Animals in the (Human) Hospital: Infection Control Considerations

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Acknowledgment

Dr. David J. Weber for sharing his original slides on this topic. His slides were the basis for my presentation to you today.

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Learning Objectives

- Discuss potential clinical benefits, and infectious and non-infectious risks, of human-animal interactions in healthcare settings.
- Evaluate scenarios involving animal-assisted activities or therapies, service animals, and personal pets in healthcare settings using existing infection control guidelines and best practices.
- Formulate a risk-mitigation strategy for human-animal interactions in a healthcare facility.

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Companion Animals in U.S. Households

- Approximately 71% of households own a pet (94 million households)*
- In 2024, the percentage of households owning at least one**…
  - Dog: 46%
  - Cat: 32%
  - Bird: 2%
  - Horse: <1%
- Dog and cat ownership continues to increase

*American Pet Products Association, Industry Trends and Stats (2025)
**American Veterinary Medical Association. U.S. Pet Ownership & Demographics Sourcebook (2024)

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Total U.S. Pet Industry Expenditures are Increasing

- 2024: >$151 billion
  - Pet food and treats, >$65 billion
  - Supplies, live animals, and over-the-counter (OTC) medications, >$33 billion
  - Veterinary care and product sales, >$39 billion
  - Other services, $13 billion
- 2023: $147 billion
- 2022: >$136 billion

American Pet Products Association, Industry Trends and Stats (2024)

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The Human Animal Bond – A Brief History

- For millennia, humans have coexisted with companion animals
- Animals have held practical roles which have sometimes led to deep human-animal emotional connections

Hunting
(Flickr)

Pest control
(Flickr)

Transportation
(U.S. Library of Congress)

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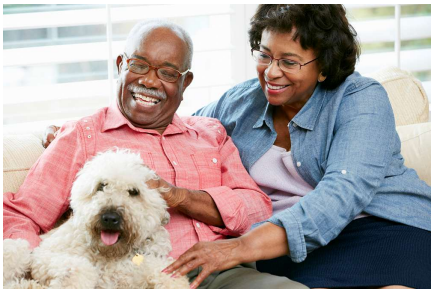
Common Roles of Companion Animals Today

Dog
- Companion
- Working, for example:
  - Herding
  - Guarding
- Service dog
- Animal-assisted activities (e.g., therapy)

Cat
- Companion
- Working (e.g., pest control)
- Animal-assisted activities (e.g., therapy)



People with their pet. *(CDC)*

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Therapeutic Value of Animal Contact: A Historical Perspective

Among the earliest medical references of potential therapeutic value…

"*A small pet animal is often an excellent companion for the sick, for long chronic cases especially. A pet bird in a cage is sometimes the only pleasure of an invalid confined for years to the same room. If he can feed and clean the animal himself, he ought always to be encouraged to do so.*"

Nightingale, Florence. 1859.
Notes on Nursing: What It Is, and What It Is Not.

Florence Nightingale Wellcome
(Wellcome Library, London)

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Benefits of Human-Animal Interaction

- Relatively young field of research (past ~40 years)
- Can be difficult to measure outcomes
- Human health benefits have been documented
  - Reduced
    - Stress
    - Depression
    - Systemic blood pressure
    - Cardiovascular disease risk
  - Improved
    - Psychological and physical well-being
    - Lipid profiles

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Ways that People and Animals Interact in Healthcare Settings

- Animal-assisted Activities
  - Pet therapy
  - Animal-assisted therapy
  - Other animal-assisted activities
- Service Animals: As defined under the Americans with Disabilities Act (ADA)
- Personal Pet Visitation: Personal pet of a patient interacts with that individual patient
- Animals in Research: As approved by the facility's Institutional Animal Care and Use Committee (IACUC)
- Other
  - Aquariums
  - Medicinal leeches and maggots

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SHEA EXPERT GUIDANCE

Animals in Healthcare Facilities: Recommendations to Minimize Potential Risks

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"*This document is intended to help acute care hospitals and ambulatory care facilities develop or modify policies related to animals based on their role…*" (i.e., animal assisted activities, service, research, personal pet).

