



Our Mission:

We are committed to saving lives and reducing suffering of homeless dogs and cats through education, advancement of knowledge and shelter outreach.

Program Staff:

- Dr. Jan Scarlett, Program Director
- Dr. Elizabeth Berliner, Director of Clinical Programs
- Ms. Kelley Bollen, MS, CABC, Director of Behavior Programs
- Ms. Kelly Garner, MA, Program Coordinator
- Ms. Sue Honig, MS, Computer Technician
- Dr. Mike Greenberg, Clinical Fellow

Shelter Medicine Interns:

- Dr. Kate Gollon
- Dr. Nicole Putney

Contact Information:

Shelter Medicine Program
Cornell University
College of Veterinary Medicine
SI-066 Schurman Hall
Ithaca NY 14853

(607) 253-3349

sheltermedicine@cornell.edu

Shelter Watch



Volume I, Issue 10

September 8, 2011

From the Clinician's Desk

In July, I took a leap of faith and wrote about work wellness in the animal shelter setting.

The article was a hit! Several people responded enthusiastically with what they have done to encourage their staff in physical and emotional wellness. Although these suggestions are not exhaustive, I thought I would share what some of your colleagues are doing.

Some organizations are working in-house to support their staff. At the McKamey Animal Center in Chattanooga, TN, they have invited a yoga teacher-in-training to teach classes for their staff when they are closed to the public; the instructor fulfills necessary teaching hours, and the staff get de-stressed. At other times the crew gathers for fun bowling nights out, purely voluntary of course. At least one other organization has "stitch and bitch" knitting and craft nights, with several of the projects being cat or dog blankets. No great stress if they come out a bit uneven, or the colors aren't quite right!

Other groups enlist outside companies to help. The Oregon Humane Society changed health insurance plans and took advantage of several wellness incentives offered by the new company: employees get rewards for getting a flu shot, taking a personal health risk assessment, and/or signing up with a health coach for free sessions. They also approached a counselor from a local university to help provide guidance for employees struggling with anger and frustration from the daily issues of animal sheltering. Nicole of OHS

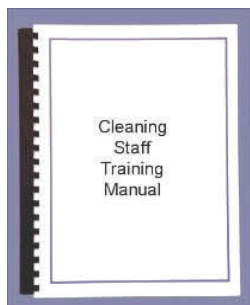
wrote, "If we can reduce small (but large) stressors like not feeling good, worrying about money, feeling angry or not knowing how to relieve stress, maybe we can enhance the long term well-being of the people who work here, and ultimately enhance the care they give to animals and clients."

Sometimes small, simple efforts within the shelter can make a difference as well. A "kudos" board recognizing efforts above and beyond by staff members, a daily quote of encouragement, or a pot-luck lunch once a week (healthy foods of course) can make a big difference in workplace relationships and overall climate.

Finally, one director sent me a copy of Trauma Stewardship by Laura van Der-noot Lipsky, which she recently gifted to all of her staff members. A long-time trauma worker, Lipsky recognizes and articulates the very complicated role of institutional care-giving over the long haul. This thoughtful, insightful, and often humorous book provides a framework for deciding just how much one can give before it become detrimental to one's self and the overall mission. Unlike many others, it recognizes humane work, animal sheltering, and conservation medicine right alongside the other more traditional, human-centered helping professions.

Thank you for your feedback! And I'll be seeing you at the shelter.

Elizabeth Berliner, DVM, MA



Always check the proper guidelines for use and potential toxicity of cleaning products.

“Phenols, organic compounds found in cleaning supplies like Pine-Sol, should never be used in a shelter setting.”



Bleach is highly effective against many common pathogens found in animal shelters.

Safety Guidelines for Disinfection and Sanitation: Dr. Kate Gollon

Proper disinfection and sanitation in a shelter setting is an essential tool in prevention of disease transmission, maintenance of a clean environment, and providing sound animal welfare. That said, disinfectants used in shelters are chemical compounds and, even when used appropriately, can pose a risk to the animals and people exposed to them. When materials are used incorrectly (in the wrong concentration, for example), or inappropriate materials are chosen, the results can be truly hazardous.

Always read product labels before diluting these materials. In particular, quaternary ammonium compounds (QAC), sodium hypochlorite (bleach) and peroxide-based compounds (Trifectant, for example) that are not diluted appropriately can cause irritation to mucous membranes, skin, and the respiratory tract. In addition, highly concentrated QACs have been associated with pneumonia and death. Training staff members in the proper storage, mixing, and use of sanitation and disinfection materials is essential. While cleaning, staff members should wear person protective equipment (PPE).

