



Cleaning and Disinfection in Foster Homes

Housing pets in foster homes lowers their risk of getting sick, because it reduces stress and exposure to infectious disease. Regardless of where animals are living, or whether they are currently sick, cleaning and disinfection help prevent the spread of disease. Cleaning and disinfection is especially important when a foster pet has an infectious disease that is difficult to eradicate from the environment. Foster caregivers should consider housing options and supplies that allow for easy cleaning and disinfection, and should know what to clean and disinfect, when to clean and disinfect, and how to do so.

Definitions and Importance of Cleaning and Disinfection

- *Cleaning* is the removal of dirt and debris – like cat litter or pieces of food -- followed by washing with soap or detergent and water. Cleaning mechanically removes viruses, bacteria, and other germs, but it does not kill them, no matter how hard you scrub. This is where disinfection comes in.
- *Disinfection* is the application of any agent, such as diluted bleach, that actually kills the germs.
- Cleaning always comes first. You can't disinfect a surface until you clean it.
- The primary goal of cleaning and disinfection is to reduce the spread of infectious disease to other pets or people through fomites. The first step to cleaning and disinfection is to identify all possible fomites in a foster pet's environment.
- A fomite is a nonliving object that can carry infectious organisms on its surface. Fomites can be anything with traces of a sick pet's body secretions or fur on them. Body secretions include nasal discharge, saliva, vomit, diarrhea and blood. Essentially, this means that fomites are all surfaces and objects that a sick pet has come into direct contact with- Floors, walls, bedding, toys, food and water bowls, crates and pens, collars, leashes, scales, and people's hands and clothing. Fomites can also be surfaces and objects that people touched after touching a sick pet- doorknobs, light switches, brooms and mops, pens, thermometers, etc.
- To learn more about fomites and other ways diseases are transmitted, check out the [Maddie's Preventing the Spread of Disease in Foster Homes](#) flash class.
- Since so many surfaces and objects can be fomites, it's a good idea to choose housing and supplies for your foster pet that are easy to clean and disinfect.



Choosing Housing That Is Easy to Clean and Disinfect

- Some household surfaces are difficult to clean and disinfect without causing damage from scrubbing or the use of bleach.
- You should house your foster pet in a room that has surfaces that are easy to clean and disinfect, at least for the first two weeks, or if he or she is sick.
- Some surfaces that are particularly easy to clean and disinfect are tile or vinyl floors and countertops, tile walls, splashboards, bathtubs, and showers.
- On the other hand- wallpaper, carpet, wooden or upholstered furniture, and hardwood floors are all difficult to properly clean and disinfect.
- Some rooms contain more objects needing to be cleaned and disinfected than others, and all those things are potential fomites that need to be cleaned and disinfected. Think about this when selecting housing for your foster pet- again, at least for the first two weeks, or if he or she is sick.
- One particularly easy-to-clean-and-disinfect option might be a spare bathroom that only contains supplies used for the foster pet, and doesn't have unnecessary clutter on its countertop.
- In contrast, a home office is particularly hard to clean and disinfect. Remember desk lamps, papers, books, computer monitors, printers, and everything else are all potential fomites.

Choosing Supplies That Are Easy to Clean and Disinfect

- When selecting supplies for your foster pet, either use disposable supplies, or avoid those that are difficult to clean and disinfect or cannot be cleaned and disinfected.
- For example, stainless-steel food and water bowls, and stainless-steel litter boxes are all very easy to clean and disinfect.
- Some supplies that are not as easy to clean and disinfect include plastic food and water dishes, plastic litter boxes, rubber or plastic toys, bedding, and towels.
- Toys are great, but remember- some are difficult to clean and disinfect, so be sure not to share them between pets. These include stuffed toys and any toys with feathers, fabric, rope, or similar material.
- Some common supplies cannot be cleaned or disinfected- like cardboard carriers, cardboard toys, bags of food, bottles of white corn syrup, and tubes of lubricant.
- Getting more specific, we commonly use white corn syrup to address blood sugar issues, and lubricant to take temperatures. While you can clean and disinfect their containers, once the corn syrup or lubricant themselves are contaminated, they cannot be cleaned and disinfected.