Murthy, R., Bearman, G., Brown, S., Bryant, K., Chinn, R., Hewlett, A., . . . Weber, D. (2015). Animals in Healthcare Facilities: Recommendations to Minimize Potential Risks. Infection Control & Hospital Epidemiology, 36(5), 495-516. doi:10.1017/ice.2015.

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Diseases, Conditions, and Injuries Can Occur from Interactions with Dogs

- Trauma from bites and scratches
- Allergies
- Tick paralysis (animal passively carries ticks)
- Infestations (e.g., ticks, fleas, etc.)
- Infections

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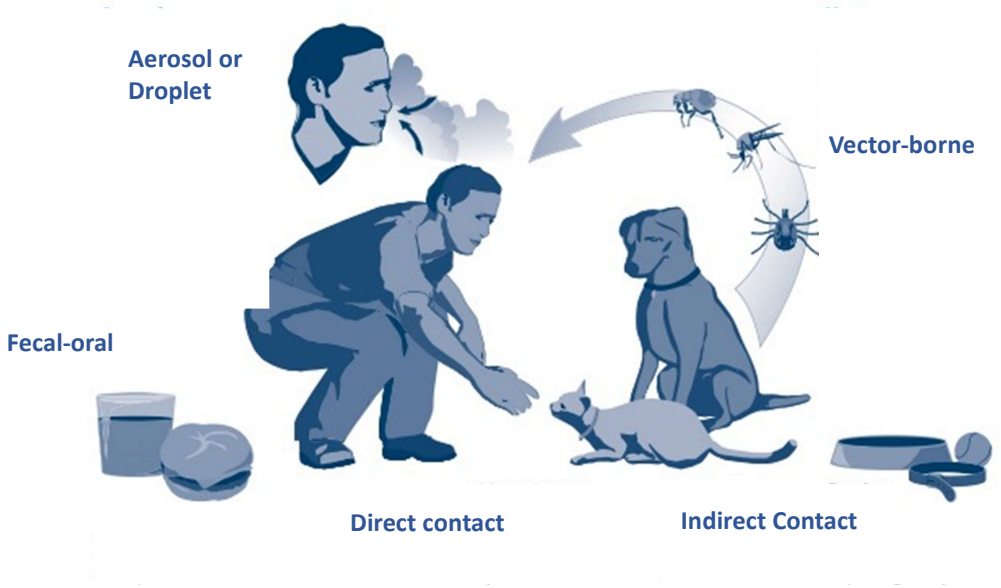
Zoonotic Disease Transmission



the Center for Food Security & Public Health
Iowa State University

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Select Diseases Transmitted by Dogs

Transmission Route	Select Diseases / Organisms	
Direct contact (bites)	Rabies *Capnocytophaga canimorsus* *Pasteurella* spp. (*P. canis* most common)	*Staphylococcus aureus** *Streptococcus* spp. *Clostridium tetani* *Sporothrix schenckii*
Direct or indirect contact	Flea bites (*Clenocephalides canis*) Mites (*Cheyletiellidae, Sarcoptidae*) *Staphylococcus aureus**	*Malassezia pachydermatis* *Microsporum canis* *Trichophyton mentagrophytes*
Fecal-oral	*Campylobacter* spp. *Salmonella* spp. *Giardia duodenalis* *Cryptosporidium* spp. *Brucella canis*	*Strongloides stercoralis* *Ancylostoma ceylanicum* (hookworm) *Toxocara canis* (visceral larva migrans) *Taenia multiceps* *Yersinia enterocolitica*
Droplet	*Chlamydophila psittaci*	*Mycobacterium tuberculosis* (rare)
Vector-borne	Ticks (dogs passively carry ticks to humans) ▪ *Rickettsia ricksettsii* ▪ *Ehrlichia* spp.	Fleas ▪ *Dipylidium caninum* ▪ *Bartonella henselae*

*Including methicillin-resistant strains

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Zoonotic Pathogens and Reported Outbreaks in Healthcare Facilities (HCFs)

