

## Pets in Health Care Facilities; Addressing Safety with Compassion

Kimberly Signs, DVM  
Zoonotic Disease Epidemiologist  
Michigan Department of Community Health

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## Objectives

- List common zoonotic disease and injury concerns associated with animals in a health care setting
- Review guidance materials available to address these concerns as they relate to Animal Assisted Interventions (AAI) and personal pet visitation in the health care setting
- Review public health reporting requirements for incidents involving animals

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## Definitions

- **Pet therapy** is a general term that encompasses many activities, both formal and informal.




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## Animal Assisted Therapy (AAT)

- Formal goal-directed intervention involving animals as an integral part of the treatment process, directed by a professional with specialized expertise.
- Designed to promote improvement in human physical, social, emotional, and/or cognitive functioning.
- Patient progress is measured.




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## Animal Assisted Activities (AAA)

- Provide opportunities for motivational, educational, and/or recreational benefits to enhance quality of life
- Delivered by trained professional, paraprofessional and/or volunteers
- Involve animals that meet specific criteria




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## Personal Pet Visitation

- Pets visiting with patients
- Some therapeutic benefits can be attained, but there is no specific goal for the interaction
- Visits are not structured and do not involve trained staff
- Patient progress is not tracked, but is often noted to be beneficial




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## Background

- Growing (but limited) body of evidence regarding the benefits to patients/residents of Animal Assisted Interventions and pet visitations.
- Physiologic:
  - Blood pressure, heart rate, cortisol, salivary IgA
- Psychological:
  - Depression, anxiety, loneliness, perceived quality of health, distraction from pain



[www.petassisted.org](http://www.petassisted.org)

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## Survey of Zoonotic Concerns in AAI Programs

- 1989 event in Canada- a friendly stray animal taken into a nursing home pet therapy program developed rabies
- Prompted survey of groups from Canada and the U.S. involved in AAI activities
  - 2/3 nursing home programs
  - ¼ schools, ¼ hospitals

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## Survey Findings

- 50% had concerns about zoonotic disease transmission
  - Rabies, dermatophytes, external parasites
  - Hospitals had more concerns for intestinal infections - *Salmonella*, *Campylobacter*, etc
- <50% consulted with health professional about zoonotic disease prevention (but 95% of hospital programs did)
- 10% of community programs had printed prevention materials, 75% of hospital programs had them

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## Health Survey of Visiting Dogs

- Journal of Hospital Infection; Vol.62 (4), 458-66.
- May-July 2004, 102 visiting dogs sampled
  - Owner questionnaire
  - Collected feces, hair-coat brushings, rectal, aural, nasal, oral and pharyngeal swabs; tested for 18 pathogens
- Zoonotic pathogens detected in 80/102 (80%)
  - *Clostridium difficile* (58% of fecal samples, and 71% of these were toxigenic)
  - *Pasteurella* spp. were found in 29% of oral swabs

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## Pathogens and AAI Animals

- Reservoirs
- Mechanical carriers/vectors
- More likely to be exposed to HAI pathogens
  - AAI animals that visited HCF's were more likely to carry MRSA than those from other settings
  - Certain behaviors and activities may be higher risk, Ex; licking patients, accepting treats, sitting on beds

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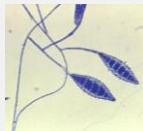
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## Disease Agents to Consider (dog and cat)

- Viral: **RABIES**
- Bacterial
  - *Salmonella* spp, *Campylobacter* spp, *E. coli*
  - MRSA, *Clostridium difficile*
  - *Pasteurella* spp, *Staphylococcus* spp, *Streptococcus* spp
- Fungal: dermatophytes ("ringworm")
- Protozoal: *Giardia* spp, *Cryptosporidia*, coccidiosis
- External parasites: fleas, ticks, mites
- Internal parasites: roundworms, hookworms, tapeworms




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## A Word About Bites

- Any animal bite must be reported to the LHD/local animal control-the risk for rabies must be assessed.
- Animals can have nasty bacteria in their oral cavity, antibiotics typically prescribed prophylactically for bites
  - *Staphylococcus* spp, *Streptococcus* spp, *Pasteurella* spp, *Capnocytophaga canismorsus* - can lead to life threatening sepsis
- Tetanus status must be assessed
- Temperament assessment is a very important component of a visitation program. Animals that bite should never be part of an AAI program.




