

HANDLING, DILUTING AND USING DISINFECTANTS

Operations require the use of several detergents and disinfectants. Some of these may be hazardous to human and animal health, and the following procedures are in place to ensure the safety of our shelter animals, staff, volunteers and the public.

Dilutions

Follow these formulas for diluting detergents and disinfectants. Volunteers and anyone other than shelter staff should **not** be allowed to dilute a disinfectant. Volunteers may fill empty spray bottles of solutions from the pre-diluted gallon jugs if they are wearing protective gear, but they may not mix the dilutions themselves

- *Bleach (disinfectant)*: dilute 4 ounces (1/2 cup, C setting on hose end sprayer) per gallon of water
- *Bleach labeled "concentrated"* ("concentrated", "more concentrated", "ultra", etc.): dilute 3 ounces (1/3 cup, also C setting on hose end sprayer) per gallon of water. **Be careful to check bleach labels for concentration!**
- *Accel "concentrate" (detergent, disinfectant)*: dilute 2 ounces (1/4 cup, B setting on hose end sprayer) per gallon of water (NOTE: Accel "TB" liquid and wipes are pre-diluted and "ready to use" – do NOT dilute Accel TB)
- *Hose end sprayers*: when using a hose-end sprayer, always check the dilution level before use. If the label on the hose-end sprayer indicates units of measurement other than those listed in this reference, don't guess or perform your own conversion; report to your manager for clarification. (NOTE: ALWAYS empty and rinse the hose-end sprayers immediately after completing use. See *Operating Instructions for Foamaster II Foam Cleaning Gun* in SOP manual.)
- *Soap (detergent) solution*: approximately 1/4 cup liquid soap per 4 gallons of water or until sudsy

Procedure for diluting disinfectants:

- Ensure proper ventilation (i.e. opening windows)
- Wear protective gear (personal protective equipment/PPE: gloves, face mask, goggles)
- Fill the gallon jug labeled for the particular disinfectant with cold water completely. Pour out the amount of water you're going to replace with disinfectant, using the measuring cup labeled for the disinfectant.
- Measure the proper amount of disinfectant into the measuring cup labeled for it and pour into the gallon jug.
- Pour the diluted disinfectant into the spray bottle labeled for it
- Ensure the gallon jugs, measuring cups and spray bottles are always properly labeled for the correct solution and have expiration dates noted on them if applicable

Degradation of dilutions

All *bleach dilution* must be mixed fresh, gallon jugs and spray bottles emptied and refilled **every morning**. Once diluted or exposed to light, bleach degrades and becomes ineffective after 24 hours. Bleach is also inactivated by soap, and hot water.

- Always store the gallon jug on top of the mini-fridge in the vet room
- Emptying spray bottles of bleach from the day before is the responsibility of each section's assigned staff member (be sure to check the whole building for spray bottles so no old dilution is left to be used accidentally)

All *Accel "concentrate" dilution* must be mixed fresh, gallon jugs and/or spray bottles emptied and refilled **every 90 days**. Once diluted, Accel concentrate degrades and becomes ineffective after 90 days. Always store the gallon jug on top of the mini-fridge in the vet room

- When filling a gallon jug OR a spray bottle with Accel dilution, you **MUST** clearly mark the expiration date on the bottle
- Remember to double-check the expiration date on the bottle of Accel before every use!

Rinsing disinfectants

- Bleach dilution must always be completely rinsed with clean water
- Accel dilution does not need to be rinsed if the surface has dried

Fomites any object or substance capable of carrying infectious organisms, such as germs or parasites, and hence transferring them from one individual to another

- Mops and brooms are fomites. The mops and brooms (floor brooms & handheld brooms) are never to be used for kennel cleaning or spot cleaning. A mop is only to be used for cleaning public floors and hallways. Use a clean paper

towel to pick up debris. You may use a clean paper towel to “sweep” debris into a handheld dustpan, as long as the dustpan is fully disinfected after the morning’s cleaning.

Cases of known infectious disease

- When cleaning kennels, dishes or toys that were used by an animal with a known infectious disease (i.e., ringworm or parvovirus) these dilutions do not apply; refer to the SOP for the particular infectious disease
- NOTE: For areas contaminated with parvovirus, panleukopenia or ringworm, dilute Accel at 1 oz per gallon for pre-wash (scrub) stage, rinse & then dilute at 8 oz per gallon for 5 minutes of contact time to fully disinfect

CLEANING AND SANITIZING SMALL ITEMS

Including litter boxes, food and water dishes, and hard toys

The procedure for cleaning and sanitizing small items is similar to that of “deep cleaning” kennels; the dishes and toys will likely be used by a different animal after they’re washed, and so they must be fully sanitized.