Author	Methodology	Findings
Lebebvre, 2006	**Healthy visitation dogs** (n=102) assessed for presence of zoonotic pathogens.	Zoonotic agents isolated from 80% of animals including: toxigenic *C. difficile* (40.1%), *Salmonella* spp. (3%), extended spectrum beta-lactamase or cephaloporinase *E. coli* (4%), *Pasteurella* spp. (29%), *Malassezia pachydermatis* (8%), *Toxocara canis* (2%), and *Ancylostoma caninum* (2%).
Scott, 1988	Epidemic of methicillin-resistant *S. aureus* (MRSA) on a **rehabilitation geriatric ward**	Paws and fur of a cat that roamed the ward were heavily colonized by MRSA. The cat was a possible vector for MRSA transmission.
Lyons, 1980	Outbreak of *Salmonella* Heidelberg in a hospital **nursery**	Outbreak traced to infected calves on a dairy farm where the mother of the index patient lived
Chang, 1998	An evaluation of a large outbreak of *Malassezia pachydermatis* in an **intensive care nursery**	Isolates from all 15 case patients, 9 additional colonized infants, 1 healthcare worker (HCW), and 3 pet dogs owned by HCW had identical patterns of restriction fragment length polymorphisms.
Mossovitch, 1996, Snider 1993	Multiple nosocomial outbreaks of *Microsporum canis* (ringworm) in **newborn nurseries or neonatal intensive care units**	Person-to-person transmission described; In neonatal intensive care unit outbreak, infection source (nurse) likely infected from her pet cat

Murthy, R. et al.. (2015). Animals in Healthcare Facilities: Recommendations to Minimize Potential Risks.

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Zoonotic disease outbreaks in HCFs are uncommon.

- Relatively limited presence of animals in HCFs
- Immunocompetency of patients involved in the encounters

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Animals as Carriers of Methicillin-Resistant *Staphylococcus aureus* (MRSA)

- MRSA colonized ward cat linked to outbreak in rehabilitation geriatric ward (Scott GM, et al. J Hosp Infect 1988;12:29)
- Household with MRSA colonized patient: 13.6% of households with pet had a colonized animal, 2/3 strains genetically linked (Morris D, et al. Zoonoses Pub Health 2012, epub)
- MRSA colonized human – companion animal colonized in 8.2% - concordent pulsed-field gel electrophoresis (PFGE) pattern in 75% (Ferreira JP, et al. PLoS One 2011;6:e26978)
- German turkey workers (37.3%) positive for MRSA (Richter A, et al. Epidemiol Infect 2012;epub)
- Spanish pigs colonized 85.7% - pig workers positive 9.3% - all isolates multilocus sequence type (MLST) 398 (Morcillo A, et al. Foodborne Pathogen Dis 2012;9:207)
- MRSA found in 1.2% of retail meat in Iowa (Hanson BM, et al. J Infect Pub Health 2011;4:169)

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Animals and COVID-19

- No evidence that animals play a significant role in spreading SARS-CoV-2 to people
- Most animals with SARS-CoV-2 became infected after close contact with people with COVID-19
  - People with suspected or confirmed COVID-19 should avoid contact with animals
  - Additional research and surveillance data are needed to better characterize how SARS-CoV-2 is spread between people and animals

CDC. What You Should Know about COVID-19 and Pets (updated May 2024)

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Animals and Mpox

- No pets or other animals were confirmed to have mpox during the global mpox outbreak that began in 2022
- People with mpox could possibly spread the virus to pets through close contact:
  - Petting, cuddling, hugging, kissing, licking
  - Sharing sleeping areas
  - Sharing food
- People with mpox should avoid contact with animals

CDC. Mpox in Animals and Pets. Updated September 2024

Animals and Carbapenem-resistant Enterobacterales (CRE)

- Pets can be colonized or infected with CRE
- Little is known about how CRE and CP-CRE spread in veterinary settings, but this spread has been documented
- Regardless of their risk, all owners of CRE-colonized or infected animals should be advised to protect themselves

CDC. Carbapenem-resistant Enterobacterales and Animals Basics. Updated April 2024

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Animals in Healthcare Settings

