

Integrating Veterinary Medicine with Shelter Systems

INTEGRATING VETERINARY MEDICINE WITH SHELTER SYSTEMS

JULIE LEVY, CYNDA CRAWFORD, AND BRENDA GRIFFIN



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CONTENTS

[MODULE 1: INTRODUCTION](#)

Authors	3
How to Use this Interactive Digital Textbook	6

[MODULE 2: THE CASE OF THE SICK PUPPIES](#)

The Case...	10
The Initial Investigation...	12
Cat Vaccinations	14
More Investigation...	16
The Next Day...	18
What to Do?	22
The Problem Worsens....	24
Lessons Learned	27
Congratulations – You Have Completed Module 2!	28

[MODULE 3: THE CASE OF THE EMBEDDED COLLAR](#)

The Case ...	32
Is This an Animal Abuse Case?	35
What is Veterinary Forensics and Animal Abuse?	37
Animal Neglect	39
Animal Cruelty	40
Animal Abuse Laws	41
What is the Shelter Veterinarian's Role in Response to Animal Abuse?	44

<u>The Clinical Forensic Examination</u>	48
<u>Step 1: Identify the Victim and the Circumstances</u>	51
<u>Step 2: Photo Board and Overall Photographs</u>	53
<u>Step 3: Physical Examination</u>	59
<u>Step 4: Orientation and Close-Up Photographs</u>	61
<u>Step 5: Diagnostic Testing</u>	63
<u>Step 6: Evidence Collection</u>	65
<u>Step 7: Forensic Medical Report</u>	66
<u>Congratulations – You Have Completed Module 3!</u>	67
<u>MODULE 4: THE CASE OF THE BARKING DOG</u>	
<u>Shelter Animals and Behavior Problems</u>	70
<u>Health and Wellness</u>	73
<u>Emotional Wellness = Behavioral Wellness</u>	76
<u>Physical and Behavioral Examination</u>	79
<u>What’s the Worst Thing that Could Happen?</u>	83
<u>Getting on Track!</u>	85
<u>A Sense of Control</u>	89
<u>Enrichment</u>	93
<u>Monitoring Behavior and Welfare</u>	102
<u>The Barking Dogs</u>	106
<u>The Ultimate Goal: Forever Homes</u>	108
<u>Congratulations – You Have Completed Module 4!</u>	110
<u>MODULE 5: THE CASE OF THE SNOTTY CATS</u>	
<u>Welcome to the Cat Ward</u>	114
<u>Feline URI</u>	117
<u>A Different Perspective</u>	119
<u>General Cat Room</u>	121

<u>Cat Isolation Room</u>	123
<u>Environmental Stress and URI</u>	125
<u>Housing for Health</u>	127
<u>Test Your Housing Smarts</u>	131
<u>Double-Compartment Housing</u>	133
<u>Group Housing for Cats</u>	138
<u>More than Housing</u>	139
<u>The Dog House</u>	144
<u>Sanitation Challenges for Dogs</u>	146
<u>Sanitation Gone Bad</u>	150
<u>The Disinfectant Dilemma</u>	152
<u>Did You Know This?</u>	154
<u>Congratulations – You Have Completed Module 5!</u>	155
<u>MODULE 6: THE CASE OF THE OVERWHELMED SHELTER</u>	
<u>“Outrage over dog’s killing”</u>	158
<u>A Plea for Help</u>	160
<u>What is Capacity for Care?</u>	161
<u>Tracking Shelter Population Statistics</u>	163
<u>Using Data to Analyze Trends in Shelter Admissions</u>	167
<u>Using Intake Trends for Capacity for Care</u>	170
<u>Using Data to Analyze Trends in Shelter Outcomes</u>	172
<u>Shelter Animals Count and the National Shelter Database</u>	175
<u>To Report or Not Report – What is Required?</u>	182
<u>Length of Stay</u>	183
<u>Housing Capacity</u>	186
<u>Holding Capacity</u>	188
<u>Adoption-Driven Capacity</u>	191