When using bleach, there are other potential dangers to keep in mind. Bleach is basic (high pH) and, as such, when it is combined with an acid substance (low pH) or ammonia, toxic chlorine gas can be released. This gas is highly lethal to both humans and animals. As a general rule, do NOT mix bleach with any other substances besides water.

Phenols are one example of an organic compound that should never be used in a shelter setting. Phenols are found in cleaning supplies that contain pine oil, like Pine-Sol. Cats are particularly sensitive to phenols. When inhaled, phenols can cause pulmonary edema and respiratory irritation. If swallowed, ulceration of the gastrointestinal tract can result. Cats can also suffer from vomiting, liver damage, and central nervous system depression.

Before adding a new material to your sanitation protocol, please ensure that you know how to use it, and that it does not have the potential to be toxic to animals. If you have any questions about the safety of a particular product, you can contact the ASPCA's poison control center (there is a charge for the call) or visit them on line at <http://www.asPCA.org/pet-care/poison-control/>.

Bleach: Dilution is the Solution: Dr. Nicole Putney

Of the many available cleaners to shelters, household bleach (a.k.a. 5.25% sodium hypochlorite) is one of the most common and least expensive. However, its misuse is widespread. While a more concentrated solution may seem like a good idea, it can actually have several detrimental effects, such as lack of efficacy, corrosive effects on surfaces, and harsh fumes which damage respiratory linings, eyes, and skin of both shelter animals and personnel. Bleach is highly effective against many common pathogens found in animal shelters, such as parvovirus, panleukopenia, calicivirus, and, at a specific concentration (see below), ringworm. However, this effi-

cacy is based on its proper use, i.e.:

1) Proper initial cleaning of organic debris (such as dirt, feces, urine, blood):

Before an area can be disinfected, it must be cleaned. Bleach, as well as several other common disinfectants, is inactivated by organic debris. Be sure to wipe up organic debris before applying bleach as a disinfectant.

2) Adequate contact time:

Diluted bleach solution should be left on a surface for a minimum of 10 minutes before rinsing and drying.

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3) Correct dilution:

The standard dilution for bleach is 1:32, which is equivalent to ½ cup bleach added to 1 gallon water. The exception is ringworm, which requires a 1:10 dilution, or 1.5 cups bleach to 1 gallon water. *The 1:10 dilution should be used for cases of ringworm only and all animals should be removed from the area when used.* This is a very strong solution and is **not** more effective against other pathogens when used at this dilution and can cause the harmful effects described above.

4) Make new dilutions everyday.

Importantly, these dilutions **MUST** be mixed up freshly every 24 hours and protected from light in order to be most effective.

5) Precautions:

See Dr. Gollon's comments above.

Although bleach is a wonderful part of any cleaning arsenal, it must be used wisely. Besides staining your favorite pair of scrubs, if used inappropriately, it can also worsen respiratory infections and corrode kennels. But when used correctly, it will help keep your shelter clean and safe for the animals (and humans) in it. Happy cleaning (and disinfecting afterward)!

Resources:

ASPCA Professional Shelter Sanitation: <http://www.aspcapro.org/shelter-sanitation.php>

Maddie's® Infection Control Manual for Animal Shelters, 1st ed: Ames Iowa, Iowa State University, Center for Food Security, 2008: <http://www.cfsph.iastate.edu/Products/maddies-infection-control-manual-for-animal-shelters.php>



The Maddie's® Infection Control Manual for Animal Shelters is a valuable resource.

Numbers Count: Dr. Jan Scarlett

Many (if not most) shelters today invest significant money and staff time in data collection. These funds and effort can only be justified if the information collected is correct and reliable. For example, if an owner with a lost pet calls the shelter inquiring whether a young adult, male, brindle boxer-cross has been brought to the shelter, that information will be of little help if a staff member has described this dog as an adult, male, brown and tan pitbull cross. Similarly, if a shelter is planning its needs for foster care homes for unweaned kittens based on intake of kittens last year, if unweaned and weaned kittens were not distinguished last year, the estimates are likely to be misleading. Therefore, it behooves shelters to employ a variety of strategies to improve the quality of the information they collect, including:

- Good training and periodic re-training of people collecting and entering data;
- Standardization of the meaning of characteristics such as age, color,

breed, neuter status, and signs of disease or diagnoses;

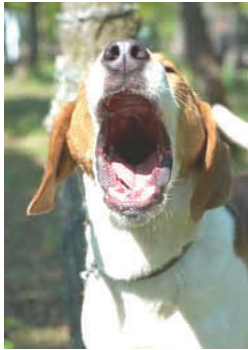
- Immediate data recording and entry (if software is used) by the person making an observation;
- Accountability and rewards for good data collection;
- Most knowledgeable person collecting that data;
- Prompt feedback of summaries of relevant information to the staff and volunteers collecting the data;
- Demonstration of the utility of the data to the improvement of animal care and management of the organization;
- Reinforcement of importance of data collection by management;

Ensuring quality always takes time out of busy schedules, but a shelter that can't find time to foster collection of quality information is wasting the money they have invested in computers, staff time, and software-supporting data gathering. These shelters have also limited their ability to use the data to enhance the welfare of their animals and to improve their management practices.

