

PRINCIPLES OF INFECTION CONTROL

Minimizing the spread of infectious diseases in animal shelter settings



Infection control is essential to prevent the introduction and spread of disease. This handout highlights important measures for infection control in animal shelters and steps to protect personnel from zoonotic disease risks.

Animal Health

The health of an animal plays a key role in its ability to ward off infection. In a shelter, important components of health maintenance include proper veterinary care, good nutrition, stress reduction, and effective record keeping.

- **All animals should be vaccinated with core vaccines on entry; this includes DHPP for dogs and FVRCP for cats**
 - Many shelters also vaccinate dogs intranasally for *Bordetella bronchiseptica*
 - Rabies vaccination should also be considered, but does not have to occur on intake
- **Animals should be examined by a veterinarian shortly after intake**
- **All animals should receive a weight-specific dose of routine dewormer**
 - Use of a broad-spectrum product like pyrantel pamoate, praziquantel and febantel is optimal
- **Do not feed raw or undercooked meats**
- **Rodent proof the main shelter building, barns, and other buildings, if present**
 - Keep pet food in rodent-proof containers with tight lids

Personal Protection

- **Protective clothing**
 - Gloves, smocks, uniforms, dedicated boots or disposable booties can help to minimize disease pathogen transfer and protect personnel
 - When airborne infectious particles are suspected, glasses or masks may be required
- **Avoid insect vectors (e.g., ticks and mosquitoes)**
 - Avoid being outside during peak vector activity times (e.g., dusk and dawn for mosquitoes)
 - Wear long sleeve shirts and long pants while outside
 - Use insect repellent containing DEET—
NOTE: DEET should not be used on pets
- **Use vector control measures around the animal shelter**
 - Remove stagnant water sources to minimize mosquito breeding areas

Hand Washing and Hygiene

Hand washing is one of the most effective ways to prevent the spread of disease. Alcohol-based hand gels can be effective when hands are not visibly dirty; these gels do not inactivate several common shelter pathogens.

- **Wash your hands often!!**

- BEFORE—preparing or eating food; having contact with young animals
- AFTER—contact with animals; cleaning pet waste or cages; using the restroom; blowing your nose

- **Avoid direct contact with animal feces**

- Wear gloves when cleaning animal cages, areas with animal waste or litter boxes
- Keep litter boxes away from eating areas
- Do not use high pressure hoses to remove animal waste from runs or cages as this can aerosolize fecal material and increase the risk of environmental contamination

- **Clean and disinfect areas accessed by pets**

- Change cat litter boxes daily; disinfect once a month or use disposable litter trays which are thrown away when heavily soiled or after the cat leaves the shelter
- Use a 1:32 dilution of bleach in all shelter laundry
- Dispose of any laundry contaminated with feces from likely panleukopenia-infected cats or parvovirus-infected dogs
- Launder all personal clothing, either at the shelter or at home, using bleach

Cleaning and Disinfection

Proper cleaning and disinfection procedures can help minimize disease pathogens in the environment. Two of the most important and overlooked steps are the removal of dirt and organic debris before disinfecting and allowing the proper contact time for the disinfectant to work. Gloves should be worn when cleaning any potentially contaminated surfaces in the shelter. Disinfectant selection will depend on the suspected pathogen, surface to be cleaned as well as the species of animals present in the shelter and their relative susceptibility to toxicity. Air filters and vents in the shelter should also be cleaned on a regular basis.

For More Information

Disinfection 101. Center for Food Security and Public Health. Available at: <http://www.cfsph.iastate.edu/BRM/resources/Disinfectants/Disinfection101Feb2005.pdf>

Cleaning and disinfecting in shelters information sheet. University of California - Davis, Koret Shelter Medicine Program. Available at: http://www.sheltermedicine.com/portal/is_cleaning.shtml#top3