



Shelter Watch



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

Shelter Medicine Interns:

- Dr. Mike Greenberg
- Dr. Kate Riley

Contact Information:

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

(607) 253-3349

sheltermedicine@cornell.edu

Volume 1, Issue 4

March 7, 2011

From the Director's Desk

The Maddie's® Shelter Medicine crew at Cornell has just returned from the Midwest Veterinary Conference in Columbus, OH. For those of you (veterinarians and non veterinarians) who may not be familiar with this conference, it is probably the (or one of the) oldest shelter medicine continuing education tracks in the country. It is held in February in Columbus each year – yes, I know why not in the Caribbean this time of year? But . . . the conference has four days of shelter-related sessions with plenty of topics for both veterinarians and non veterinarians, and it is economical.

Attending the conference reminded me of how absolutely essential participating in continuing education is to all of us! Keeping abreast of the most current information is exciting and improves our ability to help the animals we cherish. It is an opportunity to meet people from other shelters and share knowledge and experiences. All shelters (even shelters with very limited resources) should include continuing education as an important line item in their budgets. I suspect strongly that the resources invested in gaining new knowledge and making contacts during good shelter-related confer-

ences will be recouped in additional lives saved, cost-savings from more efficient processes or ideas, or through networking with people from other shelters.

Knowledge should also be shared! The person (or persons) attending the conference should be required to summarize highlights with everyone at the shelter in meetings, newsletters or written reports. An enlightened staff is less contentious and more progressive than those who are unaware of new ideas and isolated from people facing similar challenges.

Jan Scarlett, DVM, PhD.



Cat Handling & Equipment : Bill Brothers, Pres., Humane Services International

In a previous article on using *Control Poles*, we pointed out that using such a device on a cat was almost always inappropriate, if not downright inhumane. So what other options do we have when faced with the need to capture or restrain a cat that could present a risk of injury while being handled?

Actually, there are quite a few tools available that can make the job of handling a fractious cat safer and more humane. Each one is designed for

particular circumstances and will not be the best choice in a different situation.

For instance, a *Cat Shield* is a simple panel with a handle and with holes in the panel to allow for injections through the panel. The panel is sized to fit within given cage dimensions. It is used by simply pushing a caged cat to the back of the cage, then giving an intramuscular (IM) injection through one of the many holes. It is

(Continued on Page 2)



The use of Feral Cat Dens can reduce stress in feral cats and keep staff safe.

“There are quite a few tools available that can make the job of handling a fractious cat safer and more humane.”



Cat Handling & Equipment: (continued from Page 1)

gentle and humane for when you need only to administer an IM injection (e.g. a pre-surgical tranquilizer) to a caged cat.

A couple of useful devices for removing cats from cages are the *EZ-Nabber* and the *Cat Bagger*. Both feature a hinged framework with either a mesh or solid bag that closes around the cat for 100% containment but also allows for certain procedures to be performed on the cat (IM injections, wound treatment, etc).

Every facility that has caged feral cats should have a *Feral Cat Den*. The Feral Cat Den provides a refuge for a frightened cat and also allows for cat containment via an easy open/close porthole door. This is useful for cage cleaning, treatment and transport; additionally, the cat can also be given an IM injection through small access holes in the den's walls.

A *Cat Grasper* is basically a set of tongs that closes around a cat's neck that allows the

user to immobilize a cat or move it into or out of a trap, cage, or other confined area. It is more comfortable and humane than using a snare pole.

For capturing cats during hoarding situations or other field capture events, a number of nets are very useful. Cat nets should ideally have small mesh sizes. The best for more open environments is the *Freeman Hammock Net* which has a flexible hoop to protect the cat plus a drawstring closure to securely prevent escape. For tighter quarters, the superb *Freeman Cage Net* fits into tight corners and with a hoop that closes tight for 100% containment (especially when you roll the net on its pole to further relax the cat).

