



Our Mission:

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

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Shelter Watch



Volume 1, Issue 2

January 7, 2010

From the Director's Desk

The beginning of 2011 brings thoughts of New Year's resolutions for many of us. It can also be a time to reflect on a shelter's accomplishments in 2010 and to consider goals for the coming year. An issue crucial to continuously improving the health of your shelter's population is including specific health goals in your planning process. We often ask shelters about the status of the health of their animals, and almost inevitably we get answers such as "we have a lot of upper respiratory tract infections (URI) in our cats" or "we have a Giardia problem this year". When asked specifically how much disease has occurred, shelters usually don't know. Analogous to clinical signs (such as sneezing) in individual animals that help shelters assess the health of individuals, the frequency of disease in a population is an indicator of the health of a population of animals. A shelter population where 1 of 3 cats entering the shelter develops URI is less healthy than a population where only 1 of 5 cats becomes ill. If the frequency of diseases is known, priorities and goals for the year can be set to maximize the health of the population and direct utilization of resources effectively. Knowledge of the incidence of disease over time also facilitates assessing the success of goals from previous years. Data can be a powerful means to document to shelter Boards or to the community how additional re-

sources could *directly* benefit the animals.

As shelters acquire software such as PetPoint® or Chameleon® that have the capability of collecting disease data, monitoring population health is becoming easier. That is not to say that shelters can't use a spreadsheet program or hand-tally the amount of disease diagnosed, but custom made software usually offers more options for easy data entry and summarization. Shelters frequently resist data collection because it takes staff training and time, but shelters that are committed to minimizing preventable suffering must be aware of the frequency of disease in their facilities and develop plans to minimize it. In future issues we'll talk more about what to collect and how to interpret such data.

Jan Scarlett, DVM, PhD



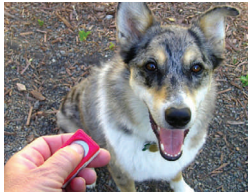
"Treating" Shelter Dogs: Healthy, Shelter Friendly Treats Part I: Dr. Elizabeth Berliner

Who doesn't love to give a dog a treat? And no one deserves a good treat more than a shelter dog waiting for a new home. However, there are a few aspects of being a shelter dog that make giving treats more complicated, and often more dangerous, than in the home environment. Here are a few things to think about:

Shelter dogs are unsupervised upwards of 12 hours a day. This means that more "risky"

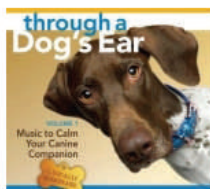
treats that may work well for privately owned, well supervised pets in homes are not so safe for shelter dogs.

Shelter dogs have less stability in their life and diet, contributing to stress. Stress colitis is fairly common in dogs from all walks of life, but very common in shelter environments where human contact, food sources, housing spaces, and the influences of other dogs are changing constantly. (Continued on Page 2)



Save higher-value treats for behavior training sessions to ensure they are effective.

“Food-gathering activities are only one form of enrichment for shelter dogs.”



The psychoacoustically designed classical music on the CD “Through a Dog’s Ear”, has been shown to calm shelter dogs and is available for free to shelters.

Treating” Shelter Dogs: Healthy, Shelter Friendly Treats Part I (continued from Page 1)

Shelter dogs receive treats throughout the day, from many different people. It is possible for a shelter dog to be treated by literally dozens of people a day. The shelter needs to be careful about both amounts and types of treats that dogs receive.

Shelter dogs have differing degrees of dietary tolerances. Unlike a privately owned dog, there is not one person who keenly knows the dietary sensitivity for each dog. Some dogs do well on rich treats, but other dogs do not – and this is not always apparent to the person doing the treating.

Shelter dogs may have previously undetected levels of resource guarding that could manifest in the treating situation, especially with high value items. This could make it unsafe for the visiting public, who may miss subtle warning signs.