<u>Staffing Capacity</u>	194
<u>Population Management</u>	195
<u>Congratulations – You Have Completed Module 6!</u>	197
<u>MODULE 7: GET TO KNOW A SHELTER</u>	
<u>Animal Sheltering: Past and Present</u>	200
<u>Community Animal Shelters</u>	201
<u>Rescue Groups and Sanctuaries</u>	205
<u>Emergency Shelters</u>	208
<u>What’s in a Name?</u>	212
<u>Animal Sheltering in the age of COVID</u>	216
<u>Can Shelters Start Back with a New Normal? The Animal Social Services Model</u>	219
<u>Social Justice: Diversity, Equity, and Inclusion in Animal Shelters</u>	223
<u>Animal Shelters: Community Service or Competition?</u>	230
<u>Taking It Community-Wide</u>	233
<u>The Language of Lifesaving and Culture Change</u>	235
<u>Anatomy of a Shelter</u>	238
<u>Test Your Knowledge</u>	239
<u>Congratulations – You Have Completed Module 7!</u>	240
<u>MODULE 8: THE CASE OF THE SPAY-NEUTER SKEPTIC</u>	
<u>Busy New Doctor</u>	243
<u>The Relationship Between Spay-Neuter and Positive Outcomes</u>	245
<u>“Targeted” Spay-Neuter</u>	248
<u>Targeted Programs for Community Cats</u>	250
<u>Trap-Neuter-Return Programs</u>	253
<u>The Shelter Veterinarian’s Perspective</u>	258
<u>Sterilization in the Shelter Environment</u>	260
<u>HQHVSN: The Q Stands for Quality</u>	263

<u>Keeping the “Q” in HQHVSN in Resource-Scarce Locations</u>	265
<u>HQHVSN in Remote Locations – Getting It Right</u>	268
<u>Opportunities to Master Spay-Neuter Skills</u>	270
<u>Spay-Neuter Controversies</u>	274
<u>Concerns about Competition</u>	277
<u>Spay/Neuter in the COVID Era</u>	279
<u>Self-Care of the Spay/Neuter Surgeon</u>	283
<u>Congratulations – You Have Completed Module 8!</u>	286
<u>MODULE 9: THE ROLE OF THE SHELTER VETERINARIAN</u>	
<u>A Day in the Life of a Shelter Veterinarian</u>	289
<u>A Weighty Responsibility</u>	290
<u>Breaking Out of the OR</u>	293
<u>Making the Most of the Shelter Veterinarian</u>	295
<u>Setting the Stage for Success: Shelter Medicine Behind the Scenes</u>	297
<u>The Shelter Vet Wears Many Hats</u>	299
<u>A Compassionate Field</u>	301
<u>Compassion Fatigue</u>	304
<u>Managing Compassion Fatigue Throughout the Organization</u>	307
<u>Shelter Medicine: A Rising Tide</u>	309
<u>Becoming a Boarded Specialist in Shelter Medicine</u>	313
<u>Careers in Shelter Medicine</u>	315
<u>Making the Right Match</u>	320
<u>The Culture Fit</u>	325
<u>Congratulations – You Have Completed Module 9!</u>	326

MODULE 1: INTRODUCTION



Welcome to the rewarding world of Shelter Medicine! Shelter Medicine is an emerging field of veterinary specialization supported by rapidly increasing career opportunities. This book uses a case-based approach to explore the critical role played by the entire shelter team to protect the health and welfare of sheltered dogs and cats and how medical care, behavior programs, and operations all come together under the umbrella of Shelter Medicine. Readers will learn about the vast opportunities to join the community of Shelter Medicine, how to follow trends in the field, and to build lifelong professional networks.

According to the Association of Shelter Veterinarians,

“Shelter Medicine is a field of veterinary medicine dedicated to the care of homeless animals in shelters or other facilities dedicated to finding them new homes. While private practice veterinarians focus mainly on the health care of individual animals with owners, shelter veterinarians provide a unique blend of individual and population level care for homeless animals, including a strong focus on physical and behavioral wellness. Caring responsibly for a shelter population presents challenges rarely faced in private practice. Many of the animals entering shelters arrive with little to no medical history and may be stray, feral, or victims of cruelty. Arriving from many locations with different life experiences and exposure histories makes this a population at higher risk for infectious diseases and problem behaviors. This is compounded by high-density housing and the stress associated with confinement, making proper behavioral care a crucial part of shelter animal health.”

Textbook Learning Objectives

1. Use the Association of Shelter Veterinarians (ASV) Guidelines for Standards of Care in Animal Shelters as a guide for the practice of veterinary medicine in a shelter environment.
2. Develop population management practices that optimize animal wellbeing and best outcomes for homeless and sheltered animals.
3. Employ evidence-based medicine and best practices to develop cost-effective preventive healthcare, biosecurity, and public health measures.
4. Prioritize situational urgency and respond appropriately to common health threats, animal welfare issues, and animal abuse.
5. Analyze recent trends, issues, and epidemiology related to animal homelessness, and identify rational and culturally competent strategies to address these.
6. Apply key concepts crucial to the practice of Shelter Medicine, including the Five Freedoms, Fear Free principles, capacity for care, high quality high volume spay-neuter, and One Health.
7. Monitor employment opportunities for veterinarians in Shelter Medicine and analyze the training and experience needed for success in such positions.
8. Integrate factors such as time management, team leadership, workplace safety, and personal wellness associated with career satisfaction of the entire veterinary team.
9. Adapt written and oral communication and leadership styles in interactions with shelter personnel and professional peers.