If you're involved in handling cats in a disaster or hoarding rescue situation, be sure to have a number of *Freeman ZipnGo* bags with you. These bags calm cats, allow many to be handled easily at once, have ID cards for address or other info, and are easily dis-infectable.

Resource: ACES, Inc. – www.animal-care.com, 800-338-2237.

Parvovirus Pathology: Dr. Kate Riley

There are many different diagnostic testing options available for canine parvovirus and its feline cousin, panleukopenia. Many shelters reach for the IDEXX SNAP test, for reasons of both cost and convenience. Most laboratories offer several additional tests, including other ELISA tests, PCR, and virus isolation. Unfortunately, sometimes we are looking for a diagnosis after an animal has already died, in order to protect the rest of the population. We have two suggestions for increasing your chances of getting an accurate diagnosis in post-mortem cases:

First, collect and submit multiple tissue samples. Disease does not always affect the GI tract in a uniform manner, and some samples will be better quality than others. If possible, call your lab in advance, and ask how they would like samples collected, stored, and transported. Most labs charge a set price for greater

than 3 histopathology samples (more will be charged for running different types of testing), so it doesn't hurt to submit as much as you can. Not all samples have to be tested right away, but it is better to have them ready and available if needed.

Second, submit the tongue! The diagnostic laboratory at Michigan State University showed that the tongue can be used to diagnose parvovirus and panleukopenia on histopathology, even though the tongue usually looks totally normal in these animals. If the intestine has been destroyed by parvovirus and bacteria, the tongue may have your answer.

Reference:

Evaluation of tongue as a complementary sample for the diagnosis of parvoviral infection in dogs and cats. McKnight CA, Maes RK, Wise AG, Kiupel M.J *Vet Diagn Invest.* 2007 Jul;19 (4):409-13.

FeLV and FIV Testing In The Shelter: Dr. Mike Greenberg

Developing a testing strategy for feline leukemia virus (FeLV) and feline immunodeficiency virus (FIV) presents a unique challenge in the shelter. Unfortunately, as with most shelter protocols, there is no “one size fits all” solution for FeLV/FIV testing. Resources, staffing, population dynamics, housing, and goals all come into play. The following is intended to outline some general recommendations for testing based on questions we have received.

Why Should We Test for FeLV and FIV?

The most effective means of preventing the spread of FeLV/FIV is to prevent uninfected cats from coming into contact with infected cats. Testing for FeLV/FIV is not only useful for determining the status of the cat being tested, but ultimately prevents the spread of these diseases in populations.

Antigen vs. Antibody -- How do the Tests Work?

Commercially available tests use a small sample of whole blood, plasma, or serum to detect evidence of infection. FeLV tests typically detect an *antigen* (p27 protein) that is produced by the FeLV virus. This means that a cat who tests positive has circulating *virus*. In contrast, FIV tests detect *antibodies* produced by the cat's body to a specific protein (p24) expressed by the virus. The presence of antibody can indicate infection, but could also be the result of maternal antibodies (antibodies that kittens receive when first nursing) or be the result of FIV vaccination.

When Can Cats be Tested?

Cats can be tested for FeLV at any age. A positive FeLV test, even in a kitten, indicates circulating virus. FIV tests should be performed on cats over the age of six months. Kittens may carry maternal antibodies for the first several months of life. If such antibodies are present, they will result in a positive test, but the kitten may not necessarily be infected with FIV.

Which Cats Should be Tested?

Ideally, all potentially adoptable cats should be tested at admission to the shelter. Cats that are to be group-housed *must* be tested prior to being placed in a group. If cats remain in the shelter for longer than two months, ideally they should be re-tested 60 days after the initial test. Cats with signs of illness compatible with FeLV or FIV infection should be tested for these viruses, as well as cats entering foster homes where other cats reside or may reside.

What Should We Do if We Cannot Afford to Test Every Potentially Adoptable Cat?

