

IBPSA Infectious Disease Standards

VERSION 1: SEPTEMBER 29, 2020



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Pet boarding, daycare, training, veterinary, and grooming facilities have unique requirements for keeping dog and cat guests healthy. The frequency of visits to a facility, close contact with other animals and people, indoor air quality, and varied immunity of animals creates a chance for spread of illness among pets. This spread can occur even when the infected pet appears healthy. A disease outbreak in a facility may be financially costly to eliminate, can be emotionally draining, and may result in a long-term loss in reputation and client trust.

Animals can spread illness before, during, and even after they appear sick, so simply taking action with sick animals is not enough to protect your pet customers. Fortunately, there are a number of simple, cost effective ways to prevent the spread of illness in facilities, and when necessary, limit further spreading.

Whether or not an animal will develop disease depends on multiple factors:

Type of infecting organism (e.g. bacteria, virus)

How long the animal is in contact with (exposed to) the organism

The amount (dose) of the organism that the animal encounters

How the infection is transmitted (passed to the animal), e.g. feces ingestion, cough, sneeze

The animal's immune status or vulnerability of the animal to the organism.

There are different types of organisms that can cause illness in animals. These are bacteria, viruses, fungi (molds), and parasites. Those of greatest concern for boarding, daycare, training and grooming facilities include:



Bacteria: such as *Bordetella* ('canine cough'), *Campylobacter*, *Leptospira*, *Salmonella*, *Bartonella*, *Staphylococcus*, *Streptococcus equi ssp zooepidemicus*



Viruses: such as canine parvovirus, canine distemper virus, canine influenza virus, canine parainfluenza virus, rabies virus, feline leukemia virus, feline calicivirus, feline herpes virus, feline panleukopenia virus



Fungi: such as ringworm (dermatophytes)



Parasites: such as ticks, fleas, hookworms, roundworms, tapeworms, whipworms, mites (e.g. *Cheyletiella*, *Sarcoptes*), *Coccidia*, *Cryptosporidium*, *Giardia*.

Infectious organisms of animals vary in their infectivity, or the rate at which they can spread disease to other animals, and how severe the illness will be once the animal is infected. Some diseases can cause very severe illness and even death. Other diseases may cause mild signs of illness but be very infectious, making them a big concern for a facility. Also, in some cases, animal organisms can infect people, putting staff at risk for illness, which can be severe.

Organisms can be spread between animals in 5 main ways:

Type	Definition and Example
Direct	When an infectious organism is transferred directly from one animal to another. This can occur through touching, licking, and biting.
Airborne/Droplet	<p>Droplet: when small droplets are produced (e.g. when an animal or person sneezes or coughs). These droplets carry organisms short distances (within approximately 6 feet), where they fall to surfaces or on nearby people or animals.</p> <p>Airborne transmission occurs when very small pathogens in the air are inhaled by another host. Droplets can evaporate quickly leaving behind residue which attaches to dust in the air. These very small particles can remain suspended in air currents and are a source of infection traveling throughout a facility.</p>
Fomites	Inanimate (non-living) objects and surfaces that are contaminated with infectious organisms and contribute to the spread of infections throughout a facility. Fomites are especially a concern when the infectious organism can survive outside of the animal for a long time. Common fomites include pet toys, leashes, bowls, grooming equipment, play equipment, cages and bedding, but also human items such as clothing, shoes, markers, and pens.
Oral	When infectious organisms are ingested. This occurs through eating or drinking contaminated food, treats, or water, and oral contact with contaminated surfaces such as the floor. Vomit and feces from pets or wildlife can carry disease-causing organisms and transmit disease if eaten or allowed to contaminate surfaces.
Vectors	Animals and insects that act as “intermediaries” or “middlemen” and transmit infectious organisms from an infected animal to another animal. Fleas and ticks are common vectors of disease.