How Often to Clean and Disinfect

- Before any new foster pets or resident pets are brought into the household.
- At least daily if a foster pet or resident pet has an infectious disease.
- At least weekly if all foster pets and resident pets are healthy.
- As needed to clean up messes such as vomit, diarrhea, and nasal discharge.

How to Clean and Disinfect: Product Selection

- The cleaning agent should be either a detergent or a degreaser. A detergent is a cleaning agent that helps remove dirt and grease from surfaces. A degreaser is a very powerful detergent that specifically removes oils and other greasy debris. A dishwashing detergent such as Dawn® is a good choice.
- Some infectious diseases are particularly tough, and cannot be destroyed by certain kinds of disinfectants and many household cleaners. It's important that your disinfectant is able to kill even the most resistant infectious diseases, such as feline panleukopenia virus, canine parvovirus, feline calicivirus, and ringworm. Even some disinfectants used in veterinary clinics and animal shelters that are labeled as "parvocidal" do not kill canine parvovirus.
- The best choice for a disinfectant in foster homes is a dilution of household bleach. It is highly effective, and inexpensive. The dilution needed varies based on the infectious disease present. A 1:32 dilution kills most infectious diseases except ringworm. Ringworm needs a stronger 1:10 dilution.

How to Clean and Disinfect: Bleach Dilution

- Household bleach is sodium hypochlorite. The amount of bleach that you add to a certain amount of water depends on the concentration of the bleach.
- Most household bleach found in stores these days is an 8.25% concentration, even though most labels no longer list the concentration. The Clorox brand of concentrated household bleach has a concentration of 8.25%. If you are using a brand of bleach other than Clorox, you should check with the company to find out what the concentration is.
- It is very important to note that most household bleach found in stores used to be a 5.25% concentration. Almost all information on the internet on how to dilute bleach solutions still uses a 5.25% concentration- nothing seems to have been updated yet.
- If you are using 8.25% concentrated household bleach:
 - To make a 1:32 dilution, you should add 1/3 cup of bleach to 1 gallon of water, or 17 ml, which is 1 TBSP + ½ TSP, to 32 oz. of water. A typical spray bottle is 32 oz.



- To make a 1:10 dilution, you should add 1 cup of bleach to 1 gallon of water. Or ¼ cup to 32 oz. of water.
- If you are using a different concentration of bleach, use the [ASPCA Bleach Dilution Calculator](#) to figure out how to make a 1:32 or 1:10 dilution.
- A word of caution about the 1:10 diluted bleach. Remember that bleach can burn. You should avoid exposing foster pets to the fumes, and people should wear gloves and masks. Also, be sure there is adequate ventilation when using it.
- Also, bleach rapidly breaks down when exposed to light and when mixed with water. Bleach solutions should be stored in an opaque container, not a clear or transparent container, and must be made fresh at least every 24 hours – or more often.

How to Clean and Disinfect: Bleach-Safe Fomites

- Bleach-safe fomites are surfaces and objects such as bathtubs, tile, and stainless-steel bowls that would not be damaged with the use of a 1:10 or a 1:32 dilution of household bleach.
- To clean these surfaces and objects:
 - 1) First remove all debris, such as fur, food, cat litter, poop, pee, vomit, and nasal discharge, etc.
 - 2) Then scrub the object or surface with your detergent or degreaser.
 - 3) Follow with rinse and dry.
 - 4) Next, disinfect with diluted bleach. Spray with diluted bleach and allow it to sit for a full 10 minutes of contact time. Apply enough diluted bleach to ensure that it does not evaporate before the 10 minutes is up.
 - 5) Follow with rinse and dry
 - It is recommended that the disinfection and final rinse and dry steps be repeated two more times when dealing with feline panleukopenia virus, feline calicivirus, canine parvovirus, and ringworm.
 - One quick note about contact time. When disinfecting, there's a temptation to spray an item with dilute bleach and then almost immediately rinse it. But the bleach needs time to work. Assuming the concentration is correct, 10 minutes of contact time is enough to kill even the toughest infectious diseases.