If it is not economically feasible to test every potentially adoptable cat, then it is important to prioritize. In addition to testing group-housed animals and those that are ill with possible signs of FeLV/FIV (but the shelter may adopt), highly adoptable cats (e.g., very friendly) could be tested, or cats entering homes with other cats.

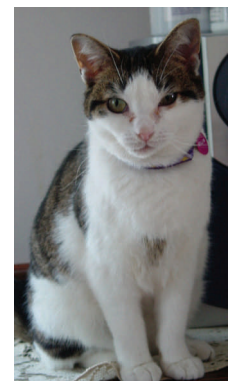
What if a Cat Has Been Vaccinated for FeLV or FIV?

FeLV vaccination does not affect the FeLV test; again, the test is looking for viral *antigen* while vaccines induce the production of *antibodies*. In contrast, cats vaccinated for FIV present a challenge. They will have antibodies identical to those detected on the FIV test. Therefore, an FIV vaccinated cat will show up positive on an FIV test even if she is not infected. FIV vaccine is not commonly administered; it is important to speak with veterinarians in your area to find out if the cats coming to your shelter are likely to have been vaccinated for FIV. There is currently no commercially available method to distinguish an FIV vaccinated cat from an FIV-infected cat.



The Idexx Snap® FeLV/FIV combo tests.

“Testing for FeLV/FIV is not only useful for determining the status of the cat being tested, but ultimately prevents the spread of these diseases in populations.”



(Continued on Page 4)



“If it is not economically feasible to test every potentially adoptable cat, then it is important to prioritize.”



FeLV and FIV Testing (continued from Page 3)

What Should be Done if a Cat Tests Positive?

A single positive test should *ideally* not be used to determine a cat's retroviral status. The American Association of Feline Practitioners (Levy et al 2008) recommends that if a cat tests positive for either FeLV or FIV, a confirmatory test should be performed. The use of confirmatory tests is impractical in many shelters, however, due to financial constraints and time. If retesting of only some positive cats is possible, a shelter might choose to retest only otherwise highly adoptable cats. Shelters testing for FeLV/FIV should be aware that as the frequency of infected cats (i.e., prevalence) diminishes, the probability of obtaining falsely positive results increases, however.

When retesting a positive cat, one option is to repeat the test using an in-house test from a different manufacturer. This will only improve decision-making if the second test is better than the first one at detecting false positives. Since this information is rarely available, samples can also be sent to a veterinary diagnostic laboratory for testing, ideally requesting an immunofluorescent antibody test (IFA). For FIV, a Western blot should be performed. If the second test result is positive, the cat should be considered infected. If the second test result is negative, a veterinarian should be consulted.

Is a Negative Test Truly Negative?

One of the most important factors in determining the accuracy of a test is the prevalence of the disease in question. In the case of FeLV and FIV, the prevalence is 2 - 4% or less *for clinically healthy animals*. With this relatively low prevalence, a negative test result is very likely to be *truly* negative. A negative cat with signs compatible with FeLV/FIV infection may be a false negative and should be retested. Regardless, it is important to remember that these tests—despite their accuracy—only look at a “snapshot” in time. If a cat becomes infected with either FeLV or FIV, it may take weeks or months for them to seroconvert (show evi-

dence of infection in the blood). Therefore, *ideally* it is recommended that following a negative test, cats get retested in 60 days. Since running a second test in 60 days is usually not practical for shelters where cats are adopted quickly, adopters must be encouraged to have their cats retested by their veterinarians. If cats cannot be retested 60 days before entering group housing, shelters which group-house cats long-term should retest groups at least annually.

What should adopters and foster care providers be told about FeLV/FIV testing?

Adopters should be educated with regards to FeLV/FIV and the limitations of testing for these viruses. They should know whether or not their newly adopted cat has been tested. Regardless of whether the shelter tests for these diseases, however, adopters should understand that none of the tests are perfect and be advised to have their cats retested by a veterinarian.