“Bleach is one of the most common and least expensive cleaners used in shelters; however, its misuse is widespread.”

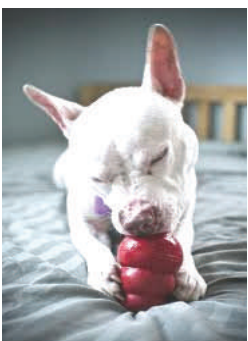


Quality data can assist shelter in enhancing animal welfare and improving management practices.



Attention-seeking barking is very common.

“Barking is normal communication for dogs and we need to identify what dogs are trying to communicate if we want to reduce or stop the behavior.”



Special treats, like stuffed Kongs, can help with mild cases of separation distress.

Behavior Advice to Reduce Surrenders: Ms. Kelley Bollen, MA, CABC

Dogs bark for many reasons but sometimes the result is a trip to the shelter. Complaints from neighbors and landlords can force a dog owner to give up their pet – often times after trying some pretty hideous techniques to stop the barking.

The very first thing to ask when presented with a barking dog problem is under what circumstance does the dog bark? Barking is normal communication for dogs and we need to identify what they are trying to communicate if we want to figure out how to stop or at least reduce the behavior.

Attention-seeking barking is very common. If the owner tells you that the dog barks to go outside, or to have the ball thrown, or to get some food the best advice is to have them walk away from the dog as soon as he starts to bark. Behavior is dictated by its consequence so if the attention-seeking barking (also called demand barking) causes the person to walk away which is the opposite of what the dog wants, the behavior should go away.

Sometimes dogs bark because they are frightened by something. The ‘something’ can be a person, another dog, a sound or an event. The advice in this situation is to ‘countercondition’ the dog’s emotional response to the trigger. To do this simply pair the delivery of a special tasty treat every time the dog encounters the scary trigger. Make sure to tell the owner to keep the dog far enough away from the trigger at first so that they can deliver the treat before the dog starts to bark.

Sometimes dogs bark when they are lonely. Separation anxiety sends

many dogs to the shelter. This type of barking can be a bit more complicated to deal with because it often requires a pretty extensive behavior modification program and sometimes medication. But if the separation distress is mild the advice to give is to have the owner give the dog something extra special every time they leave the house. The best item to use in this case is a Kong toy stuffed with yummy pasty food. If the departure from the owner predicts the delivery of a wonderful treat that takes 15 minutes or so to eat, the barking may subside.

The last type of barking that is quite common is alarm barking. Because dogs are naturally territorial, they often bark when someone comes to the door. The advice in this case is to again have the owners do counterconditioning. Have the door knock and the entry of the visitor predict yummy treats as long as the dog is quiet. Because this is an exciting time for a dog, however, barking is often inevitable so teaching a “quiet” command is also good practice. To teach this important cue you must pair the word “quiet” with the behavior of shutting up so the dog learns what the word means. To do this, when the dog starts to bark the owner should show him a treat and when he stops barking they should say “quiet” and then give the treat. After about a dozen pairings of the word with the behavior the dog should understand the cue. From then on, when the dog barks they are able to use this valuable “off switch” to keep the behavior under control.

Giving distressed pet owners sound behavioral advice can prevent surrenders to your shelter so we will continue this series of articles for the next few months. If you have a common behavior problem that you would like me to address, write to me (ksb68@cornell.edu) and let me know.

Evaluating Disinfectants: Accelerated Hydrogen Peroxide

Dr. Mike Greenberg

Not too long ago, shelter disinfection was rather limited -- bleach, and maybe a quaternary ammonium was likely all that was on the shelf. Now with a wider array of cost-effective disinfectants to choose from, the landscape is more complicated. Addressing the question of which disinfectants to choose is best done through an organized framework--a specific set of questions that will enable you to more effectively compare products. The questions that follow are a good place to start, and we will use them to discuss a relatively new class of disinfectants -- accelerated hydrogen peroxide (AHP).

What is it?

Accelerated hydrogen peroxide (AHP) is a liquid disinfectant composed of hydrogen peroxide (the active ingredient) in combination with surfactants that increase its ability to spread and penetrate, and chelating agents that reduce water hardness.

What can it kill?

