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# **GUIDANCE FOR ANIMALS IN HEALTHCARE FACILITIES**

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SHEA EXPERT GUIDANCE

# Animals in Healthcare Facilities: Recommendations to Minimize Potential Risks

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# PET OWNERSHIP, US 2015-2016

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## Pets: # pets owned (# households)

- Overall: 65% of households own a pet (79.7 million homes)
- Freshwater fish: 95.5 million (12.3 million)
- Cats: 85.8 million ( 42.9 million)
- Dogs: 77.8 million (54.4 million)
- Birds: 14.3 million (6.1 million)
- Small animal: 12.4 million (5.4 million)
- Saltwater fish: 9.5 million (1.3 million)
- Reptile: 9.3 million (4.9 million)
- Horses: 7.5 million (2.5 million)
- Increasing number of persons have more exotic pets

# PET OWNERSHIP, AUSTRALIA, 2013

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- >25 million pets
- ~5 million households have a pet (63%) – one of the highest rates of pet ownership in the world
  - Dogs (4.2 million), 39% of households
  - Cats (3.3 million), 29% of households
  - Fish (10.7 million)
  - Birds (4.8 million)
  - Small mammals and reptiles (2.2 million)
- Pet care industry worth ~\$8.0 billion

# USEFULNESS OF COMPANION ANIMALS:

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## Dogs

- Companionship
- Work
  - Guard dogs
  - Herding
- Service animals
- Animal assisted therapy

## Cats

- Companionship
- Work
  - Control of pests (e.g., mice)

TABLE 1. Selected Diseases Transmitted by Dogs Stratified by Transmission Route

| Transmission Route         | Selected Diseases  |
|----------------------------|--|
| Direct contact (bites)     | Rabies (rabies virus)<br><i>Capnocytophaga canimorsus</i> infection<br>Pasteurellosis ( <i>Pasteurella</i> spp.)<br><i>Staphylococcus aureus</i> , including methicillin-resistant strains<br><i>Streptococcus</i> spp. Infection  |
| Direct or indirect contact | Flea bites, mites<br>Fungal infection ( <i>Malassezia pachydermatis</i> , <i>Microsporium canis</i> , <i>Trichophyton mentagrophytes</i> )<br><i>Staphylococcus aureus</i> infection<br>Mites ( <i>Cheyletiellidae</i> , <i>Sarcoptidae</i> )  |
| Fecal-oral                 | Campylobacteriosis ( <i>Campylobacter</i> spp.)<br>Paratyphoid ( <i>Salmonella</i> spp.)<br>Giardiasis ( <i>Giardia duodenalis</i> )<br>Salmonellosis ( <i>Salmonella enterica</i> subsp <i>enterica</i> serotypes)  |
| Droplet                    | <i>Chlamydophila psittaci</i>  |
| Vector-borne               | Ticks (dogs passively carry ticks to humans; disease not transmitted directly from dog to human) <ul style="list-style-type: none"> <li>■ Rocky Mountain spotted fever (<i>Rickettsia rickettsii</i>)</li> <li>■ Ehrlichiosis (<i>Ehrlichia</i> spp.)</li> </ul> Fleas <ul style="list-style-type: none"> <li>■ <i>Dipylidium caninum</i></li> <li>■ <i>Bartonella henselae</i></li> </ul> |

# OUTBREAKS IN HEALTHCARE FACILITIES RELATED TO ZOOONOTIC DISEASES

| Author                           | Methodology   | Findings  |
|----------------------------------|---|---|
| Lebevre, 2006                    | Healthy visitation dogs (n, 102) assessed for presence of zoonotic pathogens.   | Zoonotic agents isolated from 80 percent of animals including: toxigenic <i>Clostridium difficile</i> (40.1%), <i>Salmonella</i> spp. (3%), extended spectrum beta-lactamase or cephaloporinase <i>E. coli</i> (4%), <i>Pasteurella</i> spp. (29%), <i>Malassezia pachydermatis</i> (8%), <i>Toxocara canis</i> (2%), and <i>Ancylostoma caninum</i> (2%) |
| Scott, 1988                      | Epidemic of MRSA on a rehabilitation geriatric ward   | Paws and fur of a cat that roamed the ward were heavily colonized by MRSA, and the cat was considered to be a possible vector for the transmission of MRSA  |
| Lyons, 1980                      | Outbreak of <i>Salmonella Heidelberg</i> 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 <i>Malassezia pachydermatis</i> in an intensive care nursery                           | Isolates from all 15 case patients, 9 additional colonized infants, 1 healthcare worker, and 3 pet dogs owned by HCP had identical patterns of restriction fragment length polymorphisms (RFLPs).   |
| Mossovitch, 1996,<br>Snider 1993 | Multiple nosocomial outbreaks of <i>Microsporum canis</i> (ringworm) in newborn nurseries or neonatal intensive care units. | Person-to-person transmission described; In neonatal intensive care unit outbreak, the source of infection in the neonatal intensive care unit outbreak was a nurse likely infected from her pet cat  |

