-round broad-spectrum parasite control
- Prevention plans:
 - Including core vaccinations
- Follow-up plans:
 - To stay up-to-date
- Documentation



Quantifiable Risks?

- Not validated in controlled research but therapy animals can harbor healthcare-associated pathogens
 - Asymptomatic carriage of MRSA, Clostridioides difficile, Salmonella, Pasteurella
- Infection Prevention and Control policies regarding animal visitation vary widely
 - From no policy to a robust policy
- Lack of effective educational campaigns (for both healthcare staff and animal handlers)

Other Risks

- Bites
- Scratches
- Human allergies





Review National Guidelines and Best Practices Related to Animals in Healthcare Settings

Discuss Strategies to Minimize Infection Risks in Facilities During Animal Visits

APIC Guidance

Healthcare facilities must establish animal and handler guidelines and program-specific infection prevention policies to provide a safe environment for animals, handlers, and patients. Healthcare providers need to understand and abide by the laws for service animals and persons with disabilities.

- Highlights:
 - Records of the animal's health must be up to date.
 - Animal must never be left alone with a patient.
 - Animals must be free of any skin condition or wounds.
 - Ask patients if they want to interact with the animal or have allergies or phobias to animals.

Source: 2014 APIC Text



APIC Guidance (cont'd.)

Highlights:

- Exclude patients with allergies to animals; open wounds or burns; open tracheotomy; immunosuppression (as defined in the facility AAA/AAT program); agitation or aggression; or Transmission Precautions or isolation of any kind; or exclude others for reasons as defined by facility-specific patient populations or infection risks.
- Exclude patients who are infected with tuberculosis, Salmonella, Campylobacter, Shigella, Streptococcus A, MRSA, ringworm, Giardia, and amebiasis.

CDC Guidance

- Highlights:
 - Allowing young animals (i.e., those aged <1 year) is not encouraged because of issues regarding unpredictable behavior and elimination control.
 - Animals should be clean and well-groomed.
 - Animals should be free of ectoparasites (e.g., fleas and ticks).
 - Animals should have no sutures, open wounds, or obvious dermatologic lesions that could be associated with bacterial, fungal, or viral infections or parasitic infestations.



SHEA Expert Guidance

- Guidance Highlights (Animal-Assisted Activities and Therapies)
 - Facilities should develop a written policy.
 - All clinical staff should be educated about the animal-assisted activities program, its governance, and its policies.
 - Ensure that animal-assisted activities handlers have been informed of the facility's IPC and human resource policies (similar to volunteers) and have signed an agreement to comply with these policies.
 - The IP should be consulted regarding which locations are appropriate for animals interacting with patients.
 - Only dogs should be used (i.e., exclude cats and other animals).
 - Cats should be excluded because they cannot be trained to reliably provide safe interactions with patients in the healthcare setting.



SHEA Expert Guidance (cont'd)

- Guidance Highlights (Animal-Assisted Activities and Therapies)
 - Instruct the animal-assisted activities handler to restrict contact of his/her animal to the patient(s) being visited and to avoid casual contact of the animal with other patients, staff, or the public.
 - A visit liaison should be designated to provide support and facilitate animal-assisted activities visits.
 - Limit visits to one animal per handler.
 - Restrict visiting sessions to a maximum of one hour to reduce the risk of adverse events associated with animal fatigue.
 - Require that all animal handlers observe standard occupational health practices.



SHEA Expert Guidance (cont'd)

- Guidance Highlights (Animal-Assisted Activities and Therapies)
 - Allow only adult dogs (i.e., dogs of at least 1 year but ideally at least 2 years of age, the age of social maturity).
 - Deny entry of dogs directly from an animal shelter or similar facility.
 - Require that dogs be in a permanent home for at least 6 months prior to enrolling in the program.
 - Require that every dog pass a temperament evaluation specifically designed to evaluate it under conditions that might be encountered when in the healthcare facility.
 - Require that every animal receive a health evaluation by a licensed veterinarian at least once (optimally, twice) per year.
 - Defer to the animal's veterinarian regarding an appropriate flea, tick, and enteric parasite control program, which should be designed to take into account the risks of the animal acquiring these parasites specific to its geographic location and living conditions.
 - Routine screening for specific, potentially zoonotic microorganisms, including group A streptococci, *Clostridium difficile*, VRE, and MRSA, is not recommended.



SHEA Expert Guidance (cont'd)

- Guidance Highlights (Animal-Assisted Activities and Therapies)
 - Exclude any animal that has been fed within the past 90 days any raw or dehydrated (but otherwise raw) foods, chews, or treats of animal origin, excluding those that are high-pressure pasteurized or γ irradiated.
 - Obtain oral or written consent from the patient or his/her agent for the visit and preferably from the attending physician as well. Consider documenting consent in the patient's medical record.
 - Practice routine cleaning and disinfection of environmental surfaces after visits. Clean and disinfect all areas (e.g., floors, chairs) with an EPA-registered hospital disinfectant.