AUTHORS

JULIE K. LEVY, DVM, PHD, DACVIM, DABVP (SHELTER MEDICINE PRACTICE)



Dr. Julie Levy is the Fran Marino Endowed Professor of Shelter Medicine Education at the University of Florida. Her research and clinical interests center on the health and welfare of animals in shelters, feline infectious diseases, and humane alternatives for cat population control. She is the founder of Operation Catnip, a university-based community cat trap-neuter-return program that has spayed, neutered, and vaccinated more than 60,000 cats in Gainesville, Florida since 1998. In 2008, Dr. Levy joined Dr. Cynda Crawford to found Maddie's Shelter Medicine Program at the College of Veterinary Medicine, an educational and discovery initiative with a global impact on the care of homeless animals. In 2014, she joined Dr. Kate

Hurley to launch the Million Cat Challenge, a shelter-based campaign to save a million cats in shelters across North America. For the past two years, Dr. Levy has worked with animal shelters to better understand diagnosis, management, and outcomes in FeLV+ shelter cats.

CYNDA CRAWFORD, DVM, PHD



Dr. Cynda Crawford is a Clinical Assistant Professor of Shelter Medicine and Director of the Maddie's Shelter Medicine Program at the University of Florida. Dr. Crawford's expertise includes diagnosis, management, and prevention of infectious diseases in dogs and cats in sheltering facilities. Her current focus is tracking and responding to respiratory disease outbreaks and the development of creative interventions that support the recovery of affected animals while halting the spread of infection. Accomplishments include co-discovery of the first canine influenza virus and contribution to the development and validation of canine influenza vaccines, diagnostic assays, and disease prevention protocols that have been adopted worldwide.

BRENDA GRIFFIN, DVM, MS, DACVIM, DABVP (SHELTER MEDICINE PRACTICE)



Dr. Brenda Griffin is an adjunct clinical associate professor at the University of Florida. A pioneer in Shelter Medicine, she has contributed to the development of academic training and research programs across the country. Her professional interests focus on shelter animal behavior and welfare, population health and wellness, feline medicine, and strategies to prevent animals from entering shelters including behavioral wellness, identification, and sterilization programs. In 2000, she co-founded the Alliance for Contraception in Cats and Dogs. She has also served on the Association of Shelter Veterinarians task forces that developed foundational guidelines for standards of care in animal shelters and spay-neuter programs

and chairs the Fear Free Shelters task force. Dr. Griffin led a decade-long process for the development of standards for specialization and residency training, culminating in the establishment of the newly recognized specialty in Shelter Medicine Practice in the American Board of Veterinary Practitioners, for which she currently serves as Regent.

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MODULE 2: THE CASE OF THE SICK PUPPIES

CYNDA CRAWFORD, DVM, PHD



Module Learning Objectives

- Identify and describe best practices for shelter animal medical health and the veterinarian's role in development and oversight of these practices.
- Identify practices that put animals and people at risk for disease in shelters.
- Propose best practices that support animal wellness and mitigate risk for disease transmission in shelters.
- Practice effective communication skills for helping shelters employ best practices for shelter animal medical health.

THE CASE...

It's Monday morning at the Local Humane Society. There is a commotion in the lobby. An adopter is at the front desk complaining that his recently adopted puppy died over the weekend. Staff summon the shelter veterinarian to the lobby to talk with the adopter and obtain more history about the puppy.

The adopter stated that he only had the puppy for 2 days. The puppy stopped eating on the 2nd day and had some diarrhea. He did not take the puppy to a veterinarian because it was the weekend and the puppy was still playing with his children. The next morning he found the puppy dead. He and his kids buried the puppy in the backyard and the whole family is upset.



This puppy died two days after being adopted from a shelter.

THE INITIAL INVESTIGATION...

The shelter veterinarian reviewed the medical record for the dead puppy and its 4 littermates still in the shelter. None of the puppies were reported by staff to be ill, they appeared healthy during her daily medical rounds, and there were no problems with their spay-neuter surgeries 7 days ago.