The amount of time an infectious organism can live in the environment plays a critical role in its ability to spread. Survival in the environment can range from hours to years. As examples, without effective cleaning and disinfection of the air and surfaces, organisms can survive for:

- Hours: Canine distemper virus
- Days: *Bordetella*, canine influenza virus
- Months: *Leptospira*, *Staphylococcus* (including multi-drug resistant such as MRSP, MRSA)
- Years: Canine parvovirus, feline panleukopenia virus, *Salmonella*, ringworm

To be successful, a facility’s infection prevention and control measures must take into account all of the above components (the type of organism, how it is spread, and its survival in the environment).

Why are standards needed?

Practice Standards are published documents that state the accepted behaviors and actions expected of individuals for an aspect of their work. They contain criteria that are considered essential to meet the needs for that area. The IBPSA Infectious Disease Standards contained in this document are those areas and criteria considered to be essential to meet the health needs of clients, pets and staff of facilities that involve the temporary gathering of owned cats and dogs (e.g. groomers, daycare, boarding).

Who do these standards apply to?

These Standards apply to all members of the profession, across the range of settings, roles, and environments in which they work. These Standards are intended to provide guidance to people that work with animals so that they can limit the introduction and spread of infectious diseases in our clientele pets, our clients and our staff. Compliance with the standards is required for a certificate of IBPSA accreditation.

Development of IBPSA infection control and prevention Standards

The information provided below comes from publications on infection control and prevention in veterinary practices and dog group settings, along with published university and field research studies on animal care infection control.¹⁻⁵ All of these documents were created by independent experts in the field of animal infectious diseases with a specific focus on locations where high levels of contact between animals and people have led to disease spread and outbreaks. These Standards are refined recommendations that contain the practices and actions best suited to reduce the introduction and spread of infectious diseases in grooming, daycare and boarding facilities. To limit the length of this document, only key supporting (background) information is provided. The reader is encouraged to seek additional support and background information for these Standards by reviewing the referenced documents (links at the end of this document).



General Standards:

Clear, well-thought out written Standard Operating Procedures (SOPs) and policies serve as the basis for reducing infectious diseases risks for a facility. To be effective, these SOPs should include the reason/intended purpose for the SOP, specific actions that are to be taken by staff, and which staff are responsible for each task. Each SOP should be specific for the facility. The original date created and date updated should be clearly included on the SOP. Written SOPs are critical to ensure key steps of a given action/practice is clearly defined and can be followed. Example SOPs are available in the sources linked at the end of this document that can be used to help when developing a new SOP or fine-tuning an existing SOP.

Requirement 1: A written plan (collection of SOPs) exists and is regularly updated that is aimed at reducing and managing infectious disease spread in animals. SOPs considered core to this plan are mentioned throughout this document.

Requirement 2: An established, relevant training program exists on policies and SOPs for staff and volunteers. There is a log (name, date, content covered) kept of all completed trainings. New staff receive training as part of their orientation and existing staff receive refresher trainings as SOPs are updated or as needed to ensure SOPs are known and followed.



Animal Housing Standards:

Requirement 1: Only non-infectious animals should be allowed to enter the facility. To ensure this, it must be clear to staff and clients what health conditions are considered reasons for an animal to be denied access to the facility.

Protocol: A clear, written and accessible health conditions exclusion policy should exist for the facility.

- This policy includes animals known or suspected by a veterinarian to be infectious. This should include animals with diarrhea, vomiting, coughing, sneezing, fever, skin infections, or a new illness that has not been determined to be non-infectious by a veterinarian.
- Due to concerns with animals bringing new diseases from other countries/regions, pets should not be permitted to immediately enter the facility when returning from international travel (or travel from areas known to have different animal diseases from those where the facility is located). In all cases, pets with recent illness or foreign travel should be excluded for 2 weeks or as recommended by a veterinarian.
- An SOP is available that explains how such information is regularly obtained from clients and veterinarians (e.g. staff screening at each drop off, required reporting by owners). Regardless of the method, obtaining written (not verbal) records is important.

Protocol: There is a clear SOP of where and how animals will be kept in the facility if determined to be possibly infectious while awaiting immediate removal by owner.

- Animals considered likely to be infectious should be kept away from other animals (ideally in a separate room that is able to be effectively cleaned and disinfected after the animal is removed).
- Depending on the infectious disease concern, these animals may need to be immediately moved to and held at a local veterinary practice in an isolation room.