Shelter dogs are often undergoing train-

ing or behavioral modification while in the shelter. It is important we save the most valuable treats for these episodes (training sessions, medical exams) so that they can be effective.

The truth is, shelter dogs are likely to get more treats than a dog in a private home, because there are simply more people acting in their lives, often without knowing what others are doing.

Additionally, it is important to recognize that for dogs, size doesn’t matter. Dogs do not recognize the difference between a large treat or a small treat. Therefore, give the smallest amount that you can; this will still provide the treat experience. Breaking a biscuit into multiple pieces, or using tiny bites of treats is more than adequate, and better for the pet. Furthermore, regular treats for our shelter dogs should be at least minimally healthy, saving the really delicious, no-so-healthy treats as rewards. In our next issue we will talk more specifically about appropriate and inappropriate treats for shelter dogs.

Shelter Dog Enrichment--Beyond the Kong®: Kelley Bollen, MS, CABC

It is true that feeding the shelter dogs by stuffing their food in Kongs® rather than simply giving it to them in bowls is a wonderful form of enrichment. This strategy makes the dogs work to obtain their food, which provides them with lots of mental stimulation. But food-gathering activities are only one form of enrichment for shelter dogs.

When devising enrichment strategies, we need to think about all of the dog’s senses. The dog’s most powerful sense is their sense of smell so stimulating this sense is VERY enriching. A simple and inexpensive way to stimulate the olfactory sense is to spray food scented aerosol air fresheners in the kennel a couple of times each day. The mental stimulation they get during the few minutes of air scenting they do following the spray will go a long way since their most important sense will have been triggered. You can also stimulate the olfactory sense by simply letting the dogs sniff things when on their walks. People have a tendency to

want to keep the dogs moving so that they get more physical exercise, but the mental stimulation they get from sniffing the same blade of grass for five minutes can be even more stimulating than the additional 100 yards of walking. Dog walkers should also carry some treats and toss a hand full in the grass and let the dog play “find it”.

Another sense to consider is the auditory sense. Music can stimulate the auditory sense but we need to be mindful that certain types of music are excitatory while other types are calming. Classical music has been shown to calm animals so playing a classical music CD or setting the radio to a classical music station in the kennel is recommended. The psychoacoustically designed classical music on the CD “Through a Dog’s Ear”, has been shown to calm shelter dogs and is available for free to shelters (www.throughadogsear.com/shelter_program.htm). When playing music in the kennels, it is important to keep the volume on the low side because dogs have very good hearing and to turn the music off at night so that the dogs have silence to sleep.

Numbers Count: Dr. Jan Scarlett

Shelters have made many changes over the past 15 years to capture a larger market share of all dogs and cats acquired in their communities. These changes include replacing dark, dingy facilities with modern adopter-friendly buildings, offsite adoption options, improving customer service and advertising shelter animals. Have shelters' changes increased their market share of animals acquired in their communities? Sadly, there are few data that address this question. A study by PetsMart Charities (employing a professional survey company) collected data that provide data regarding shelter market share in 2009. Approximately 1000 people (who had acquired a dog or cat within the previous 12 months) were sampled from a national panel of households representative of the U.S. population. Among those responding, 24% had acquired their new dog or cat from an animal shelter.

Is this an increase over previous years? Using data from studies conducted in the early 1990's, Patronek et al (1994) modeled the movement of dogs in the U.S. and estimated that 12-13% of newly acquired dogs (no data regarding cats were evaluated) were adopted from animal shelters. While the methodologies used in these studies differ and only dogs were studied, the magnitude of the difference in estimates suggests that shelters have made progress and that the investment in healthier animals, advertising, modernizing, and all of the many other changes have enhanced the proportion of newly acquired pets coming from shelters. Despite this apparent progress, however, shelters can't be complacent and must continuously develop innovative programs that attract pet-seeking adopters.



Nutrition in the Shelter: Dr. Kate Riley

Historically, nutrition has not been a primary concern for animal shelters. When animals are only housed for a few days, any food will do, and a recent stray is likely very hungry and not too picky.