- Role of animals in zoonotic pathogen transmission and human pathogen cross-transmission in healthcare settings is not well-studied
- Priority should be placed on:
  - Patient and healthcare personnel (HCP) safety
  - Use of standard infection prevention and control (IPC) measures to prevent animal-to-human transmission

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TABLE 8. Summary of Animals in Healthcare Classification and Selected Recommendations

	Animal-Assisted Activities	Service[a]	Research	Personal Pet
Program				
Written policy recommended	Yes	Yes	Yes	Yes
Federal legal protection	No	Yes	No	No
Animal visit liaison	Yes	No	IACUC	Yes
Infection prevention and control notification of animal visit/session	Yes	Yes	Yes	Yes
Infection prevention and control consultation for restricted areas	Yes	Yes	Yes	Yes
Visit supervised	Yes	No	Yes	Yes
Visit predetermined	Yes	No	Yes	Yes
Animal and handler/owner performs trained tasks	See text	Yes	N/A	No
Specially trained handler	Yes	Yes	Yes	No
Health screening of animals and handlers	Yes	N/A	N/A	No
Documentation of formal training	Yes	No	N/A	No
Animal can be a pet	Yes	No	No	Yes
Animal serves solely for comfort or emotional support	See text	No	N/A	Yes
Identification with ID tag	Yes	Not required	N/A	Yes/No
Animal required to be housebroken	Yes	Yes	N/A	Yes
Permitted animals				
Dogs	Yes	Yes	N/A	Yes
Other animals	See text	See text	N/A	See text

NOTE. IACUC, Institutional Animal Care and Use Committee.
[a]Policy to reflect ADA and regulatory compliance. Inquiries limited by ADA to tasks performed for patient.

Murthy, R. et al.. (2015). Animals in Healthcare Facilities: Recommendations to Minimize Potential Risks.

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People and Animals Interact in Healthcare Settings in Different Ways

- Animal-assisted Activities
  - Pet therapy
  - Animal-assisted therapy
  - Other animal-assisted activities
- Service Animals: As defined under the Americans with Disabilities Act (ADA)
- Personal Pet Visitation: Personal pet of a patient interacts with that individual patient
- Animals in Research: As approved by the facility's Institutional Animal Care and Use Committee (IACUC)
- Other
  - Aquariums
  - Medicinal leeches and maggots

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Animal-Assisted Activities (AAA)

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AAA: Background and Definitions

- Includes hospital visitation programs using specially-trained animals and their handlers (i.e., “pet therapy”)
  - Recreational and social purposes, or
  - Goal-directed interventions
- Goals vary by type
  - Animal-assisted therapy (AAT): Animals are part of specific treatment program
  - Animal-assisted education (AAE): Goal directed interventions to promote patient cognitive function improvement

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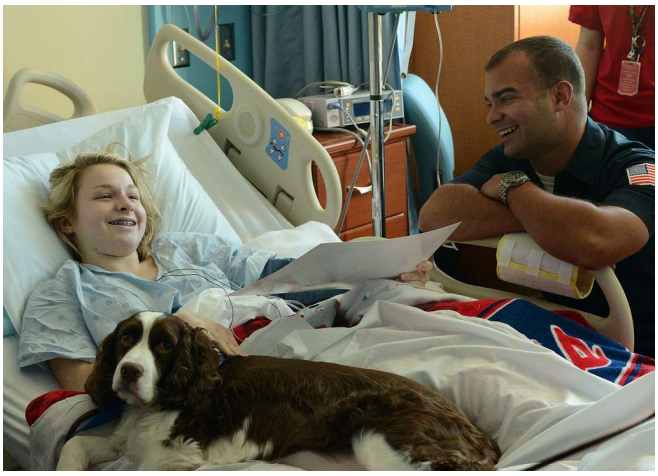
Published Studies Demonstrating Benefits of AAA

- Benefits include:
  - Improved psychological health
  - Improved pain management
  - Lower blood pressure
- Most studies are not scientifically rigorous but provide evidence of beneficial impacts on patients.