Litter boxes, litter scoops and any other item used for cleaning must be segregated and sanitized separately from dishes or toys and any item used for eating, drinking or chewing

- Remove any solid material from the item so it doesn’t clog the drain or interfere with the detergents and disinfectants used
- Thoroughly scrub the item with a sponge, scrub brush or washcloth and soap solution (in a 5-gallon bucket or a sink basin)
- Thoroughly rinse the item with clean water
- Ensure proper ventilation (open windows and also prop open outside-leading doors at least 6 inches if there’s no present risk of animals escaping)
- You must wear PPE (personal protective equipment: gloves, face mask, goggles) during application of bleach
- Adjust the spray nozzle to mid-range spray (in between mist and stream)
- Hold the spray bottle closely to the item and be careful not to direct the spray anywhere other than on the item
- Completely spray down the item with bleach dilution (be sure to address the inside and outside of the item as well as any fold, crease or removable part.)
- You must saturate each item so thoroughly with bleach that it will stay damp for the entire 10 minute contact time required for proper sanitization.
- Stack the items sprayed with disinfectant inside the sink basin and allow at least 10 minutes of contact time
- Place a “Bleached” label on top of the stack of sprayed items
- After at least 10 minutes, thoroughly rinse the items with clean water and either hand-dry or stack to dry on a clean towel

SANITIZING LAUNDRY (WASHING MACHINE)

- Use powdered laundry detergent per load, measured to the black line on the detergent scoop in “A” (pre-wash) slot of machine
- Use 1/2 cup of bleach (1/3 cup if concentrated) per load, measured with the measuring cup labeled “bleach” in “B” slot (main wash) of machine
- Laundry that was used by an animal with a known infectious disease must always be secured inside of its own plastic garbage bag before being moved to the laundry area to be washed

DOG MORNING CLEAN UP (DAYS OTHER THAN WEDNESDAY & SATURDAY)

The dog morning scrub begins right after the dogs are all fed and medicated. Dogs are to be fed in their outdoor runs while cleaning occurs. We rotate water buckets daily: when feeding dogs outside, bring the water bucket that was inside with you to place outside with the dog (if the weather is freezing, we don't move water buckets from the day before outside, we just replace them with clean ones.) The morning scrub for all animals should be completed by 10:30am each day. Work in a team of at least two (one staff member plus at least one volunteer) whenever possible. Clean the general dog area first, dog receiving second and dog isolation last. If the weather is a safe temperature, call or walk all of the dogs outside and secure the doors/kennel gates behind them. If the weather is extreme, call or walk dogs from each section (those runs that share a drain) outside at a time and clean one section at a time.

- Go inside the kennel, pick up all bedding, platforms, beds, dishes, etc. and look for any evidence of feces or urine.
- NOTICE: For animals with very soiled kennels (i.e., diarrhea) follow the *Wednesday/Saturday Deep Cleaning SOP*; for animals with a known infectious disease, refer to the SOP for the particular infectious disease. **The best way to ensure a "spot cleaning" procedure doesn't have a harmful impact on animal health is to closely monitor all animals for signs of infectious disease and immediately remove any potentially infected animal into an isolation area.**
- Move and retain all visibly clean and fresh-smelling bedding and toys to be returned to the appropriate kennel after cleaning. Place piles separately approximately 10 ft away from associated kennel if needed; it is preferred to keep the items in a corner of the kennel if spot cleaning allows for them not to become wet.
- In each run, pick up all of the solid fecal matter and pick-up any spilled food, broken toys or shredded bedding. Hose any urine down the drain.
- Ensure proper ventilation: open all available windows (prop open outside-leading doors at least 6 inches if there's no present risk of animals escaping) You must wear PPE (personal protective equipment: gloves, face mask, goggles) during application of Accel
- Cover any area of visible organic material with Accel dilution at 2 ounces (1/4 cup) per gallon, including any organic material on the walls, doors, pallets and fencing
- Scrub all the areas with a stiff brush or heavy cloth, thoroughly removing the organic material
- Use the hose to completely rinse clean each run of the Accel dilution
- When spot cleaning with Accel, the Accel does not need to sit 5 minutes because we are using the dilution as a detergent, not a disinfectant. However, the Accel must be rinsed in order to remove organic material.
- Squeegee each run and walkway and/or spot-dry with clean towels as necessary
- Fill new water bowls/buckets and place in proper position
- Replace with old bedding and toys, replace with new bedding if needed. Refer to dog toy chart for special cases
- Move all the dogs back inside their runs
- Examine the outside section of every run. Scoop up all the solid fecal material and toy and bedding parts with the scooper. Ensure the kennel is completely secure and there are no breaks in fencing or dangerous broken items
- Check the outside of the dog's run and bring their toys back inside if they've taken them outside, removing any soiled toys to be cleaned and replacing them with clean ones. Be sure to provide at least one toy - preferably one each of a soft toy, hard toy and squeaky toy.
- Check all poop buckets and garbage receptacles in each animal area for fullness. Any bag that is half full or more needs to be emptied immediately and replaced with a clean bag
- Sweep and mop the floor of any debris in the main area, hallways, bathroom and other rooms

