



Infection Prevention and Control Best Practices

For Small Animal Veterinary Clinics

Dear veterinary staff member,

We are conducting a brief online survey to understand your current infection control practices and your motivation for seeking out these guidelines. Participation in the survey is strictly voluntary. You may exit the survey at any time, and you may skip any questions you wish. All responses are anonymous

This survey should only take approximately 2-3 minutes to complete. We would greatly appreciate your feedback.

Click this link to start the survey:

https://uoguelph.eu.qualtrics.com/jfe/form/SV_6DbIPOk3dZnLbQ9

Client Visitation

Given the strong bond between owners and their pets, it is understandable when clients wish to visit their hospitalized pets. However, animals carrying transmissible pathogens pose a potential risk to other animals at the clinic and at the owners' home, as well as to the owners themselves, other household members and clinic employees. As a policy, clients should not be allowed to visit animals that are considered potentially infectious. Under extenuating circumstances, such as an animal whose condition is imminently life-threatening or where euthanasia decisions are being made, it is reasonable to accommodate controlled visitation when risks can be identified and measures can be taken to reduce those risks. The risks posed by some pathogens such as rabies virus or *Yersinia pestis* (the cause of plague) are such that visitation should not be permitted. Therefore, visitation should be considered on a case-by-case basis evaluating the pathogens of concern, the ability to implement infection control measures, and the understanding and acceptance of any risks by the owner. Consider additional limitations for visitation by children (especially young children), and ensure all visitors are escorted and supervised by clinic personnel in order to ensure control measures are followed. Hand hygiene should be emphasized in all cases, and enhanced infection control practices such as personal protective equipment may be required as well. Clinics should be aware of the liability associated with client visitation, especially when children are involved. In some scenarios it may be easier to manage the animal and the visitors in a designated exam room, in which case protocols must be followed for movement of infectious patients within the clinic, as well as thorough cleaning and disinfection of the room after the visit.

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Non-Patient Animals

In some veterinary hospitals, a variety of non-patient animals may be present, including boarders, recurrent day care animals, pets that accompany staff to work, blood donor animals and resident (clinic) animals. Their presence poses some risk to both the non-patient animals and patients alike, and though the degree of risk has been minimally investigated ([Ghosh 2012](#)), a facility-specific assessment should be made of the benefits. Transmission of pathogens such as canine influenza via transient non-patient animals has been identified ([Weese, 2019](#)), highlighting the potential risks of having non-patient animals present in the clinic.

From an infection control standpoint, non-patient animals should not be present in veterinary hospitals. However, if it cannot be avoided there are measures that can and should be taken to reduce the risk of pathogen transmission between non-patient animals and patients or staff.

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Boarding / day care

Transmission of pathogens and disease outbreaks amongst boarding/day care animals are poorly described in the veterinary literature. Outbreaks of canine upper respiratory disease complex, undifferentiated diarrhea, ringworm and canine papillomatosis ([Lane 2017](#)) have occurred in day cares. **Veterinary hospitals considering boarding/day care should assess whether it can be done in a manner that does not pose undue risk to hospitalized patients or boarding animals.** Some of the factors to consider are listed in [Table 2](#).

Although boarding animals may appear clinically normal, there is always a risk of subclinical shedding of infectious pathogens which can be spread through direct or indirect contact. Creating more crowded conditions can also increase the risk of pathogen transmission simply by the relative proximity of a larger number of animals.

If boarding is permitted, careful consideration must be given to selection of boarders and boarding practices:

- Insist that boarding animals be on a regular preventative health program that includes a full physical examination by a veterinarian at least annually, regular vaccination, and internal/external parasite control, as appropriate.
 - Ideally boarders are patients at the same veterinary clinic so their medical history is readily available. If not, a copy of the medical record from the clinic where the animal was last examined should be provided.
- Avoid introduction of high-risk animals (e.g. recently infectious, from a shelter, or imported) into the facility.
- Boarders should be up-to-date on all core vaccinations for a given geographic area ([Ford 2017](#)), as well as *Bordetella bronchiseptica* and canine parainfluenza virus (kennel cough) for dogs. Canine influenza vaccination is also prudent in areas where the virus is circulating.
 - Time vaccinations so that there is a reasonable expectation of protective immunity at admission.
- Perform a behavioural assessment to determine how the animal is likely to respond to the presence of other animals of the same or different species, as well as any behavioural triggers that need to be avoided. Note this in the boarder's file in some way.
- Outline infection control measures to clients before initial admission to facilitate compliance and reduce the potential for conflict if an animal must be excluded.
- Use daily syndromic surveillance to detect clinical issues (see [Chapter: Surveillance](#)). These syndromes do not always indicate that an infectious disease is present, but they indicate the need for a veterinary examination to determine whether boarding of the animal poses any additional risk. Relevant syndromes to screen for include, but are not limited to:
 - lethargy - diarrhea - sneezing - oral papillomas
 - vomiting - coughing - presence of external parasites - skin lesions

- Restrict direct and indirect contact between boarders, and between boarders and clinical cases. Complete physical and procedural separation is ideal, including separate food bowls, water bowls and toys.
 - If group contact is unavoidable, keep specific groups of animals together. This helps limit any disease events that may occur to a smaller group, and makes interventions (e.g. isolation, temporary exclusion) more practical to implement.
- Have a clear, written protocol manual that details all activities involved with the day care and all infection control practices that are undertaken.