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## Lack of Scientific Evidence of Zoonotic Disease Risks

Surveys and cases studies illustrate the potential risk associated with AAI animals and pets

Occasional incidents involving immunocompetent patients

No reports of disease risk from service dogs

Even less is known about the potential risks to therapy animals, or the risk of HAI's being spread to the community via therapy animals.




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## Health Screening and Infection Prevention Standards Vary

- Formal Animal Assisted Intervention
- Informal-animal "visitors"




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## AJIC: Guidelines for AAI in Health Care Facilities (2008)

- Working Group of 29 individuals from Canada and the U.S. with expertise in AAI, infection control, public health, and veterinary medicine
- **Purpose:** to provide explicit and when possible, evidence-based guidelines for risk mitigation in AAI to health care workers
- Recommendations were ranked IA, IB, IC, II and Unresolved
- Degree of Consensus was also measured (>80% agreement, <80% agreement)

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## Major Areas of Emphasis



- **HAND HYGIENE**
- Designating an "Animal Visit Liaison"
- Methods for Contact Tracing, should it be necessary
- For animals in formal AAI programs, develop restrictions for certain animal species, ages, origin, behavior, diet and health status
- For visits by patient's pets, institute basic health and diet requirements and limit contact to the individual patient

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## Hand Hygiene

- **MOST IMPORTANT INFECTION CONTROL MEASURE**
- ALL patients, visitors and HCW wash hands before and after each animal contact.
- Animal handlers carry alcohol based sanitizer and offer to anyone who touches the animals




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## Facility Management

- Establish visitation program/policies
- Designate Animal Visitation Liaison (AVL)




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## Animal Suitability



- AAI animals
  - Domestic, companion, household pets
  - Cats 1 year and older, dogs preferably 2 years or older (age of maturity)
  - Member of a formal AAI program
  - Rabbits, guinea pigs and birds-risks are less well known, but may be suitable if litter training or other steps are taken to prevent patient exposure to their excrement
- Patient's animals (fewer explicit restrictions)
  - Domestic, companion, household pets
  - Under control
  - Only visit designated patient

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## Unsuitable Animals

- High risk species (reptiles/amphibians, nonhuman primates, rodents/other pocket pets, farm animals)
- Animals that reside in shelter setting
- Member of household for less than 6 months
- Cats and dogs younger than 1 year




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## Puppies and Kittens

- While cute, young animals pose a much greater risk of zoonotic disease transmission for at risk populations (young, old, immune-suppressed)
- Much more likely to be shedding enteric pathogens, often while appearing healthy (*Campylobacter*, *Salmonella*, *E. coli*, *Giardia*, coccidia, etc)
- More likely to have accidents
- More likely to nip or scratch




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## Temperament Evaluation



- Required for all AAI program animals
- Test must simulate situations animals may be exposed to in the health care setting
- Evaluators be certified/trained
- Animal handler teams must be observed and approved by AAI program rep
- Require re-assessment if negative, aggressive or fearful behavior is noticed by anyone in the program

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## Health Screening

- Rabies vaccination for dogs and cats
- Require AAI animals have at least yearly evaluation by licensed veterinarian, routine screening/prophylaxis for parasites
- Tailor flea/tick control to needs of animal and its geographic location, suspend visits when treating for an infestation
- Routine screening for potential zoonotic agents is not recommended




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## Indications for Special Screening

- Animal has interacted with known human carrier (in either health care facility or the community)
- Epidemiologic evidence suggests an animal may involved in disease transmission
- Animal is epi-linked to an outbreak