If you were assisted by a volunteer, walk through every animal area and inspect both the inside and the outside of every kennel after you've completed the morning cleaning. Give appropriate constructive feedback to each volunteer as necessary. Staff is held accountable for the cleanliness, condition and adherence to policy in their assigned animal area.

When you remove a dog from his/her cage permanently, immediately place a yellow "Dirty Kennel" card on the cage to indicate that the cage needs to be disinfected. See *EMPTY CAGE DISINFECTING (AFTER ANIMAL LEAVES)*

CAT MORNING CLEANING (DAYS OTHER THAN SATURDAY)

Cats should be left in the cage while cleaning whenever possible. Whenever possible, cats should be provided an area to hide in their kennel. A paper bag, box, etc. will work well for this purpose. The cat can be encouraged to enter the hiding area (often will enter on her/his own) while spot cleaning occurs. If double sided cages are available, fractious cats should be placed on the opposite side of the cage and separated with a divider. Handling should be minimized during cleaning. If absolutely necessary, the cat should gently be removed from the cage and placed inside a sanitized, size-appropriate carrier that is labeled clearly with the animal's name for reuse (use a heavy blanket or towel to handle a fractious animal.)

- At the beginning of cleaning, check each animal and its environment, including inside and outside of the animal's cage to determine whether or not spot cleaning is appropriate
- NOTICE: For animals with very soiled kennels (i.e., diarrhea) follow the *Saturday Deep Cleaning* SOP; for animals with a known infectious disease, refer to the SOP for the particular infectious disease. **The best way to ensure a "spot cleaning" policy doesn't have a harmful impact on animal health is to closely monitor all animals for signs of infectious disease and immediately remove any potentially infected animal into an isolation area.**
- Always work in order of age and susceptibility when cleaning:
1. Pediatric (kitten) & geriatric (senior), 2. Vaccinated healthy adult, 3. Unvaccinated adult, 4. Sick
- Staff and volunteers must thoroughly *sanitize* their hands (i.e. wash their hands with soap and water, NOT only use hand sanitizer) in between cleaning each cat enclosure
- If cat litter and hair has accumulated on the cage floor, use a clean paper towel to sweep the debris into a dustpan (hold the dustpan outside of the cage – fomite!) or back into the cat's litter box
- Any organic material (urine, feces or spilled food) on kennel walls and floors should be wiped down with Accel dilution
- The safest way to apply Accel dilution in cat enclosures is: Fill a clean 5-gallon bucket with as many washcloths as you have enclosures to clean. Fill the gallon bucket with enough Accel dilution to completely cover the washcloths. When spot cleaning in this way, the washcloth must be thoroughly rung out so the Accel dries quickly in the animal's enclosure.
- Do NOT double-dip used washcloths in this dilution! If more than one washcloth is needed to clean a single enclosure, use a brand new washcloth.
- You must wear PPE (personal protective equipment: gloves) during this application of Accel
- Soiled litter should be disposed of and replaced with fresh litter.
- When disposing of soiled litter, always use a new litter box scoop for each litter box, a clean paper towel or a clean plastic glove (do not reuse litter box scoops – fomite!)
- If the litter is lightly soiled, scoop the solid material and replace the volume with fresh litter. If very soiled, replace the entire litter box, using two scoops for a single cat's litter box, or three scoops for a shared litter box.
- Empty water bowls and refill with fresh water. Dispose of food from the day before and provide fresh food based on instructions on white board. Only replace bowls if they're very soiled (i.e., contained wet food)
- Shake bedding out into a trash bag or back into the cat's litter box to remove litter and food, and return to cage if not soiled. Provide clean bedding if needed.
- Check all poop buckets and garbage receptacles in each animal area for fullness. Any bag that is half full or more needs to be emptied immediately and replaced with a clean bag.
- Sweep and mop the floor of any debris in the main area, hallway, bathroom, and office. Be sure to use the proper broom labeled for use in hallways, office, and bathroom.
- **Community cat rooms:** The cleaning process is exactly the same as above. Be sure to sweep the floors well using the proper broom labeled for use in the community cat area.