Medical Record Notes

Day 1

- Litter of 5 puppies brought to shelter
- 6 weeks old
- Examination: healthy
- Modified-live DAPP vaccine injected in left hind leg
- Modified-live Bordetella bronchiseptica vaccine intranasally
- Pyrantel pamoate 1 mL orally
- FrontLine Plus 0-25 lb topically

Day 14

- 8 weeks old
- Examination: healthy
- Modified-live DAPP vaccine injected in left hind leg
- Pyrantel pamoate 1 mL orally

Day 15

- 8 weeks old
- Healthy
- Spay-neuter surgery

Day 19

- Black/white male puppy adopted

Review Chapter 5 in the ASV Guidelines and the [2017 AAHA Guidelines for vaccination of dogs in shelters](#).

AAHA Vaccination Recommendations for Shelter Dogs

1. Modified-live CDV + CAV2 + CPV + CpiV (DAPP) vaccine
 - CDV = canine distemper virus; CAV2 = canine adenovirus type 2; CPV = canine parvovirus; CPIV = canine parainfluenza virus
 - Administered by the subcutaneous (SQ) route
 - Puppies: DAPP at intake and every 2-3 weeks from 4 weeks old to 18-20 weeks old
 - Adults: DAPP at intake and 2-3 weeks later
2. Modified-live Bordetella bronchiseptica + CPiV vaccine
 - Administered intranasally
 - Dogs 4 weeks of age and older: single dose at intake
3. Killed Rabies vaccine
 - Administered SQ
 - Puppies and adults: 3 months of age and older before release from the shelter in accordance with local and state laws

Test Your Knowledge



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CAT VACCINATIONS

Just as for dogs, the ASV Guidelines state that all cats must receive the core vaccines at admission into the shelter and at recommended intervals while in the shelter. Shelters that do not vaccinate with core vaccines immediately at entry, or do not vaccinate all animals, are much more likely to experience deadly outbreaks of vaccine-preventable disease.



Review Chapter 5 in the ASV Guidelines and the [2013 AAFP Guidelines for vaccination of cats in shelters](#).

AAFP Vaccination Recommendations for Shelter Cats

1. Modified-live FHV1 + FCV + FPV (FVRCP) vaccine
 - FHV1 = feline herpesvirus; FCV = feline calicivirus; FPV = feline parvovirus
 - Administered by the subcutaneous (SQ) route
 - Kittens: FVRCP at intake and every 2-3 weeks from 4 weeks old to 16-20 weeks old
 - Adults: FVRCP at intake and 2-3 weeks later
2. Killed or recombinant FeLV vaccine
 - FeLV = feline leukemia virus
 - Administered SQ – requires two doses 2-4 weeks apart
 - Group-housed cats only
3. Killed rabies vaccine
 - Administered SQ once
 - Kittens and adults: 3 months of age and older before release from the shelter in accordance with local and state laws

Test Your Knowledge



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MORE INVESTIGATION...

Review of the puppies' medical records did not reveal any clues as to why one of them died so suddenly.

The shelter veterinarian examined the remaining littermates. All 4 puppies are BAR (bright, alert and responsive), have a BCS (body condition score) of 5/9 (normal) on the [Purina Scale](#), weight gain of 4 to 5 lbs in 3 weeks, and normal body temperatures ranging from 100.9 to 101.9°F. There were no abnormal findings other than one pup acted painful on abdominal palpation.



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The techs drew blood for a PCV/TP test (packed red cell volume/total protein) and WBC (white blood cell) count estimated by microscopic exam of a blood smear. They also collected feces for a fecal flotation exam for parasite eggs. One of the pups had soft stool – this was the same one that seemed painful on abdominal palpation.

Diagnostic Test Results for the Puppies

- PCV = 26 to 28% (normal range for pups: 25 to 34%)
- TP = 6.0 to 6.2 g/dL (normal range: 5.5 to 7.5 g/dL)
- WBC count (blood smear) = 14 to 25 WBC per 10X field (normal range: 18 to 50 WBC per 10X field)
- The pup with the painful abdomen and soft stool had a WBC count = 14 per 10X field
- Fecal flotation = no parasite eggs seen for any of the pups

The shelter veterinarian's exam and diagnostic test results did not find any evidence of anemia, infection, or parasite infestation, but she is worried about the pup with a painful abdomen, soft stool, and lowest WBC count. She asks the techs to monitor the puppies twice daily for any signs of disease, including not eating, vomiting, diarrhea, nasal discharge, or coughing.

THE NEXT DAY...

It's 4:30 pm. The tech reports to the vet that one of the 4 pups is curled up away from his littermates and does not want to get up. There are piles of vomit and bloody diarrhea in the run.



This puppy's symptoms include vomiting and diarrhea.

The shelter vet noticed this was the puppy with the painful abdomen, soft stools, and low WBC count the day before. She examined the sick puppy.