When evaluating what a disinfectant can kill, it would be impractical to try to look at every "bug" we encounter in the shelter. Instead, we typically look to see if it is effective against those that are hardest to kill -- parvovirus, calicivirus, and ringworm. AHP has been shown to be effective against parvo-and calicivirus at a dilution of 1:16 with 5 minutes of contact time. It has been shown to be effective against one species of ringworm, *Trichophyton mentagrophytes* with 10 minutes of contact time at a 1:16 dilution; it has not been proven effective against *Micorsporum canis*, the ringworm species most commonly encountered in shelters.

What effects might it have on humans and animals?

After application, AHP breaks down into oxygen and water. At the recommended dilution (1:16) it is non-caustic, and may cause some mild skin or eye irritation. It contains no volatile organic compounds

(VOCs), a class of substances typically associated with the negative effects (irritation, headaches, nausea) of cleaners and disinfectants. Anecdotally, shelters using AHP report that it does not seem to have any odor, nor does it seem to cause any of the ocular or respiratory "burn" associated with some other disinfectants.

How much contact time is required?

AHP requires 5 minutes of contact time to effectively kill parvovirus, calicivirus, and a whole host of bacteria. While it has shown efficacy against one ringworm species with a contact time of 15 minutes, it is not recommended for use in a known ringworm outbreak.

Does it have any detergent activity?

Detergent activity simply refers to the ability of a disinfectant to act as a cleaner as well, removing organic material and debris. Typically, disinfectants do not clean very effectively. AHP is an effective cleaner. While it should not be applied to heavily soiled surfaces, it can be used to simultaneously clean *and* disinfect surfaces that are free of large amounts of organic material.

What effect does it have on surfaces?

Disinfectants can have corrosive effects on almost any surface they contact in the shelter. At the recommended 1:16 dilution, AHP has been shown to have minimal effects on a variety of metal, plastic, and acrylic surfaces. However, it is recommended to minimize use on soft metals such as aluminum or brass.

Is a rinse required?

Typically, after allowing a disinfectant to sit for the recommended contact time, it is necessary to rinse the product off of the surface before allowing the surface to dry and reintroducing animals. Properly diluted AHP does not have negative effects on animals after it is allowed to sit for the required 5-minute contact time, and so does not require rinsing following

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AHPs are a relatively new class of disinfectants.

"AHP is effective against some of the hardest bugs typically found in shelters."



AHP requires 5 minutes of contact time to effectively kill parvovirus, calicivirus and a whole host of bacteria.

Accelerated Hydrogen Peroxide (Continued from Page 5)

application. It is recommended that the surface be allowed to dry before reintroducing animals.

Is it inactivated by things such as light or organic material?

Disinfectants are chemical compounds, and these compounds can be affected by other materials or changes in the environment. Light and organic material can both decrease the efficacy of some disinfectants. AHP is still effective in the face of small amounts of organic material and is not deactivated by light.

What does it cost?

Disinfectants are sold as concentrated liquids, ready-to-use liquids, and powders. Cost can be compared on a per-gallon (or per-liter) basis. When calculating cost per-gallon, be sure to calculate based on a gallon of the solution at the dilution that will be used. For AHP, this dilution is 1:16. A gallon of AHP concentrate costs approximately \$37. Therefore, a gallon of 1:16 diluted AHP will cost \$2.30 (\$37 divided by 16). As a point of comparison, prepared Trifectant solution (1%) costs about \$0.65 per gallon while diluted (1:32) bleach is about \$0.08 per gallon. So AHP costs considerably more than other common disinfectants.

In Summary

AHP is effective against some of the hardest bugs typically found in shelters. Its higher cost will render it impractical for use as a general disinfectant in most shelters, but it has a number of pluses -- short contact time, safe for use around people and animals, can be used to clean small amounts of organic material, and does not require any rinsing. In turns, it may be useful in specific areas of the shelter (e.g. exam tables) or as part of a rotation of disinfectants.

More Information

For a chart comparing several classes of disinfectants commonly found in shelters, please see our website: <http://www.sheltermedicine.vet.cornell.edu/shelter/documents/DisinfectantChart.pdf>

Thanks to Tom Geroy of the Chemung County SPCA in Elmira, NY for his assistance with this article; he is a wealth of information on cleaning and disinfection.

Events Calendar

September 2011						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
	UC Davis Extern					
11	12	13	14	15	16	17
				Meeting with The Ohio State University Primary Care Clinician		
18	19	20	21	22	23	24
Butler-Schein dental wetlab						
25	26	27	28	29	30	
				Primary Care Educators Meeting: OVC		



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Maddie's® Shelter Medicine Program is underwritten by a grant from Maddie's Fund®, The Pet Rescue Foundation (www.maddiesfund.org), helping to fund the creation of a no-kill nation.