If you were assisted by a volunteer, walk through every animal area and inspect every kennel after you've completed the morning cleaning. Give appropriate constructive feedback to each volunteer as necessary. Staff is held accountable for the cleanliness, condition and adherence to policy in their assigned animal area.

When you remove a cat from his/her cage permanently, immediately place a yellow "Dirty Kennel" card on the cage to indicate that the cage needs to be disinfected. See *EMPTY CAGE DISINFECTING (AFTER ANIMAL LEAVES)*

SATURDAY DEEPIING CLEANING

For dogs: The dog morning scrub begins right after the dogs are all fed and medicated. Dogs are to be fed in their outdoor runs while cleaning occurs. We rotate water buckets daily: when feeding dogs outside, bring the water bucket that was inside with you to place outside with the dog (if the weather is freezing, we don't move water buckets from the day before outside, we just replace them with clean ones.) The morning scrub for all animals should be completed by 10:30am each day. Work in a team of at least two (one staff member plus at least one volunteer) whenever possible. Clean the general dog area first, dog receiving second and dog isolation last. If the weather is a safe temperature, call or walk all of the dogs outside and secure the doors/kennel gates behind them. If the weather is extreme, call or walk dogs from each section (those runs that share a drain) outside at a time and clean one section at a time.

For cats: Animals must be gently placed in a sanitized, size-appropriate carrier while disinfecting occurs (use a heavy blanket or towel to handle a fractious animal.)

- Staff and volunteers must thoroughly *sanitize* their hands (i.e. wash their hands with soap and water, NOT only use hand sanitizer) in between cleaning each cat enclosure
- Empty the entire kennel and take dishes, bedding and toys to their washing areas
- In each kennel, pick up all of the solid fecal matter and pick-up any spilled food, broken toys or shredded bedding
- Cover the entire kennel with Accel dilution at 4 ounces (1/2 cup, or C setting on hose end sprayer) per gallon (NOTE: this is DOUBLE the spot-cleaning concentration!), including on the walls, doors, pallets, and gates
- Use a hose-end sprayer to apply Accel dilution in dog enclosures.
- The safest way to apply Accel dilution in cat enclosures is: Fill a clean 5-gallon bucket with as many washcloths as you have enclosures to clean. Fill the gallon bucket with enough Accel dilution to completely cover the washcloths. Do NOT double-dip used washcloths in this dilution! If more than one washcloth is needed to clean a single enclosure, use a brand new washcloth. When deep cleaning in this way, the washcloth must stay sopping wet so enough Accel is applied to stay wet for the full 5 minutes of contact time required.
- Scrub all the areas with a stiff brush or heavy cloth, removing the organic material
- Ensure at least 5 minutes of proper contact time for disinfectant to work
- Completely rinse clean the kennel of the Accel dilution (depending on the animal area, use the hose or a cloth in a 5-gallon bucket of water [use a new cloth for each enclosure and do NOT double-dip the cloth; focus on not contaminating the clean water – fomite!])
- Ensure proper ventilation (prop open outside-leading doors at least 6 inches if there's no present risk of animals escaping)
- You must wear PPE (personal protective equipment: gloves, face mask, goggles) during application of Accel
- Spray Accel dilution on any squeegee used (fomite!)
- Squeegee each kennel and walkway and/or spot-dry with clean towels as necessary
- Provide clean, full water bowls/buckets. Provide fresh food based on instructions on white board (for cats)
- Provide new bedding (return cat castles to their proper kennels)
- Provide at least one toy - preferably one each of a soft toy, hard toy and squeaky toy. Refer to dog toy chart for special dog cases
- Return all of the animals to their enclosures
- Thoroughly examine the outside section of every kennel (if applicable.) Scoop up all the solid fecal material and toy and bedding parts with the scooper. Ensure the kennel is completely secure and there are no breaks in fencing or dangerous broken items. Remove ALL toys from the dog yards.
- Check all poop buckets and garbage receptacles in each animal area for fullness. Any bag that is half full or more needs to be emptied immediately and replaced with a clean bag

Deep cleaning in the **community cat area** is limited to:

- Remove all litter boxes, dishes and washable bedding and replace with new items
- Walls, gates, windowsills and floors of room can be wiped down with Accel dilution to remove any organic material.
- Be sure to sweep the floors well using the proper broom labeled for use in the community cat area.