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## Health Exclusions

- Exclude from onset to at least one week following recovery for:
  - Vomiting/diarrhea
  - Episode of urinary or fecal incontinence
  - Episodes of sneezing/coughing
  - Antibiotic/steroid tx
  - Open wounds
  - Ear infections
  - Skin infections
  - Painful orthopedic conditions/injuries
  - Signs of estrus




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## Dietary Guidelines

- Exclude animals fed any of the following within the previous 90 days (Pet Partners recommends minimum 30 days):
  - Raw or dehydrated raw diets
  - Chews/treats of animal origin (rawhides, pig ears, etc)




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## About Raw Diets



- 2009 JAVMA, Lefebvre et al, raw fed dogs were 17X more likely to shed MDR E. coli, and more likely to shed *Salmonella*.
- 2010 Zoonoses and Public Health, Leonard et al, raw diet fed dogs (commercial or homemade) were 5X more likely to shed *Salmonella*.
- 2009 Canadian Veterinary Journal, Lenz et al, *Campylobacter jejuni* detected in feces of 2.6% of raw-fed dogs, and *Salmonella* in 14% of raw-fed dogs. Neither was found in dogs not fed raw diets.

Raw diets are inherently unsafe from a pathogen standpoint

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## Animal Handler Requirements




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## AAI Handlers



- Undergo formal training
- Comply with facility policy for influenza vaccination and any additional human screening required for volunteers/employees
- Provide adequate supervision during visits
- Restrict visits to 1 hour
- Comply with facility restrictions on visits

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## Patient's Pet



- Informed and sign agreement to comply with facility policies
- Provide rabies vaccination records
- Must be escorted to destination within facility
- Unleashed animals transported in clean carrier to the patient's location
- Dogs must be kept on leash (non-retractable, 6 ft long or less) and use route as directed by AVL
- Avoid interactions with others in the facility

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## ALL Handlers



- Self screen for illness including cough/sneezing, nasal discharge, fever  $>38^{\circ}\text{C}$  ( $100.4^{\circ}\text{F}$ ), diarrhea, vomiting, conjunctivitis
- One animal/handler
- Keep animal from touching/licking medical devices or equipment
- Licking of patients should be discouraged
- No visits during meals or eating/drinking during visits
- Familiar with facility policy regarding accidents; reporting, cleaning, disposal (wear gloves, use absorbent materials, dispose in leak resistant plastic bags)
- Immediately report any scratches, bites or other injuries to facility and public health/animal control

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## Managing Contact



- Consent of patient for visit
- Permission of others to enter patient's room
- Handler aware of patient's who are allergic (15% of population estimated to be allergic to dogs or cats) or uncomfortable around animals
- Aware of rooms that are off limits to animal visitors
- Aware of "rules of engagement" for facility

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## Contact Tracing



Develop a system for tracking that may include:

- Requiring Animal Handlers to sign in and out
- Ideally, keeping a log of areas/room numbers where the animal interacted with patients

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## Animal Bite Reporting; Communicable Disease Rules

(Promulgated under the Authority of Michigan's Public Health Code)

"Any person who has knowledge of an animal bite where rabies is suspected **shall, within 24 hours** of the biting incident, report the bite to the appropriate local health department and to the local health department where the bite occurred. The report shall include all of the following information:

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## Communicable Disease Rules (con't)

- Animal species inflicting the bite
- Animal owner's name, address, and telephone number
- Vaccination status of animal
- Date and location of biting incident
- Name, address, and telephone number of the person bitten
- Site of the bite on the body
- Name of the reporter of bite"

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## Service Animals

- HCP are covered by ADA (Rehabilitation Act)
- A person with a disability may be accompanied by a service animal (dog) within a facility unless it poses a "direct threat" (to health and safety) that cannot be reasonably mitigated
- Exclusion is allowed from "restricted access" areas
- Care of a service animal is the responsibility of the person with the disability
- Fake service dogs are a growing problem. Internet businesses that sell fake ID's and other paraphernalia so people can pass their pets off as service animals




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## Guidelines for Environmental Infection Control in Health-Care Facilities (HICPAC), 2003