AAA visit in the hospital
(U.S. Navy)

General Recommendations for HCFs

- Maintain a written AAA policy
- Designate an AAA visit liaison
- Allow only dogs for AAA
- Ensure AAA program animals and their handlers are:
  - Formally trained and evaluated (with documentation)
  - Screened before acceptance
- Facilitate consultation with IPC staff on suitable facility locations and patient populations
- Provide clinical staff with education on the AAA program

AAA Handler Management (Training and Policies): Recommendations for HCFs

- Require handlers to review and sign an agreement to comply with IPC and human resources policies
- Offer all HCP-recommended immunizations to handlers
- Require handlers to participate in (and provide certificate confirming) formal training
  - Standard precautions
  - Zoonotic diseases
  - Disposal of animal waste
  - Cleaning of contaminated surfaces
- Require handlers to observe standard occupational health practices
  - Self-screen for communicable disease symptoms (e.g., cough, fever, diarrhea, conjunctivitis, rash)
  - Refrain from providing AAA services while ill

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Visit Session Logistics: AAA Handler Requirements

- Escort their dog to designated destination(s), as arranged by AAA liaison and following HCF policy
- Restrict contact with their dog to the patient(s) being visited (i.e., avoid casual contact with other patients, staff, the public)
- Maintain control of their dog while on the premises (e.g., keep dog leashed, avoid cell phone use)
- Manage their visits by:
  - Approaching patients from the side free of invasive devices
  - Ensuring everyone practices good hand hygiene (before and after animal contact)
  - Prohibiting patients from eating or drinking during animal interaction
  - Reporting inappropriate patient behavior
- Maintain an AAA visit log for potential contact tracing (rooms, persons visited)
- Limit visits to one dog per handler
- Restrict sessions to a maximum of 1 hour

Acceptable Animals

- Require dogs to pass a temperament evaluation
  - Performed by a designated evaluator under conditions that might be encountered in the HCF
  - Evaluators at HCFs and formal certification programs must have:
    - Completed an evaluating temperament course or certification process
    - Experience in assessing animal behavior and level of training
- Recommend observation by an AAA program liaison at least once in a healthcare setting before approval to visit
- Require reevaluation
  - At least every 3 years
  - Before returning after an absence of >3 months
  - When the dog is misbehaving (suspend visits until reevaluation)

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Health of AAA Animals

- Exclude animals with known or suspected communicable diseases or other concerning medical conditions
  - Including vomiting or diarrhea; urinary / fecal incontinence; sneezing / coughing of unknown or suspected infectious origin; ectoparasite infestation; open wounds
  - Until clinically normal or condition is managed
    - Veterinarian determines that there is no increased risk to patients
    - Written documentation of veterinary health clearance is received
- Exclude animals demonstrating signs of heat (estrus) during that time

Required Health Screening of AAA Animals

- Dogs must be vaccinated against rabies*
- Animals must have a health evaluation by a licensed veterinarian at least once (optimally, twice) per year
- Routine screening for specific potentially zoonotic microorganisms (e.g., group A *Streptococcus*, *Clostridioides difficile*, vancomycin-resistant *Enterococci* (VRE), MRSA) is not recommended

*As dictated by local laws and vaccine label recommendations. Serologic testing for rabies is not recommended.

Veterinarian performing a physical exam
(CDC)

Handler Requirements Before Each AAA Visit

- Brush / comb the animal
- Ensure the animal's nails are short with no sharp edges
- Bathe the dog (if malodorous or visibly soiled) with a mild unscented hypoallergenic shampoo and allow the coat to dry
- Visually inspect the animal for fleas and ticks
- Clean the animal’s carrier
- Ensure that all leashes, harnesses, and collars are visibly clean and odor-free

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Handler Requirements During AAA Visits

- Use non-retractable 4-to-6-foot leashes (no choke collars)
- Identify their dog as belonging to an AAA program (e.g., clean scarf, collar, harness, leash, tag, etc. readily recognizable by staff)
- Allow the dog to urinate / defecate immediately before entering facility (and perform hand hygiene immediately after)