# ROLE OF ANIMALS IN A HEALTHCARE FACILITY

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- Service animals
- Animal-assisted activities (AAA)
  - Includes pet-therapy, animal-assisted therapy
- Research animals
- Personal pet visitation
- Miscellaneous
  - Aquariums

TABLE 6. Allowable Uses of Animals in Healthcare (AHC) Facilities, Stratified by 4 Major Categories

| Responses, No. (%)       | Service Animals,<br>No. (%) |         |        | Animal-Assisted Activities,<br>No. (%) |         |        | Personal Pet Visitation,<br>No. (%) |          |        | Research Animals,<br>No. (%) |          |         |
|--------------------------|-----------------------------|---------|--------|--|---------|--------|-------------------------------------|----------|--------|------------------------------|----------|---------|
|                          | Yes                         | No      | NA     | Yes                                    | No      | NA     | Yes                                 | No       | NA     | Yes                          | No       | NA      |
| US facilities 280 (83)   | 267 (95)                    | 8 (3)   | 5 (2)  | 249 (89)                               | 24 (9)  | 7 (3)  | 113 (40)                            | 158 (57) | 9 (3)  | 99 (35)                      | 155 (56) | 26 (9)  |
| Non-US facilities 24 (7) | 20 (83)                     | 4 (17)  | 0      | 16 (67)                                | 7 (29)  | 1 (4)  | 5 (20)                              | 18 (75)  | 1 (5)  | 14 (58)                      | 9 (38)   | 1 (4)   |
| Unknown 33 (10)          | 19 (58)                     | 10 (30) | 4 (12) | 14 (42)                                | 15 (46) | 4 (12) | 3 (9)                               | 26 (79)  | 4 (12) | 17 (52)                      | 10 (30)  | 6 (18)  |
| Total 337 (100)          | 306 (90)                    | 22 (7)  | 9 (3)  | 279 (82)                               | 46 (14) | 12 (4) | 121 (36)                            | 202 (60) | 14 (4) | 130 (38)                     | 174 (52) | 33 (10) |

NOTE. NA, not available.

# SERVICE ANIMALS: GENERAL GUIDANCE

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- The policy allowing service animals into the facility should be compliant with local laws and regulations.
- A policy regarding the entrance of service animals into the facility should include the following information:
  - A clear definition of “Service Animals” that should be consistent with local laws.
  - A statement that only dogs are recognized as Service Animals (if allowable).
  - A statement that service animals are NOT pets and should NOT be approached, bothered, or petted.
  - A statement that the care of the service animal is the responsibility of the patient or his or her designated visitor (i.e., it is not the responsibility of the healthcare facility).
  - A requirement that service animals be housebroken.
- Persons with disabilities may be requested *but not required* to have their service animal wear an identification tag (e.g., collar, tag) that identifies them as a service animal.

# SERVICE ANIMALS:

## SITUATIONS IN WHICH A SERVICE ANIMAL MAY BE EXCLUDED

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- The animal exhibits aggressive behavior such as snarling, biting, or scratching
- The animal is excessively noisy (e.g., howling, crying, or whining).
- The animal is unable to properly contain bodily excretions (e.g., the animal is not housebroken, or has vomiting or diarrhea).
- If the facility's personnel reasonably believes that a service animal is infectious or ill, the animal will not be allowed to remain with the person with a disability until the animal is evaluated by a veterinarian and he/she provides written certification, acceptable to the healthcare facility, that the service animal does not pose an increased risk to patients or staff.
- The policy should include a list of locations from which Service Animals are prohibited and reasons for that exclusion.
- Legal counsel should be consulted prior to exclusion of a service animal from a healthcare facility.