Requirement 2: There should be a clear policy regarding health standards and medications that are required for participation in the facility (e.g. required vaccinations, deworming, flea/tick prevention). Staff should actively verify (e.g. review client-provided veterinary records) that these requirements are met.

Protocol: There is a clear and written health practices and medication inclusion policy. These requirements must be met before joining the facility and must be maintained while participating.

- It is important to use local expert resources, including veterinarians, when developing infection control and prevention SOPs for a facility.
- It is important for local veterinarians to know how their services may be used regarding the prevention and control of infectious disease at your facility (e.g. if sick animals will be brought to them for medical care, isolation when an owner is unavailable) and documentation of how this interaction will occur.

Protocol: A local veterinarian/veterinary practice is identified, and a written agreement is established to assist the facility in infection control and prevention needs (e.g. review/input on written SOPs, care/guidance for infected animals).



Vaccination Standards

Requirement 1: Several of the infectious diseases that pose the greatest risk for animals in boarding, daycare, training and grooming facilities are preventable through vaccination. Although each pet may have individual needs, having minimum vaccine requirements for all participating animals provides benefits to every animal at the facility.

Protocol: There is to be a clear, written requirement for all animals to be up to date on a minimum set of vaccinations before starting at the facility and maintained while involved.

- Staff members must individually review client-provided veterinarian vaccine records for every animal.
- For new clients, this should occur prior to the first visit. For all clients, staff should review records prior to each visit to ensure additional vaccines (e.g. boosters) are not needed during the visit.

Protocol: At a minimum, animals are vaccinated (and considered up to date) on

Dogs

DAPP

Distemper virus,
Adenovirus,
Parainfluenza
virus, Parvovirus

- should receive an initial puppy series
- a booster at ~ 1 year of age
- then a vaccine every 3 years
- Vaccinated at least 3 weeks prior to boarding

CIV

Canine influenza
virus

- every year after initial series

Bordetella

- every year after initial series

Leptospirosis

- every year after initial series

Rabies

- every 1 or 3 years depending on local laws

Lyme

if in an area where Lyme disease is a concern and/or dog is likely to have contact with tick-prone areas such as long grass and wooded areas (every year after initial series).

Cats

FCP

- Feline viral rhinotracheitis, Calicivirus, Panleukopenia
- should receive an initial kitten series
- a booster at ~ 1 year of age
- then a vaccine every 3 years

FeLV

- Feline leukemia virus
- every year after initial series

Rabies

- every 1 or 3 years depending on local laws

Requirement 2: Animals must receive the final dose in a series prior to involvement at the facility so there is adequate time for the animal to develop immunity.

For example:

- DAPP at least 3 weeks before animal enters the facility
- CIV at least 2 weeks before animal enters the facility
- *Bordetella* at least 7 days before animal enters the facility

Protocol: Gaps in vaccination coverage or delays in doses during the initial series should be identified to determine the need for a single booster or restart of the series. Different types of vaccines have variable durations of immunity (last different lengths of time).

In general, for *yearly vaccines* (e.g. CIV, *Bordetella*, leptospirosis, Lyme, FeLV):

- 2 doses are needed for the initial series (first time given) and are to be given 2-4 weeks apart. If these doses are given 6 or more weeks apart, general recommendations suggest the series should be started again (two additional doses, administered 2-4 weeks apart).
- After the initial series, boosters are to be given every 12 months. Vaccine coverage is considered lapsed when the due date for a booster is exceeded by 6 weeks (e.g. after 1 year and 6 weeks an adult dog or cat is considered overdue for yearly-administered vaccinations).
- Pets overdue for vaccination should receive an updated vaccine with enough time for the pet to develop immunity (e.g. DAPP at least 3 weeks, CIV at least 2 weeks, and *Bordetella* at least 7 days before animal enters the facility).



Cleaning and Disinfection Standards

Requirement 1: Proper cleaning and disinfection of both surfaces and air results in a cleaner, healthier environment and helps prevent the spread of infectious disease to both animals and people.