HCF Requirements for Managing Patient-Animal Contact

- Obtain oral or written consent for the visit (and consider documenting in the medical record) from:
  - Patient (or their agent)
  - Attending physician (ideally)
- Restrict animals from: ICU, isolation rooms, nurseries, areas with immunocompromised patients, ORs, pharmacy, sterile services, food preparation areas
- Ensure that the handler…
  - Notifies caregiver (e.g., nurse, physician) of the animal visit
  - Obtains oral permission from individuals in the room (or their agents) before entering
  - Prevents the animal from contacting sites of invasive devices, open or bandaged wounds, surgical incisions, non-intact skin, and medical devices
  - Discourages patients and HCP from shaking the animal's paw
  - Prevents the animal from licking patients and HCP
  - Prohibits HCP from feeding the animal treats

Other AAA Management Considerations

- Contact tracing
  - Develop a system that requires animal handlers to sign in when visiting
  - Capture a permanent record of areas and rooms where patient-animal interactions have occurred
- Environmental cleaning
  - Practice routine cleaning and disinfection of environmental surfaces after visits

Service Animals

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Background: The Americans with Disabilities Act (ADA)

- U.S. Federal law originally passed in 1990
- Defines disability as “A physical or mental impairment that substantially limits one or more major life activities; a record of such impairment; or, being regarded as having such an impairment”
- Defines service animals as “Dogs* that are individually trained to do work or perform tasks for people with disabilities”

Service dog
(U.S. federal government)

*Exception for miniature horses that are housebroken and do not create safety issues

ADA.gov – Service Animals

Service Animals

Service animals are:

- Dogs
- Any breed and any size of dog
- Trained to perform a task directly related to a person's disability

Service animals are not:

- Required to be certified or go through a professional training program
- Required to wear a vest or other ID that indicates they're a service dog*
- Emotional support or comfort dogs, because providing emotional support or comfort is not a task related to a person's disability

*Can request but not require

ADA.gov – Service Animals

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Examples of Service Animal Tasks

- A person who uses a wheelchair has a dog that is trained to retrieve objects for them.
- A person with depression has a dog that is trained to perform a task to remind them to take their medication.
- A person with PTSD has a dog that is trained to lick their hand to alert them to an oncoming panic attack.
- A person who has epilepsy has a dog that is trained to detect the onset of a seizure and then help the person remain safe during the seizure.

ADA.gov – Service Animals

Service Animals versus Emotional Support Animals Under the ADA

- If the dog's mere presence provides comfort, it is not a service animal
- If the dog is trained to perform a task related to a person's disability, it is a service animal.

Example:

A dog has been trained to sense that an anxiety attack is imminent and to take a specific action to help avoid the attack or lessen its impact.

This is a service animal.

ADA.gov – Service Animals

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Service Animals

Asking if a Dog is a Service Animal

You may ask:

- ✓ Is the dog a service animal required because of a disability?
- ✓ What work or task has the dog been trained to perform?

You are *not* allowed to:

- ✗ Request any documentation that the dog is registered, licensed, or certified as a service animal
- ✗ Require that the dog demonstrate its task, or inquire about the nature of the person's disability

ADA.gov – Service Animals

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Service Animals

State and Local Governments and ADA

State/local governments can:

- Require service dogs to be licensed and vaccinated, if all dogs are required to be licensed and vaccinated
- Offer *voluntary* service dog registration programs

State/local governments can't:

- Require certification or registration of service dogs
- Ban a service dog based on its breed

ADA.gov – Service Animals

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Developing a Policy for Service Animals at HCFs

- Must be compliant with ADA and state and local regulations
- Should include these statements:
  - ADA-consistent definition of “Service Animals” (i.e., only dogs, miniature horses)
  - Service animals are not pets (should not be approached, bothered, petted)
  - Service animals must be housebroken
  - List of locations where service animals are prohibited (with justification)
  - Patient / designated visitor (not the HCF) is responsible for service animal care and ensuring the animal’s health
  - Visiting / residing in a HCF can increase an animal’s risk of acquiring certain pathogens
  - HCF assumes no liability for costs associated with a healthcare-associated infection in the service animal