- Nice Table of Zoonotic Diseases by Species
- Animals can serve as reservoirs or vectors for antibiotic-resistant microorganisms
- Healthcare workers can be colonized or contaminated with pathogens from their own pets, leading to outbreaks in the HC setting (Ex; yeast and ringworm outbreaks in NICU's)
- Healthcare workers can potentially be a source of HAI to their own pets

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## Immune Suppressed Patients



- AAI not recommended for these patients
- Family pet visitation for critical patients often handled on a case by case basis, but pets should never be allowed into an isolation unit
- Patients discharged to home should be educated about risks of zoonotic disease
  - Hand hygiene
  - No contact with feces/litter box
  - No contact with animals with diarrhea
  - No contact with very young animals, exotic species or reptiles

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## MRSA, VRE, Clostridium difficile

- Studies show pets can be colonized with these organisms, but carriage is often brief.
- Study shows licking/accepting treats, sitting on beds was correlated with infection
- If AAI animals do test positive for HAI pathogens, treatment is not recommended. Rather, visitation should be suspended until two successive cultures, collected 1 week apart are negative.
- Alcohol hand sanitizer is not effective for *C. difficile*




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## Pet Animal Visitation Guideline Components




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## Physician's Order

- Lets the physician decide if this activity is reasonably safe (ie, the patient is not at high risk of infection)
  - Physicians may be uninformed of common risks
  - Physician may not be aware of the relatively low risk compared to the potential benefit to the patient




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## Veterinary Assessment

Performed within 30 days of the visit and includes:

- Name of pet and owner
- Statement of general good health and disposition
- Proof of current rabies vaccination
- Notation of flea control program
- Statement that animal is free of contagious diseases
- Signed by a veterinarian




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## Animal Hygiene



Most institutions require dogs to be groomed within a day of the visit

- Reduce burden of bacteria, fungi and parasites on the hair coat
- Remove loose hair and dander
- Keep nails short and free of sharp edges

If an animal will be placed on the bed, lay down a disposable impermeable barrier or clean sheet over the bedding

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## Animal Control

Dogs must be kept on a leash

Cats must come in a pet carrier




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## Staff and Others

- Staff need to be able to turn away animals that seem agitated or distressed

- If the patient is in a shared room, the roommate must give consent, or another location provided for the visit




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## Risk vs Benefit

- There is always going to be some risk with animal hospital visitation
- Common sense practices can reduce the relatively low risk even further
- With a little structure and common sense, pet visitations can provide benefits to patients, with minimal risk

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## Summary

- Include health professionals in the development and management of AAI and pet visitation programs
- Mature healthy animals present the least risk for enteric pathogens
- Reinforce simple and straightforward measures to prevent disease transmission (hand washing!)
- Provide printed guidelines for zoonotic disease control

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## Resources

- [www.cdc.gov/hicpac](http://www.cdc.gov/hicpac)
- [www.petpartners.org](http://www.petpartners.org)
- Worms and Germs Blog--Dr. Scott Weese, DVM, University of Guelph:  
[www.wormsandgermsblog.com](http://www.wormsandgermsblog.com)




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## Additional Resources

- American Veterinary Medical Association (AVMA- [www.avma.org](http://www.avma.org))
- Guidelines for Animal Assisted Activity, Animal Assisted Therapy and Resident Animal Programs
- Wellness Guidelines for Animals in Animal-Assisted Activity, Animal-Assisted Therapy and Resident Animal Programs
- National Association of State Public Health Veterinarians (NASPHV- [www.nasphv.org](http://www.nasphv.org))
- **Animals in Public Settings Compendium**




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## Contact Information



- Michigan Department of Community Health:
  - Daytime: 517-335-8165
  - Evening/weekend: 517-335-9030
- Michigan Association for Local Public Health Directory: [www.malphp.org](http://www.malphp.org)
- Michigan Department of Agriculture:
  - 1- 800-292-3939
  - (Animal Disease Reporting)

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Questions?



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