# SERVICE ANIMALS

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- The policy should address a service animal's accompanying a healthcare facility visitor to a patient room and include the following:
  - Persons with disabilities who are accompanied by service animals are allowed to visit patients as long as visitation occurs in accordance with the facility's service animal policy and the facility's "visiting hours and regulations."
  - Service animals are not allowed to visit other patients' rooms, the dining rooms, or other public areas of the facility unless accompanied by the person with a disability.
  - When a person with a disability visits a patient's room, he or she should check with the patient's primary care nurse before visiting to assure that no patient in the room has allergies to the service animal, or other significant medical risks that would contraindicate being near an animal. If another patient in the room has an allergy, other significant medical risk from exposure to an animal, or is fearful of the animal, other arrangements for visiting must be made (e.g., visit in day room or waiting room).

# SERVICE ANIMALS

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- The policy should address the following for a service animals belonging to patients:
  - When patients with a service animal are assigned to a semi-private room, the roommate must be screened for clinically significant allergies to the service animal and, if such a condition is present, either the patient with the disability or patient with animal allergies must be moved to another room. Similarly, the patient or roommate must be moved if the roommate is fearful or otherwise disturbed by the presence of the animal.
  - IPC should be notified when patients are admitted with service animals.
  - The patient must be able to make arrangements to have the service animal fed, exercised, and toileted, without the involvement of HCP.

# ANIMAL-ASSISTED ACTIVITIES: OVERVIEW

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- Facilities should have a written policy
- Facilities should have an AAA visit liaison
- Only dogs should be used in AAA
- Animals and dogs should be formally trained and evaluated
- Animals and their handlers should be screened prior to being accepted
- Infection control and prevention (IPC) should be consulted regarding locations and patients populations suitable for AAA
- All clinical staff should be educated about the AAA program

# ANIMAL-ASSISTED ACTIVITIES: TRAINING AND MANAGEMENT OF AAA HANDLERS

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Facilities should:

- Ensure that AAA handlers have been informed of the facility's IPC and human resource policies and have signed an agreement to comply with these policies.
- Confirm that AAA handlers have been offered all immunizations recommended for HCP
- Require the AAA handler to escort the animal to the destination as arranged by the facility's AAA liaison and following hospital policy.
- Instruct the AAA handler to restrict contact of his or her animal to the patient(s) being visited and to avoid casual contact of their animal with other patients, staff or the public.
- Limit visits to one animal per handler.
- Require that every AAA handler participate in a formal training program and provide a certificate confirming the training including standard precautions, zoonotic diseases, disposal of animal wastes, cleaning of contaminated surfaces, etc.
- Restrict visiting sessions to a maximum of one hour.

# ANIMAL-ASSISTED ACTIVITIES: TRAINING AND MANAGEMENT OF AAA HANDLERS

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Facilities should:

- Require that all animal handlers observe standard occupational health practices. Specifically, they should self-screen for symptoms of communicable disease and refrain from providing AAA services while ill (e.g., cough, fever, diarrhea, conjunctivitis, rash).
- Require that handlers keep control of the animal at all times while on the premises (including keeping dog leashed, avoid use of cell phones).
- Require all handlers manage their animal as follows: Approach patients from the side that is free of any invasive devices; require that everyone who wishes to touch the animal practice hand hygiene before and after contact; do not permit a patient to eat or drink while interacting with the animal; and, report any inappropriate patient behavior).
- Facilities should maintain a log of all AAA visits that includes rooms and persons visited for potential contact tracing.

# ANIMAL-ASSISTED ACTIVITIES: REQUIREMENTS OF ACCEPTABLE ANIMALS FOR AAA

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- Allow only domestic companion dogs to serve as AAA animals.
- Require that every dog pass a temperament evaluation specifically designed to evaluate it under conditions that might be encountered when in the healthcare facility. Such an evaluation should be performed by a designated evaluator.
- Require all evaluators (either at facility or at the formal certification program) to successfully complete a course or certification process in evaluating temperament and to have experience in assessing animal behavior and level of training.
- Recommend that animal-handler teams be observed by an AAA program liaison at least once in a healthcare setting before being granted final approval to visit.
- Recommend that each animal be reevaluated at least every 3 years.
- Require that any animal be formally reevaluated before returning to AAA after an absence of greater than 3 months.
- G. Require that a handler suspend visits and have his or her animal formally reevaluated whenever he or she notices or is apprised the animal in misbehaving

# PERSONEL PET VISITATION

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- Each healthcare facility should have a policy regarding the admittance of pet animals into the facility and an individual that oversees the program.
- Pets should, in general, be prohibited from entering the healthcare facility, including pets of HCP, patients, and visitors. Exceptions can be considered when the healthcare team determines that visitation with a pet would be of benefit to the patient and can be performed with limited risk to the patient, other patients, and healthcare facility as a whole. The patient or guardian of the pet should be informed of potential risks, which should be documented in the chart. Situations where visitation with a pet might be considered include:
  - Visitation of a terminally ill patient
  - Visitation of a patient who has been hospitalized for a prolonged period of time
  - Visitation of a patient who has a close bond with the animal and where the healthcare team suspects that visitation could improve the patient's physical or mental health