Exam Findings for the Sick Puppy

- Very quiet/depressed
- Temperature = 99°F (normal range = 100° to 102.5°F)
- 8 to 10% dehydrated
- Dry mucous membranes
- CRT (capillary refill time) >2 sec (normal = <2 sec)
- Heart rate= 200 beats per minute (normal = 100 to 150 beats per minute)
- Tucked up abdomen with grunting when palpated
- Vomited yellow bile after abdominal palpation
- Bloody fecal material around anus and on hind legs

Following the shelter's Canine Diarrhea Protocol, the tech performed another fecal flotation test and the IDEXX Canine Parvovirus Antigen test on the bloody diarrhea in the run. He also collected a small blood sample from the sick puppy to repeat the WBC count.

Diagnostic Test Results for the Sick Puppy

- Fecal flotation: no parasite eggs seen
- IDEXX SNAP® Parvo test: positive
- WBC count (blood smear): 1 to 2 WBC per 10X field (normal range: 18 to 50 WBC per 10X field)

Bad news: the clinical signs, low WBC count, and parvo test results are consistent with canine parvovirus infection in this puppy.

Review some basic facts about parvovirus infection in this presentation:



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Now that you have reviewed basic facts for canine and feline parvoviruses, test your knowledge in this quiz.

Test Your Knowledge



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WHAT TO DO?

Fortunately, this is a shelter with adequate medical resources to treat parvoviral dogs. The shelter has an Isolation Unit, a full-time veterinarian to oversee all medical care, well-trained medical staff, and written protocols for treatment of common diseases in shelters. The shelter budget has allocated sufficient funding to support medical care of most common illnesses.

The shelter vet reviews the shelter's Canine Parvovirus Treatment protocol. She starts the infected sick puppy on intravenous fluids for dehydration, an injection to control nausea/vomiting, an antibiotic injection for secondary bacterial infection in the bloodstream (sepsis), and pain medication for the abdominal pain. She instructs the tech to move the puppy into a cage in the Isolation Unit.

The shelter vet also reminds the medical staff to review the shelter's Isolation Unit Biosecurity Practices protocol to ensure they follow the PPE (protective personal equipment) requirements and use the correct disinfectant to kill parvovirus on surfaces.



This puppy tested positive for canine parvovirus.

WHAT ABOUT THE LITTERMATES?

What should be done with the other 3 puppies exposed to their littermate with parvovirus? Could they also be infected but appear healthy because they are in the pre-clinical incubation period?



These littermates were exposed to the sick puppy with canine parvovirus infection.

Test Your Knowledge



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THE PROBLEM WORSENS....

The next day, the 3 littermates started vomiting and had diarrhea. Fecal samples tested positive with the IDEXX SNAP® Parvo test. The shelter vet starts these puppies on the same Canine Parvovirus Treatment protocol as their littermate.

Now that all the littermates have parvovirus, the shelter vet wonders if this could have been the cause of death in the adopted puppy. She recalls that the adopter reported the puppy had stopped eating and had some diarrhea the day after it left the shelter. She also wonders how these puppies got parvovirus infection. Were they infected before they entered the shelter 3 weeks ago or did they get infected while in the shelter?