TABLE 2. Important considerations when determining whether boarding should be permitted at a veterinary facility

Characteristic	Question to Ask
Facility design	Can boarders and clinical cases be housed separately? Is there adequate capacity to house boarders?
Facility operations	Will clinical staff handle boarding animals? Is staffing adequate to cover both clinical and boarding duties? Can staff adequately work with both groups while using some basic infection control practices to reduce the risk of cross-contamination?
Caseload	What percentage of the patient population is at high risk for infection? What percentage of the boarding population may be high risk for pathogen shedding?
Boarding population	Will all animals be accepted or just those deemed low risk for pathogen shedding or development of infection?
Clinical management	What is the risk adversity of the facility and tolerance of the potential for boarders to acquire potential hospital-associated pathogens?

Staff pets

Due to the risk of pathogen exposure if staff are allowed to bring pets to work, pets should not have free access to all areas of the clinic. If staff pets are allowed to accompany their owners, they should be housed in a separate kennel so they do not have direct or indirect contact with other animals, or at a minimum the animals should be restricted to non-clinical areas such as offices. The same criteria listed above for boarding animals and below for clinic pets should be applied to staff pets that are allowed to come to work.

From an infection control standpoint, veterinary clinics should never have a resident “clinic pet”.



Clinic pets

Veterinary clinics commonly have resident clinic animals. Although there are no objective data quantifying the risks to patients, people or clinic animals themselves, based on the theoretical risks and lack of a real need for clinic pets, it is recommended that veterinary clinics do not keep such animals, and every attempt should be made to adopt out any existing pets.

While suboptimal from an infection control standpoint, if a clinic has a clinic pet, the following recommendations should be considered:

- Do not allow the clinic pet to have access to any patient treatment areas, patient housing areas, examination rooms, isolation, surgery or the patient waiting area.
- Do not allow the clinic pet to wander freely through the kennel/ward areas where it could cross-contaminate kennels.
- Keep a dedicated food and water bowl, litter box, toys, etc. for the animal.

- The pet must receive regular health checks and have an appropriate vaccination, deworming and external parasite control program.
- Do not allow clinic pets, particularly cats, to have unsupervised outdoor access because of the higher risk of exposure to (and subsequent shedding of) pathogens such as Salmonella and Toxoplasma from hunting birds and rodents.
- Remove the animal from the clinic if any of the following are observed:
 - aggressive behaviour towards people or other animals
 - inappropriate elimination
 - inability to properly restrict access to certain areas
 - development of conditions that pose a risk of pathogen transmission to or from other patients, personnel or clients

Blood donor animals and colonies

Blood donation programs for dogs and cats are increasingly common, and some facilities coordinate their own programs based on colonies of animals (predominantly cats) that live within the clinic. This can be advantageous because of the ready access to screened donors, but there is potential for these animals to both acquire pathogens from the patient population and transmit pathogens to patients. Some basic measures can be used to minimize the risks:

- House donors apart from patients, ideally in an entirely separate room.
- Do not allow donors to roam freely in the facility.
- Use dedicated food and water bowls, litter boxes, toys etc. for donor animals
- Ensure proper quarantine and testing of new animals prior to entry into the colony.
- Schedule socialization activities so that contact with patient animals is avoided.

(See [Chapter: Blood Donation](#) for additional recommendations for infection prevention and control regarding blood donation programs.)

Research and teaching animals

It is less common now to have research and teaching animals housed within a teaching hospital, based largely on the evolution of animal care standards, but this practice may still exist in some facilities. In general, this is undesirable because it increases the susceptible animal population in the hospital, establishes a population of long-term residents that could act as sources of infection, and poses a risk to the health of the research colony.

Efforts should be undertaken to remove research animals from hospitals. If the presence of a research or teaching colony is unavoidable, the animals should be physically and procedurally separated from patient animals to minimize direct and indirect exposure. Protocols should be established to require prompt diagnostic testing should any potentially infectious diseases arise in order to reduce the risk to other animals in the facility. Active surveillance for certain pathogens may be necessary depending on the animal source, animal species, pathogen prevalence and other factors. A risk assessment must be performed to determine the optimal isolation, monitoring and testing requirements.

References

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