As we move toward a goal of finding new homes for as many animals as possible and reducing euthanasia, we are housing a more diverse population of animals, often for much longer than a few days. In response to this shift, animal shelters and sanctuaries invest a great deal of time and money into improved housing, medical care, and behavioral enrichment to keep animals as healthy and happy as possible. Proper nutrition can also play a role in achieving and maintaining good health in the shelter. Here are a few important points to consider:

Information: Keep track of weights in the individual medical records. If it helps, keep a notebook or clipboard just to track weights. Weigh animals every 2-4 weeks if possible, weekly if problems are suspected. Gain or loss of more than 3% weight in an adult could indicate a problem, as can a continued gradual loss or gain. Daily observations for food and water intake, elimination, and vomiting are important, and can be noted on a checklist or cage card.

Consistency: Animals do not do well with rapid or frequent diet changes. It is best to feed the same brand and formula each day. If dry food is the main diet, canned food and treats can be varied, but should make up less than 10% of daily intake. When changes are necessary, they should be made gradually, by mixing old and new foods together.

Quantity: Many dogs and cats will become overweight in a surprisingly short time if over-fed or free-fed. Create a feeding chart based on weight, and use clearly marked measuring cups to dispense food. Animals that start out under- or overweight should be fed based on their healthy weight. Treats should be safe, healthy, and in moderation!

Freshness: Fresh food and water should be offered daily, and uneaten food discarded. Throwing away too much uneaten food during cleaning each day is wasteful and expensive - if there is leftover food, either the animal is not eating well, or too much is being offered. Either way, there's a problem. Check expiration dates, and discard food that looks or smells "off".

Safety: To check for pet foods recalled by the U.S. Food and Drug Administration, go to: <http://www.accessdata.fda.gov/scripts/newpetfoodrecalls/> <http://www.avma.org/petfoodsafety/recalls/default.asp>

A note about group housing: When cats are housed in groups, they tend to be over-fed to make sure that shy cats get enough to eat. Multiple food and water bowls should be available, but they don't all need to be overflowing. Bowls should be spaced to prevent guarding. Groups need to be watched very carefully, and over- or underweight animals may need to be removed to solo housing.

“Proper nutrition can also play a role in achieving and maintaining good health in the shelter.”



Feeding charts and clearly marked measuring cups can help prevent overfeeding.

Nebulization Therapy in the Shelter: Dr. Mike Greenberg



A modified clear plastic container can be used as a nebulizer.

“One ancillary therapy that is safe, effective, and inexpensive for treatment of URI is nebulization.”



Our program frequently receives questions about ancillary treatment for cats with upper respiratory tract disease (URTD, URI). One therapy that we have found very safe, effective, and inexpensive is nebulization. The following “FAQs” should shed some light on the mechanisms, medicine, and myths of nebulization.

What is a nebulizer? A nebulizer is essentially an air compressor that aerosolizes liquids and medications, forming a mist that can enter the respiratory tract. Many people are familiar with the use of nebulizers in human asthma patients. A number of different mixtures of medications and liquids have reportedly been attempted for treating cats with URTD. The only substance that we recommend be routinely used to nebulize cats is *sterile 0.9% saline*.

How does it help in treating URI? The primary effects of nebulization are mechanical. The congested cat (or kitten) has a lot of mucous and inflammatory cells clogging her nasal passages and sinuses. Saline nebulization helps to moisten and break up this material, which then makes it easier for the cat's own immune cells to contact the pathogens (bacteria and viruses) that are in the airway. It also facilitates the penetration of systemic (i.e. oral) antibiotics. We are often asked about adding drugs to the saline, most commonly antibiotics and steroids. There are specific reasons why we recommend sticking with sterile saline and steering clear of any additions.