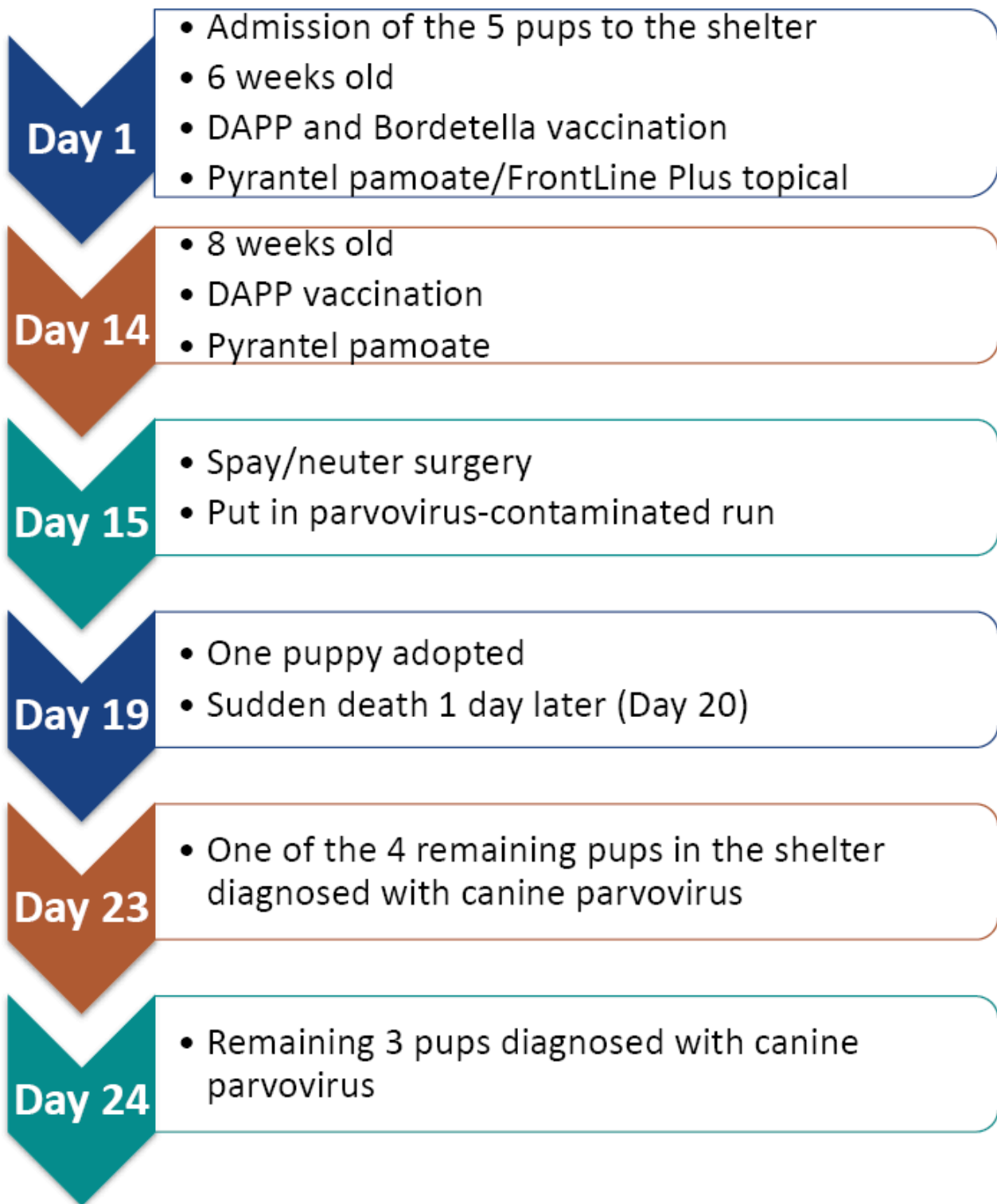
As she was pondering these questions, a tech remembered something that happened on the day the 5 pups in the litter were spayed and neutered. While they were in the surgery room, one of the kennel staff put a newly admitted puppy in the empty run belonging to the 5 pups. The mistake was noted hours later when the 5 pups were brought back following recovery from surgery. It was the end of the day, so the kennel staff hurriedly removed the new puppy and put the 5 pups back in their run without any disinfection beforehand.

But it gets worse.... several piles of vomit and bloody diarrhea were discovered the next morning in the run with the new puppy. The diarrhea tested positive for canine parvovirus using the IDEXX SNAP® Parvo test.

Could this have been the source of parvovirus exposure for the 5 littermate puppies?

PUTTING IT ALL TOGETHER . . .

Let's review the timeline of events:



Test Your Knowledge

Based on the timeline and your knowledge of the typical canine parvovirus incubation, answer the following

questions posed by the shelter vet.



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LESSONS LEARNED

Why did this litter of puppies get parvo? Was it due to inadequate medical healthcare practices?

Test Your Knowledge



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Even though this shelter follows medical care best practices according to the ASV Guidelines, a litter of puppies still acquired parvovirus infection while in their care. This is a common occurrence because of the lack of protective immunity in puppies and their slow response to vaccination due to maternal antibody interference. The brief cross-contamination that occurred when a new puppy was accidentally placed in the run while the litter was out for surgery was the most likely source of infection. The most important lesson is that the best practices allowed for prompt recognition and response to a disease threat that averted spread of infection to other susceptible dogs in the shelter. In addition, the infected puppies received prompt and proper medical care without jeopardizing the health of other dogs in the shelter.

CONGRATULATIONS – YOU HAVE COMPLETED MODULE 2!



Want to Learn More?

Several veterinary medicine expert groups have formulated evidence-based guidelines containing best practices for preventive healthcare. The practices recommended by the ASV Guidelines for Standards of Care in Animal Shelters are based on these guidelines, particularly those for management of vaccination, parasites, heartworm, retroviruses (FeLV and FIV), pain, and spay-neuter surgery.