Source: 2015, Animals in Healthcare Facilities: Recommendations to Minimize Potential Risks



National Association of Public Health Veterinarians: Animals in Public Settings

- Direct transmission of enteric pathogens from animals to people:
 - Animals carrying enteric pathogens (bacteria) frequently have no signs of illness but can still shed the organisms in feces.
 - Fecal-oral route
 - Because animal fur, hair, feathers, scales, skin, and saliva harbor fecal organisms, transmission can occur when people pet, touch, kiss, hold, feed, or are licked by animals and bacteria are ingested.
 - Removing ill animals, especially those with diarrhea, from public contact is necessary, but this step alone is not sufficient to protect the health of people and other animals



National Association of Public Health Veterinarians: Animals in Public Settings (cont'd)

Screening for enteric bacteria:

- Screening tests are available for some enteric pathogens; however, the interpretation of test results can be problematic. Shedding can be intermittent, and negative results do not indicate an animal was not shedding an organism at an earlier time or will not start shedding in the near future. There is no established guidance for management of animals with positive test results, and inappropriate interpretation might lead to unnecessary treatments, quarantine, or euthanasia.
- Antimicrobial treatment cannot reliably eliminate infection or prevent shedding, and it does not protect against reinfection. Antimicrobial use in animals can also prolong shedding and contribute to antimicrobial resistance.

Source: 2023, Compendium of Measures to Prevent Disease Associated with Animals in Public Settings



Can an animal walking into a healthcare facility be carrying an MDRO?

Can a patient's family member visiting them be carrying an MDRO?

Can anyone walking into a healthcare facility be carrying an MDRO?



Yes

Hand Hygiene:

- Best way to prevent the spread of zoonotic diseases in healthcare settings
- Required before and after contact for everyone who wishes to touch the animal



Image Source: Washington State Department of Health



Communication:

- Hand hygiene reminders
- Signage an animal is in your facility

AUTHORIZED ANIMAL IN ROOM

Questions? Ask at Nurse's Station

Image Source:Vanderbilt University Medical Center



Allergies

- The American Academy of Allergy, Asthma, and Immunology estimates that dog or cat allergies occur in approximately 15% of the population.
- Hair shedding can be minimized by processes that remove dead hair (e.g., grooming) and that prevent the shedding of dead hair (e.g., therapy capes for dogs).
- Allergens can be minimized by bathing therapy animals within 24 hours of a visit.



Safety

Phobias

Physical

- Bites
- Scratches

Source: 2015, CDC Animals in Health-Care Facilities



Considerations for animals not covered in today's webinar

- Personal Pets
- Petting Zoos
 - Not recommend at healthcare facilities
 - However, if hosting one, follow NASPHV guidance
 - Make sure you have the appropriate permits/licenses
 - <u>https://www.aphis.usda.gov/aphis/ourfocus/animalwelfare/apply/licensing-and-registration-application-packets</u>
 - Zoonotic disease risk greater with livestock

Source: 2023, Compendium of Measures to Prevent Disease Associated with Animals in Public Settings

Zoonotic Bacteria

Infectious Disease	Cats	Dogs	Fish	Birds	Rabbits	Reptiles*	Rodents [†]
Campylobacteriosis						+	+
Capnocytophaga canimorsus infection	+	+					
Cat scratch disease (Bartonella henselae)	+						
Leptospirosis							+
Mycobacteriosis			+	+			
Pasteurellosis	+	+			+		
Plague	+			+			
Psittacosis				+			
Q fever (<i>Coxiella burnetti</i>)							
Rat bite fever (Spirrillum minus, Streptobacillus monliformis)							+
Salmonellosis				+	+	+	+
Tularemia	+				+		+
Yersiniosis					+	+	+

* lizards, snakes, and turtles

[†] hamsters, mice, and rats

Zoonotic Viruses, Parasites, and Fungi

Infectious Virus	Cats	Dogs	Fish	Birds	Rabbits	Reptiles*	Rodents [†]
Rabies	+	+					

Infectious Parasites	Cats	Dogs	Fish	Birds	Rabbits	Reptiles*	Rodents [†]
Ancylostomiasis	+	+					
Cryptosporidiosis							
Giardiasis							
Toxocariasis	+	+					
Toxoplasmosis	+	+					

Infectious Fungi	Cats	Dogs	Fish	Birds	Rabbits	Reptiles*	Rodents [†]
Blastomycosis		+					
Dermatophytosis					+		+

* lizards, snakes, and turtles

[†] hamsters, mice, and rats



Key Takeaways

- Animal interactions can provide health benefits to people.
- Mitigation is risk reduction, not elimination.
- Have a written policy
- Hand hygiene! Hand hygiene! Hand hygiene!
- Consult with both legal and veterinary experts
 Set minimum health standards for animals
- Don't forget where legal definitions do and do not apply
 - <u>ADA Service Animal FAQ</u> is a good place to start.
- Guidance is guidance and NOT a regulatory requirement.

Personal pets are different than the four types of animals discussed today.



Questions?



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