For shelters with Trap, Neuter, Return programs, we will discuss FeLV/FIV testing in a future issue.

References:

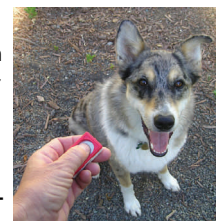
1. Hartmann K, Werner RM, Egberink H, Jarrett O. Comparison of six in-house tests for the rapid diagnosis of feline immunodeficiency and feline leukaemia virus infections. *Vet Rec.* 2001 Sep 15;149(11):317-20.
2. Levy JK. Feline leukemia virus and feline immunodeficiency virus. In: Miller L, Hurley KF, editors. *Infectious Disease Management in Animal Shelters*. Ames, Iowa: Wiley-Blackwell; 2009.
3. Levy JK, Scott HM, Lachtara JL, Crawford PC. Seroprevalence of feline leukemia virus and feline immunodeficiency virus infection among cats in North America and risk factors for seropositivity. *J Am Vet Med Assoc.* 2006 Feb 1;228(3):371-6.

Clicker Training the Shelter Dogs: Kelley Bollen, MS, CABC

Clicker training is based on the science of how animals learn, making it a very effective training method. It is effective and quite easy to learn and implement. First, we do a little ‘Pavlovian conditioning’ to make the association between the ‘click’ of the clicker and the delivery of a reward – click/treat, click/treat, click/treat. It usually only takes a few times before the dog learns that that funny noise predicts a treat. Once they know that, you can use the clicker to ‘speak’ to the dog. The click sound becomes a marker signal that tells the dog exactly which behavior earned the reward. Click when the dog puts his rump on the ground (sit) and then deliver the treat and the dog will start to put his rump on the ground more often. Click when the dog lies down and then deliver the treat and the dog will be laying down at every turn. It’s that simple – mark the behavior you like with the magic signal, deliver the promised reward (if you click you must reward) and the dog learns that it’s a behavior worth doing again. Since rewarded behaviors always increase in frequency, any behavior that earns a click and treat will do just that. Dogs do what works for them.

In the shelter environment clicker training can help with a lot more than teaching the dogs basic skills. One of the most useful applications of clicker training in the shelter is the ‘click

for quiet’ program. We know that dogs bark when they are excited, when they are frustrated and when they hear other dogs barking (social facilitation). Because of all these reasons, most shelter kennels are full of barking dogs and this makes for a very stressful environment – for the dogs and the humans. The ‘click for quiet’ program simply involves walking through the kennel several times each day, going up to each kennel and ‘clicking’ if the dog is quiet (marking NOT barking as a rewardable behavior) and walking away if he is barking. If done on a regular basis, the dogs learn that being quiet when someone approaches their kennel can earn a reward and that barking chases them away. Because behaviors get stronger with random reinforcement, the dogs will eventually stop barking even when visitors come through hoping that one of the approaching people will click and treat for their quietness (like a slot machine). To make sure this happens – have a few volunteers or staff not in uniform, occasionally do the click for quiet sessions so the dogs don’t just learn that the click only happens when someone with a blue shirt walks through. Quiet kennels equal calmer, less stressed dogs and more adoptions.



Events Calendar

March 2011						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 Companion Animal Welfare class	2	3 Companion Animal Welfare class	4	5 “Spay Your Momma” clinic
6	7 Companion Animal Welfare class	8 Companion Animal Welfare class	9	10 Companion Animal Welfare class	11	12
13 Evidence-Based Medicine rotation Week 1	14 Companion Animal Welfare class	15 Companion Animal Welfare class	16	17 Companion Animal Welfare class	18	19
20	21	22	23	24	25	26
Spring Break →						
27	28	29 Shelter Medicine I class	30	31 Shelter Medicine I class		
MSU Extern →						



Cornell University
College of Veterinary Medicine
Maddie’s Shelter Medicine Program



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.