Here are some of important guidelines for the practice of evidence-based medicine in shelters:

- [AAFP Feline Retrovirus Management Guidelines](#)
- [AAFP/AAHA Pain Management Guidelines](#)
- [American Animal Hospital Association \(AAHA\) Canine Vaccination Guidelines for Shelter Dogs](#)
- [American Association of Feline Practitioners \(AAFP\) Feline Vaccination Guidelines for Shelter Cats](#)
- [American Heartworm Society \(AHS\) Board Speaks Out](#)
- [American Heartworm Society \(AHS\) Guidelines for Canine Heartworm](#)
- [American Heartworm Society \(AHS\) Shelter Educational Brochures](#)
- [ASV Veterinary Medical Care Guidelines for Spay-Neuter Programs](#) (you will learn more about these in Module 8)
- [Companion Animal Parasite Council \(CAPC\) Parasite Guidelines](#)

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MODULE 3: THE CASE OF THE EMBEDDED COLLAR

CYNDA CRAWFORD, DVM, PHD



Module Learning Objectives

- Describe the shelter veterinarian's role in recognition and reporting of suspect animal abuse.
- Describe the link between animal abuse and interpersonal violence.
- Identify and describe basic steps in a forensic medical examination, including physical exam, diagnostic tests, evidence collection, documentation, and photographs.

THE CASE . . .

You are on call for the shelter when you receive this text: *“Sorry, but we need you ASAP, doc! Just took in a dog with a swollen face. Look at the picture. What should we do?”*



It is the animal shelter staff asking for help with a dog they just admitted and think that the swollen face is due to a collar that is deeply embedded around the neck.

You agree with staff that this looks like an emergency and hurry to the shelter. When you arrive,

you find everyone from intake, animal care, and administration is gathered around the dog. You hear these statements from staff:

Animal Care Technician: *This is an outrage! Whoever did this should be locked up! I found a microchip in this puppy and we are calling the owners right now to come face charges!*

Adoption Counselor: *I've never seen anything this gruesome! I wonder how long this poor dog has been suffering like this? I've heard that embedded collars take months or years to get this bad! I hope we have this owner arrested.*

Animal Control Officer: *Doc, this looks like animal cruelty to me and I need your help to build a case. I want to do this by the book so they don't get away with this. They had to know this dog was suffering for a long time for it to get this bad. Good thing a Good Samaritan found this puppy and brought it to the shelter. I hope we can find the owner and prosecute.*

Shelter Director: *This is one of the worst embedded collars I've ever seen! I already alerted the press and put pictures of this dog on our shelter's Facebook page! We will show the world how long it takes for a dog to recover from an injury like this. We'll ask for donations to help with this dog's veterinary care.*

The Shelter Vet Speaks: *I know how upset everyone is but please don't call the press or write a citation just yet. Let me examine this dog and give it some pain medication first. Go ahead and take pictures. We might need the photos later.*

Review these photos to see the examination findings:

The dog is a 5- to 6-mo old male neutered puppy with a Body Condition Score of 5/9 (Purina Scale). His face and neck are swollen due to edema.



In addition to the edema in the chin and ventral neck, there is a deep circumferential wound around the neck caudal to the ear base and hemorrhagic drainage from the wound.



A white cord was removed from the neck wound and appeared consistent with that used for clotheslines.



IS THIS AN ANIMAL ABUSE CASE?

Embedded collars are a common injury seen at shelters. Shelter staff was quick to jump to the conclusion that this was an embedded collar case and that the owners should be prosecuted for animal cruelty. Embedded collars result from collars placed on puppies that are not removed as the puppy grows into an adult. This is due to owner negligence.

What is the role of the shelter veterinarian in a situation like this? Does the veterinarian need any special training or qualifications to work on an animal cruelty case? How should medical findings be documented? Does the veterinarian need to “make the case” for prosecution? Does the medical evidence in this case support a charge of animal cruelty?

As you are mulling over these questions, an animal control officer hands you his investigative report on the case. The dog’s owners were located through the microchip number and he conducted interviews with them and their neighbors. Here are the facts:

Animal Control Officer Report

- The puppy is a 5-month old neutered male that is vaccinated and licensed. The owners produced medical records showing routine care by a local veterinarian.
- The puppy escaped from the yard at 9 am during a bath. The owners state the dog did not have any injuries when it ran away.
- The owners searched the entire neighborhood for several hours but could not find the dog.
- A 12-year old boy in the neighborhood found the dog around 10 am. He made a leash out of some cord and tied the dog outside the house while he ran in to get his parents. When the boy and his parents returned minutes later, the dog was gone. The dog had chewed through the cord to get free.
- Another neighbor found the dog in his yard and took him to the shelter because of his concern for a bleeding wound around the neck.
- The shelter contacted the owners at 6 pm using the microchip information. The owners came immediately to the shelter to reclaim their dog.