If you were assisted by a volunteer, walk through every animal area and inspect every kennel after you've completed the morning cleaning. Give appropriate constructive feedback to each volunteer as necessary. Staff is held accountable for the cleanliness, condition and adherence to policy in their assigned animal area.

EMPTY CAGE DISINFECTING (AFTER ANIMAL LEAVES)

Cages that require disinfecting after an animal leaves should have a yellow “Dirty Kennel” sign hanging on the cage. The person removing the animal from the cage is responsible for hanging the card.

When receiving kennels are vacated, they must be fully disinfected immediately so they can safely house a new animal as soon as necessary. In most instances, sanitizing of any other kennel can wait until the following morning’s scheduled cleaning.

For dogs: If there is an animal in a kennel which shares a drain with the one you need to sanitize, that animal must be secured in another area (likely an outside run or iso pen) while cleaning occurs

- Staff and volunteers must thoroughly *sanitize* their hands (i.e. wash their hands with soap and water, NOT only use hand sanitizer) in between cleaning each cat cage
- Empty the entire kennel and take dishes, bedding and toys to their washing areas
- In each kennel, scoop up all of the solid fecal matter and scoop or pick-up any spilled food, broken toys or shredded bedding
- Cover the entire kennel with soap solution, including on the walls, doors, pallets, and gates (for dog runs: also scrub the outdoor cement pad)
- Scrub all the areas with a stiff brush or heavy cloth, removing the organic material
- Completely rinse clean the kennel of the soap solution (depending on the animal area, use the hose, a cloth in a 5-gallon bucket of water [use a new cloth for each enclosure and do NOT double-dip the cloth; focus on not contaminating the clean water – fomite!], or several 5-gallon buckets of clean water)
- If water has pooled inside the kennel or cage, use a clean squeegee or clean cloth to remove it (it will dilute the application of the Accel dilution and make it ineffective)
- Ensure proper ventilation (prop open outside-leading doors at least 6 inches if there’s no present risk of animals escaping)
- Apply Accel dilution at 4 ounces (1/2 cup per gallon, or C setting on hose end sprayer) per gallon on the entire kennel (NOTE: this is DOUBLE the spot-cleaning concentration!), including walls, doors and gates.
- For dog runs: also Accel the outdoor cement pad.
- Use a hose-end sprayer to apply Accel dilution in dog enclosures.
- The safest way to apply Accel dilution in cat enclosures is: Fill a clean 5-gallon bucket with as many washcloths as you have enclosures to clean. Fill the gallon bucket with enough Accel dilution to completely cover the washcloths. Do NOT double-dip used washcloths in this dilution! If more than one washcloth is needed to clean a single enclosure, use a brand new washcloth.
- You must wear PPE (personal protective equipment: gloves, face mask, goggles) during application of Accel
- Spray Accel dilution on any squeegee used (fomite!)
- Ensure at least 5 minutes of proper contact time for disinfectant to work
- After at least 5 minutes, rinse the kennel thoroughly with clean water (depending on the animal area, use the hose, a cloth in a 5-gallon bucket of water [use a new cloth for each enclosure and do NOT double-dip the cloth; focus on not contaminating the clean water – fomite!])
- Squeegee each kennel and walkway and/or spot-dry with clean towels as necessary
- Thoroughly examine the outside section of every kennel (if applicable.) Scoop up all the solid fecal material and toy and bedding parts with the scooper. Ensure the kennel is completely secure and there are no breaks in fencing or dangerous broken items. Remove ALL toys from the dog yards.

Disinfected (and empty) dog run set up:

- Place an empty water bucket in the cage upside down (In Dog Receiving, place a clean, full, large bowl of water so dogs of all size can reach it, and a large blanket inside the kennel)
- Remove the “Dirty Kennel” sign and put back in the SOP binder

Disinfected (and empty) cat cage set up:

- Set up with a full litter pan in the back of the cage
- Place an empty food/water dish in the cage upside down
- Remove the “Dirty Kennel” sign and put back in the SOP binder

These setups are a visual sign for all staff and volunteers that the cage is disinfected and ready for a new animal.

If you were assisted by a volunteer, walk through every animal area and inspect the inside and outside of every kennel after you've completed the morning cleaning. Give appropriate constructive feedback to each volunteer as necessary. Staff is held accountable for the cleanliness, condition and adherence to policy in their assigned animal area.