What should our shelter do to start nebulizing? Nebulizers can be purchased rather inexpensively (about \$40 on eBay); many shelters have been successful at having them donated after putting them on a “wish list”. In order to efficiently and safely nebulize cats, you'll need to construct a “chamber” of some sort -- something about the size of a typical cat carrier. We have had good success with a modified clear plastic container (see photo). Prior to using the nebulizer and between each treatment, it is extremely important to thoroughly clean and disinfect all portions of the nebulizer. Remember, the nebulizer makes a mist out of whatever passes through it. If there are bacteria in its tubes, there is a significant risk that the cat's lungs will be showered with them. This is why it is important to only use *sterile 0.9% saline* in the nebulizer. A written protocol should be followed and shelter staff should be trained in the use of the equipment prior to initiating therapy in cats.

Why not use antibiotics? Antibiotics are unlikely to achieve therapeutic levels in the cat

via chamber nebulization, so they are unlikely to prove effective. (If a mask is used for nebulization, therapeutic levels are easily reached, but this is much more labor intensive and arguably more stressful for the cat.) In addition to being a waste of money, excessive use of antibiotics can lead to antibiotic resistance as is the case any time an antibiotic is given at too low a dose or for too short a period of time. We occasionally use antibiotics, but only do so based on culture results. In cases of URI that resist typical treatment, we will collect a sample of the nasal/respiratory discharge for culture and sensitivity testing. Culturing the bacteria shows exactly what species is involved, and sensitivity indicates which drug(s) will be effective against the bacteria. If the bacteria is sensitive to a drug that lends itself to nebulization, this may be added to the cat's therapy. Culture/sensitivity testing is sometimes disparaged as overly “academic”, but in truth, it is easy, inexpensive, and ultimately saves a lot of time and money by taking much of the “guess work” out of treatment decisions.

Why not use a steroid, like dexamethasone? Historically, steroids were thought to be helpful due to their anti-inflammatory effects. While it is true that they can have such effects, it is also true that they are *immunosuppressive*. That is, they suppress that cat's immune system, rendering her less capable of combating disease. This brings up an important point: All of the treatments we provide for these sick cats are in essence “supportive”, because ultimately it is the cat's immune system that will fight off the URI pathogens. If we give drugs to suppress the immune response, we are asking for trouble. Have people given dexamethasone to cats and had them recover from URI? Sure, but the course of disease would likely have passed on its own or have been shorter without the steroid use.

Why not use water? There are multiple reasons not to nebulize water or to add water to your sterile saline. First, water is not sterile. Tap water, bottled water, and distilled water all contain small amounts of bacteria that are harmless when ingested, but which could cause serious damage when nebulized (Think: bacteria shower in lungs!). Second, without getting into too much physiologic detail, water vapor in large quantity can cause damage to the delicate cells of the respiratory tract. Simply speaking, the water is “attracted” to the normal salts within each of the cells (all cells contain a certain amount of sodium and potassium). In turn, water enters these cells and can cause the cells to burst. Sterile saline has a “physiologic” level of salt and does not enter cells in large volumes, so does not cause such cellular destruction.

If you have any questions about the use of nebulizers in your shelter, please do not hesitate to contact our program.

Out and About



The staff of the Shelter Medicine Program have recently had some great opportunities for outreach and education.

- December, 2010:** Drs. Berliner, Riley & Greenberg took a trip out to an area humane society to consult on renovations they are doing in their dog holding area.

On their return home, the crew stopped by to see the E.D. of an other area humane society to assist in a behavior assessment of one of her canine residents, and to talk

about their exciting plans for a new facility. Nice changes coming for these organizations in 2011!

- December, 2010:** Program veterinarians & project coordinator visited again with a shelter in northern Pennsylvania to observe their progress & answer questions relating to shelter renovations & continued changes at the shelter. Everyone was impressed with the progress and dedication of the staff to improving the care at their facility!

Events Calendar

January 2011						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3 Veterinary Student Extern	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30 Intern experience at Erie Co. SPCA	31					



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.