Service Animals

HCF Policy for Service Animals that Accompany a Visitor to a Patient's Room

Persons with disabilities and accompanied by service animals can visit patients

- Adhere to the HCF's service animal policy and "visiting hours and regulations"
- Check in with the patient's primary care nurse before visiting
- Verify that no patients in the room have animal allergies or other significant medical risks from animal exposure or are fearful of the animal (and make other visiting arrangements if so)
- Must not allow service animals to visit other patient rooms, dining rooms, or public areas of the HCF unless accompanied by the person with a disability

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Service Animals

HCF Policy for Service Animals Belonging to Patients

- IPC should be notified when patients with service animals are admitted
- Patient must arrange to have the service animal fed, exercised, and toileted, without HCP involvement
- For patients assigned to a semi-private room, the roommate must be screened for clinically significant allergies to the service animal
  - If present, the patient with the disability or patient with animal allergies must be moved
  - Similarly, the patient or roommate must be moved if the roommate is fearful or otherwise disturbed by the presence of the animal

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HCF Policy for Miniature Horses as Service Animals

Miniature service horse
(The Guide Horse Foundation)

Miniature horses

- Can be trained to do work or perform tasks for persons with a disability
- Are ~24-34 inches tall (to the shoulders) and 70-100 pounds

When assessing whether a miniature horse should be permitted in the HCF, consider:

- Is it housebroken?
- Is under the owner's control?
- Can the HCF accommodate its type, size, and weight?
- Will its presence compromise legitimate safety requirements necessary for safe operations?
- Who is assigned to enforce the policy (e.g., Legal)?

When Might a Service Animal Be Excluded?

- Exhibits aggressive behavior (e.g., snarling, biting, scratching)
- Is excessively noisy (e.g., howling, crying, whining)
- Cannot contain bodily excretions (e.g., not housebroken, vomiting, has diarrhea)
- Is reasonably suspected of being infectious or ill
  - Until evaluation by a veterinarian, and
  - Written certification by the veterinarian that the animal does not pose an increased risk to patients or HCP

Legal counsel should be consulted prior to exclusion of a service animal from an HCF.

Personal Pet Visitation

Admittance of Pet Animals to HCFs

- Personal pet:
  - Domestic animal owned by an individual patient
  - Not a service animal; not an animal used for AAA
- Generally, pets (of patients, visitors, and HCP) should be prohibited
- Exceptions might occur under certain situations if risks can be limited
  - Terminally ill patient
  - Patient with prolonged hospitalization
  - Healthcare team suspects that visitation could improve the patient's physical or mental health

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Pet Visitation Poses Higher Risk than AAA
(or Similarly Structured Activities)

- Pets are:
  - Not screened for behavior or health
  - Might interact with HCP, other patients, and visitors
- No special training requirements for owners/handlers

Personal Pet Visitation

Generally, Personal Pet Visitation Should Not be Permitted for Patients…

- On contact or droplet isolation
- In an ICU
- Whose cognitive status could prohibit safe interact with the pet (unless patient will only see the animal)
- Who have undergone recent solid organ or stem cell transplant
- Who are significantly immunocompromised

Exclusions might be reconsidered by IPC and HCP based on risk to the patient, others in the HCF, or patient's household, and the anticipated benefits to the patient.

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Personal Pet Visitation: Recommendations for HCFs

- Maintain a written policy and designate a person to oversee the program
- Ensure that approvals are obtained and documented in the medical record
  - IPC
  - Patient's attending physician and nurse
- Restrict visitation to housebroken dogs
  - Ideally, at least 1 year of age
  - While considering the patient's health, mental status, and prognosis, and other animal-related factors
- Identify an ideal site for the visit – preferably outdoors, or a private room

Personal Pet Visitation

Provision of Information to Animal's Owner/Guardian: HCF Responsibilities

- Approved date, time, and location of visitation
- Maximum duration of visit (1 hour)
- Pre-visitation requirements of the owner/guardian
- Responsibilities during the visit
  - Prevent the pet from contacting other individuals
  - Promptly clean up fecal or urine accidents
  - Supervise the visitation process
  - Report any events (e.g., bite, scratch) to HCP

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Research Animals

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Background

- Clinical facilities can be requested for research animal use (e.g., CT, MRI)
- Zoos or other veterinary facilities might request use of HCFs to diagnose or treat animals
- Animals can be reservoirs or vehicles for infectious pathogens
- HCF policies and procedures should ensure patient and public safety while enabling safe, effective, and efficient evaluation and treatment of animals.