How to Clean and Disinfect: Fomites not Bleach-Safe

- A lot of fomites are not bleach-safe. Bedding, carpet, and upholstered furniture would be damaged with the use of 1:32 or 1:10 diluted bleach.



- Laundry:
 - Bedding, towels, stuffed animals, toys with fabric, and clothes worn while handling your foster pet should be laundered in hot water, separately from other laundry.
 - Follow label directions for measuring the amount of laundry detergent and bleach per load.
 - It is best to use separate bleach and detergent cycles. Use a wash cycle that introduces detergent for cleaning then has a rinse cycle prior to introducing bleach for disinfecting and a final rinse. Either that or run the laundry through twice, first with detergent, then with bleach.
 - This laundry should be either machine or sunlight dried afterwards. Sunlight is a great additional disinfectant!
 - Don't forget to clean and disinfect the outside of the washer and dryer, they can also be fomites.
- Carpet:
 - First vacuum thoroughly, including under beds and couches, then clean the carpet with regular carpet cleaner. Renting a carpet cleaner from the grocery store or a home supply store works well. Steam cleaning the carpet is also acceptable.
- Upholstered Furniture:
 - First vacuum thoroughly, including under couch cushions. Afterwards, steam clean the furniture.
 - Also, don't forget that the vacuum, carpet cleaner, and steam cleaner can be fomites, especially the vacuum cleaner canister. Be sure to clean and disinfect them after use too!
- Wooden furniture or paneling:
 - For wooden furniture or paneling, disinfection would ruin the wood so the only choice is to thoroughly clean it several times with furniture polish.
- Wallpaper or other surfaces and objects:
 - For wallpaper or other surfaces and objects that would also be ruined by disinfection, the best thing to do is to carefully clean them with disinfecting wipes or with another type of cleaner that is safe for those surfaces or objects.

Infectious Diseases Difficult to Eradicate from Environment: Additional Considerations

- There are additional considerations if you are dealing with infectious diseases that are very difficult to get rid of in the environment, like feline panleukopenia virus, canine parvovirus, or ringworm.



- You should throw away all items that cannot be cleaned or disinfected, and consider throwing away supplies that aren't easy to clean and disinfect.
- Ringworm spores are airborne and can get everywhere! When cleaning and disinfecting in a foster home where ringworm is present, avoid doing things that could send ringworm spores flying into the air. Don't shake out bedding. Dump cat litter in garbage cans very gently, especially if it is a large garbage can.
- Swiffers work great for trapping ringworm spores or fur containing ringworm spores.
- Furnace filters should be changed in foster homes after a pet has had ringworm.
- Feline panleukopenia virus and canine parvovirus are very durable and can persist in the environment for years. If feline panleukopenia has been in a foster home, it is recommended that foster caregivers wait at least one year before introducing any new foster or resident cats under the age of 5 months into the home. The only cats who should enter the house sooner than that are those who are over the age of 5 months and fully vaccinated against feline panleukopenia. The same holds true for canine parvovirus.
- It is better to be safe than sorry where these serious and hard to get rid of infectious diseases are concerned.

Helpful Tips

- People should wear exam gloves when handling sick pets and be diligent about hand washing. This will help reduce contamination of hands, clothing, and objects, and decrease the risk of infecting other pets in the household.
- Don't place clean items on the floor or on dirty surfaces. Don't place dirty items on clean surfaces.
- Consider covering your furniture and carpet with sheets, plastic table covers, or tarps, especially if you have a messy litter of kittens or puppies! This will make cleaning and disinfection easier and a lot quicker.
- Cardboard box lids or shirt boxes work well for disposable litter boxes that can be thrown away each day.
- Use small containers of supplies in isolation areas. This will help avoid waste. Consider using tiny packets of lubricant for temperature taking instead of a large tube of lubricant. Place small quantities of dry food in plastic containers instead of keeping the entire bag of food in the isolation area. Draw up small amounts of white corn syrup in oral syringes instead of storing the whole bottle of white corn syrup in the isolation area.