# PERSONEL PET VISITATION

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- Visitation by a pet is different than animal-associated activities or similarly structured activities. Risks from visitation by patients' pets may be increased because:
  - There is no formal training of the owner/designee, as with an AAA handler(s).
  - Pets have not been temperament tested.
  - Pets do not typically undergo the same degree of health assessment or exclusion practices (e.g. age) as compared to animals used in animal-assisted activities.
- Healthcare facilities that permit a single pet visitation to a patient should have a written policy that includes the following:
  - Approval should be obtained from IPC, as well as the patient's attending physician and nurse. Approval for the visit should be included in the medical record, with details about the animal, and the person responsible for the animal's transport and care.
  - Visitation should be restricted to dogs. Animals should be at least one year of age and housebroken. Visitation by younger animals could be considered on a case-by-case basis considering the age of the animal, the species, and potential benefits and risks to the patient.

# PERSONEL PET VISITATION

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In general, visitation should not be permitted in the following situations:

- Patients on contact or droplet isolation
- Patients in an intensive care unit (ICU)
- Patients whose cognitive status would result in an inability to safely interact with the animal,(unless it can be certain that the patient will only be able to see, not touch, the animal.
- Visitation of patients that have undergone recent solid organ or stem cell transplant or who are significantly immunocompromised.
- In some situations, these exclusions can be reconsidered by IPC and clinical personnel based on the risk to the patient, others in the healthcare facility or patient's household, and the anticipated benefits to the patient from pet visitation.

# RESEARCH ANIMALS

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- Before any research animal is evaluated in a human healthcare facility, the principal investigator should submit a detailed protocol that is reviewed and approved by the facility's responsible individuals or committees(e.g., IACUC).
- In addition to approving proposed procedures involving animals, the detailed protocol should address all relevant issues including the following:
  - When the procedure may be performed
  - Where the procedure is to 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

# OTHER ANIMALS

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## Veterinary procedures:

- Whenever possible, animals should be treated in facilities specialized for animal care; however, the expense of specialized equipment may preclude use solely for animals and, on occasion, veterinary facilities or zoological institutions may wish to utilize human healthcare equipment or facilities (follow procedures for research animals).
- Zoo animals:
  - Special care needs to be taken in the transport and care of zoo animals that are venomous (e.g., venomous snakes), large (e.g., elephant), or carnivores (e.g., tigers, lions).
  - Zoo animals must be accompanied by and contained at all times by trained staff.
  - Contact of animals by HCP not affiliated with the research or clinical activity should be prohibited.

# MISCELLANEOUS

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- If medicinal leeches are used, they should be purchased from a medical supply vendor, maintained in pharmacy, and discarded as regulated medical waste after used (engorged).
  - Consider decolonizing leeches (i.e., eliminate carriage of *Aeromonas*) by feeding leeches on an appropriate antibiotic or prophylactically treating the patient.
- Fish tanks in hospitals should not be allowed due to the risks of infection from maintenance of the fish tank and the possibility of aerosol transmission of *Legionella* spp. If a facility chooses to have an aquarium it should be covered, not accessible to patients, maintained by a professional staff, and not placed in a clinical area or in an area with immunocompromised patients. Protocols should be established for aquarium management.
- If maggot debridement therapy is used, only appropriate decolonized flies or fly larvae should be purchased. Used maggots should be handled as biohazardous waste.
- Farm and zoo animals events should be not allowed in a healthcare facility or on healthcare facility property (e.g., outside the facility).

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

|   | Animal-Assisted<br>Activities | Service <sup>a</sup> | 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.

<sup>a</sup>Policy to reflect ADA and regulatory compliance. Inquiries limited by ADA to tasks performed for patient.

# CONCLUSIONS

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- Facilities should have a policy regarding animals in their facility
- Service animals
  - Legal requirement to adhere to ADA (US)
  - Follow local laws
- Animal assisted activities (AAA)
  - Can be done safely if properly managed
  - Need to use specifically trained handlers and properly evaluated dogs
  - Need patient and physician approval
- Personal pet visitation
  - Facilities should have a policy to manage personal pet visitation
  - Should be allowed only under limited conditions (e.g., terminal patient)
- Research animals
  - Requires strict protocols to protect patients

# THANK YOU!!