Protocol: There is a written SOP on surface cleaning and disinfection practices to be used for all indoor and outdoor facility areas. SOPs must include at a minimum:

- Steps in the cleaning and disinfection process.
- Frequency for cleaning and disinfection for the various surfaces and objects (bedding, toys). This should include disinfection between use by animals (cages, kennels, grooming tables), at the end of each day and other frequencies based on the surface, its use and the facility.
- The disinfectant product, concentration and contact time (time required for the disinfectant to be in contact with the organism to kill it) must be clearly stated. The disinfectant should be known to be effective against disease-causing organisms of greatest concern in these settings (see introduction for a list of organisms of greatest concern for boarding, daycare, training and grooming facilities). There is not one cleaning or disinfectant product or process that fits all facilities or surfaces/situations. SOPs must take into consideration the surfaces and disease risks involved, so that product, concentration and dilution are appropriate.
- The disinfection process should comply with existing occupational safety and health standards for the area and considered safe for staff and animals.



Protocol: There is a written SOP on air disinfection practices used for all indoor facilities. SOPs must include at a minimum:

- The air disinfecting equipment should be known to be effective, with up to a 99.9% kill against disease-causing organisms in one air pass, without producing any ozone, whether intentionally or unintentionally, or creating the potential for re-aerosolizing organisms.
- Clear steps to be taken (and frequency for these steps) to ensure all air exchanges (vents, returns) are clear of any blockages that might reduce proper air flow. Common sources of blocked air flow include hair, sound barriers, room dividers, and furniture.
- If using ultraviolet germicidal irradiation (UVGI) to disinfect the air, clear steps to be taken (and frequency for these steps) for replacing UV lamps in HVAC and standalone upper air units to ensure proper germicidal energy to eliminate disease-causing organisms. UV lamps must be confirmed to not produce ozone, even unintentionally.

- If using standalone upper air units with UVGI, they must meet recognized guidelines. As an example, for the U.S., see those established by the Centers for Disease Control and Prevention (CDC).⁶
- Clear frequency in changing air filters and the type of filter to use (e.g. compatible with the HVAC system, effective Minimum Efficiency Reporting Value [MERV] rating to trap disease-causing organisms).

Protocol: There is a written SOP on safe disinfectant use and storage. At a minimum this should include:

- Required use of appropriate protective equipment (e.g. gloves, mask) when mixing and using disinfectants.
- Appropriate labels (at a minimum: product, dilution, date mixed, expiry date) should be present on all disinfectant product (as supplied and when diluted).

Protocol: There is a written policy on owner-provided materials (bedding, toys).

- Since it is not possible to ensure owner-provided materials items are free from disease-causing organisms, these items (especially those made of cloth such as toys and bedding) should not be permitted.
- Any items that are permitted in the facility should be used only for the intended animal, arrive clean, and returned to the owner for cleaning.



Hygiene Standards

Requirement 1: Given the nature of grooming, boarding and daycare facilities, the hands of staff are likely to become contaminated with disease-causing organisms. Contaminated hands have been documented as an important source of disease spread. To reduce this disease risk, it is important for people to regularly perform hand hygiene (i.e. clean hands; wash with soap and water or use an alcohol-based hand sanitizer).

Protocol: There is a written policy on required hand hygiene by all staff and volunteers. At a minimum this should occur:

- When entering and exiting the facility,
- Frequently while working (especially when moving from one group of animals to another)
- Before eating and drinking.

Protocol: Hand hygiene products are readily available and functional in all animal contact and relevant locations (bathrooms, breakrooms).



Work Clothing Standards

Requirement 1: Similar to hands, the work clothing of staff at grooming, daycare and boarding facilities are frequently contaminated with disease-causing organisms. Contaminated clothing can move infections to other locations, people and animals. Having dedicated work clothing that is regularly changed is important to limit the spread of disease.

Protocol: There is a written policy on the requirement for dedicated clothing to be worn in the facility. This clothing should not be worn to other locations (e.g. home) and machine washed daily. Hot water wash and hot dry should be used.