Before a Research Animal is Evaluated in a HCF…

- Principal investigator submits detailed protocol
  - When and where the procedure may be performed
  - What personnel will be involved
  - What personal protective equipment is required
  - What cleaning and disinfection practices will be required
  - What route(s) will be used to transport animals to and from the clinical area
  - Who is responsible for transporting the animal to the procedure area
  - Who is responsible for care and maintenance of the animal
- Reviewed and approved by the facility's responsible individuals or committees (e.g., IACUC)

Veterinary Procedures and Animal Transport

- Whenever possible, animals should be treated in facilities specialized for animal care
- Expense of specialized equipment could preclude use solely for animals
- Transport and care of zoo animals that are venomous (e.g., venomous snakes), large (e.g., elephant), or carnivores (e.g., tigers, lions) should receive special attention
- Zoo animals must be accompanied by trained staff and always contained
- Contact of animals with HCP who are not affiliated with the research or clinical activity should be prohibited

Other Human-Animal Interactions in HCFs

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Other

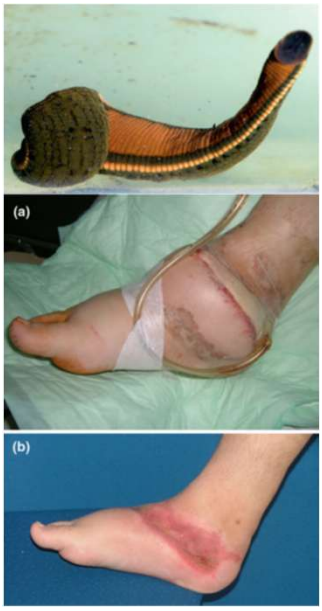
Medicinal Leeches and Maggots

Leeches

- Purchase from medical supply vendor
- Maintain in pharmacy
- Discard as regulated medical waste
- Consider decolonizing (i.e., eliminate *Aeromonas* carriage) by feeding them on an appropriate antibiotic or prophylactically treating the patient

Maggots

- Purchase and only appropriate decolonized flies or fly larvae
- Used maggots should be handled as biohazardous waste



Leech and *Aeromonas hydrophila* infection following use of medicinal leeches

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Other

Aquariums and Fish Tanks Should Not Be Allowed In Hospitals

Fish in a fish tank
(GetArchive)

- Risk of infection from fish tank maintenance
- Possible aerosol transmission of *Legionella* spp.

If a HCF does have aquariums or fish tanks, these items…

- Should *not* be:
  - In clinical areas, or
  - In areas with immunocompromised patients
- Should be:
  - Covered and inaccessible to patients
  - Maintained by a professional according to established protocols

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Other

Farm and Zoo Animal Events Should Not Be Allowed in a HCF or on HCF Property.

"Smiling" goat
(WallpaperUse)

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Summary

- HCFs should have a policy regarding animals in their facility
- The ADA must be adhered to by law, and supersedes state or local laws and facility policy regarding service animals
- Animal assisted activities can be done safely if properly managed
  - Need to use specifically trained handlers and properly evaluated dogs
  - Need patient and physician approval
- Generally, pets should be prohibited from entering the HCF, but exceptions may occur
  - Healthcare team determines that pet visitation might benefit the patient
  - Visitation can be performed with limited risk to the patient, other patients, and the HCF

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Learning Objectives

- Discussed potential clinical benefits, and infectious and non-infectious risks, of human-animal interactions in healthcare settings.
- Evaluated scenarios involving animal-assisted activities or therapies, service animals, and personal pets in healthcare settings using existing infection control guidelines and best practices.
- Formulated a risk-mitigation strategy for human-animal interactions in a healthcare facility.

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Some Resources and References

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Questions?

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