Insect, Parasite, Stray and Wildlife Control Standards

Requirement 1: Infections in animals can be introduced and spread by ticks, fleas, and gastrointestinal worms from stray animals and wildlife. Limiting the presence of stray animals and wildlife and contact between them and client animals is important in reducing infections.

Protocol: There is a written SOP on efforts taken to identify and reduce insect, stray animal and wildlife in areas used by the facility (indoor and outdoor). The following should be used as appropriate:

- Fencing,
- Keeping grass short and removing debris,
- Using a professional, licensed extermination company (wildlife, insects),
- Ensuring human-made water sources (e.g. outdoor water play pools) are changed at least twice per week or otherwise maintained to limit mosquito breeding.

Requirement 2: There is a policy requiring (with documentation from a veterinarian) for all animals to be on effective flea, tick, and endoparasite (worm) preventive products prior to and during participation at the facility.

Protocol: There is a written policy on actions taken if fleas, ticks, or worms are identified in animals immediately prior to or during stay. This may include immediate removal of the pet with required documentation from a veterinarian that the problem has been resolved or immediate care by a local veterinarian if the owner is unavailable.

Protocol: There is a written policy on practices taken to require the immediate removal of animal feces (indoor, outdoor) with effective disposal.



Animal Food and Water Standards

Requirement 1: Disease-causing organisms can be introduced to animals through food and water. When care is not taken, contaminated food and water or sharing of water or food from common bowls can lead to the spread of disease in boarding, grooming and daycare facilities.

Protocol: There is a written policy on efforts taken to ensure water provided to animals (drinking, play) is safe to drink. This is especially important when non-chlorinated water is used.

Protocol: There is a written policy on not permitting the sharing of water or food (e.g. communal bowls) between animals not housed together.

- Group water bowls or areas where water can collect (and be drunk) serve to spread disease-causing organisms.
- When drinking water is needed, such as outside group play during high temperatures, alternative approaches should be used such as dog water fountains/sprayers that do not allow water to collect.

Protocol: There is a written policy on efforts taken to ensure food provided to animals is safe to consume.

- Must require proper storage of food (to prevent mold, insects).
- Must outline steps to identify and discard recalled, spoiled or unsafe food.

Protocol: There is a written policy on food items not permitted to be fed to animals at the facility.

- Uncooked meat- and egg-containing food and treats are known to often be contaminated with disease-causing organisms such as *Salmonella* and *Listeria*, and therefore, facilities should not feed these items to pets.



Housing and Play Standards

Requirement 1: When animal density is too high, such as with many animals kennelled close to each other or with large play groups, there is a high potential for the spread of infectious disease. The number of animals increases contamination of the environment, including the air; crowding also makes cleaning and disinfection more difficult. Animals housed close to one-another have a greater chance of spreading infectious organisms through coughing, sneezing, shedding hair/dead skin, and even breathing.

Protocol: There is a written SOP on efforts taken to reduce animal density in housing and play.

- A maximum occupancy is established for the facility and specific activities (e.g. play groups).
- Efforts are taken to spread out animals in the facility as much as possible (e.g. not all in neighbouring runs).

Protocol: There is a written SOP on efforts to minimize unnecessary animal-to-animal contact (e.g. among boarders).

- For some groups, animal-to-animal contact is expected, such as play groups. However, using semi permanent small subgroups when possible (i.e. the same animals are part of a given play group each day) reduces the number of new contacts and reduces infection risks.



Reporting Suspected/Confirmed Infections Standards

Requirement 1: Timely identification and awareness of disease is important in preventing spread of infections. For disease identification to be effective, all staff must know what early warning signs and diseases to report, when to report them, to whom to report, and there must be actions taken based on reports.

Protocol: The facility has a record keeping system that collects individual animal information on both healthy animals and animals suspected/confirmed with disease (e.g. dates of involvement, location of housing, reported disease concerns, and contact information for owners).

Protocol: There is a written SOP on staff responsibilities to monitor and immediately report to the facility manager animals reported by their owner to be sick, as well as all pets suspected to be sick during their visit.

References

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