Based on the investigative facts and the veterinary examination findings, do you think the dog's injury was **ACCIDENTAL** or an **INTENTIONAL** act to do harm?

Test Your Knowledge



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WHAT IS VETERINARY FORENSICS AND ANIMAL ABUSE?

Veterinary forensics is the use of veterinary medicine to answer for a court of law whether a crime involving an animal has been committed. Crimes against animals are defined by local, state, and federal animal abuse laws. **Animal abuse is a LEGAL, not medical determination.**

The most common types of animal abuse include **neglect, intentional physical abuse, and organized abuse.**

Abuse compromises an animal's physical and mental health and well-being by causing states of discomfort, distress, and pain. Suffering is un-alleviated distress and pain and can be evaluated using the [Five Freedoms](#) as a benchmark:

The Five Freedoms

1. **Freedom from Hunger and Thirst:** By ready access to fresh water and a diet to maintain full health and vigor
2. **Freedom from Discomfort:** By provision of appropriate shelter and a comfortable resting place
3. **Freedom from Pain, Injury, Disease:** Through prevention, diagnosis, and treatment
4. **Freedom to Express Normal Behavior:** By provision of adequate space, proper facilities and the company of the animal's own kind
5. **Freedom from Fear and Distress:** By ensuring conditions and treatment that avoid mental suffering

Pain and suffering are evidence of abuse.



This dog has severe bite wounds on its ears. Care was not sought by the owner.

ANIMAL NEGLECT

Neglect is the failure to provide adequate shelter, food, exercise, and veterinary care. Neglect is generally an act of **OMISSION**. Neglect can affect just one animal, such as a dog tethered out in a yard without access to proper food and water, or many animals, such as those in puppy mills and hoarding situations. Animal neglect is the most common form of animal abuse seen by veterinarians. See examples of neglect in this presentation. You can also download it for future reference.



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Test Your Knowledge



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ANIMAL CRUELTY

Animal cruelty is non-accidental physical abuse that causes pain, suffering, distress, and potentially death. These intentional actions are acts of **COMMISSION**. Animal cruelty includes intentional beatings of animals with blunt objects, stabbings with sharp objects, shooting animals with guns and arrows, drowning, electrocution, suffocation, and burning (chemical or fire). Animal cruelty also includes organized dog-fighting and cockfighting (blood sports). Dog-fighting and cockfighting are illegal in all 50 states and the U.S. Territories.

See examples of animal cruelty in this presentation. You can also download it for future reference.
WARNING: Graphic Content.



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Test Your Knowledge



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ANIMAL ABUSE LAWS

Defining and punishing animal neglect and cruelty is largely the responsibility of each state. Every state has an animal protection statute that defines animal abuse, whether the crimes are a misdemeanor or felony, and the punishment for conviction.

The Animal Legal Defense Fund hosts a [website](#) that provides the animal protection laws for each US state and territory. The Animal Legal Defense Fund ranks each state and territory based on strengths and weaknesses of their animal protection laws. The top tier states have 3 strengths and 2 weaknesses. The middle tier states have 2 strengths and 3 weaknesses. The bottom tier states have 1 strength and 4 weaknesses.



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Is Florida ranked in the **top tier**, **middle tier**, or **bottom tier** based on the strength of its animal protection laws?

Florida Statute 828

[Florida Statute 828](#) contains laws regarding animal neglect and cruelty. According to this statute, “A veterinarian licensed to practice in the state shall be held harmless from either criminal or civil liability for any decisions made or services rendered under the provisions of this section. Such a veterinarian is, therefore, under this subsection, immune from a lawsuit for his or her part in an investigation of cruelty to animals.”

ANIMAL ABUSE IS A CRIME AGAINST SOCIETY

The FBI now categorizes animal abuse as a crime against society and tracks cases of neglect, intentional physical abuse, and organized abuse.

FBI – Animal Cruelty

The official FBI definition of animal cruelty is:

"Intentionally, knowingly, or recklessly taking an action that mistreats or kills any animal without just cause, such as torturing, tormenting, mutilation, maiming, poisoning, or abandonment. Included are instances of duty to provide care, e.g., shelter, food, water, care if sick or injured, transporting or confining an animal in a manner likely to cause injury or death; causing an animal to fight with another; inflicting excessive or repeated unnecessary pain or suffering, e.g., uses objects to beat or injure an animal."

This FBI categorization is significant because it affirms that animal abuse is recognized as a violent crime by the highest level of our government. Studies in the US and other nations have established the link between human and animal violence. Between 60-70% of people convicted of violent crimes began their criminal careers with acts of animal cruelty. Most serial killers started off with torturing animals.

Here is a short story about [how the FBI will collect and use animal cruelty data](#).

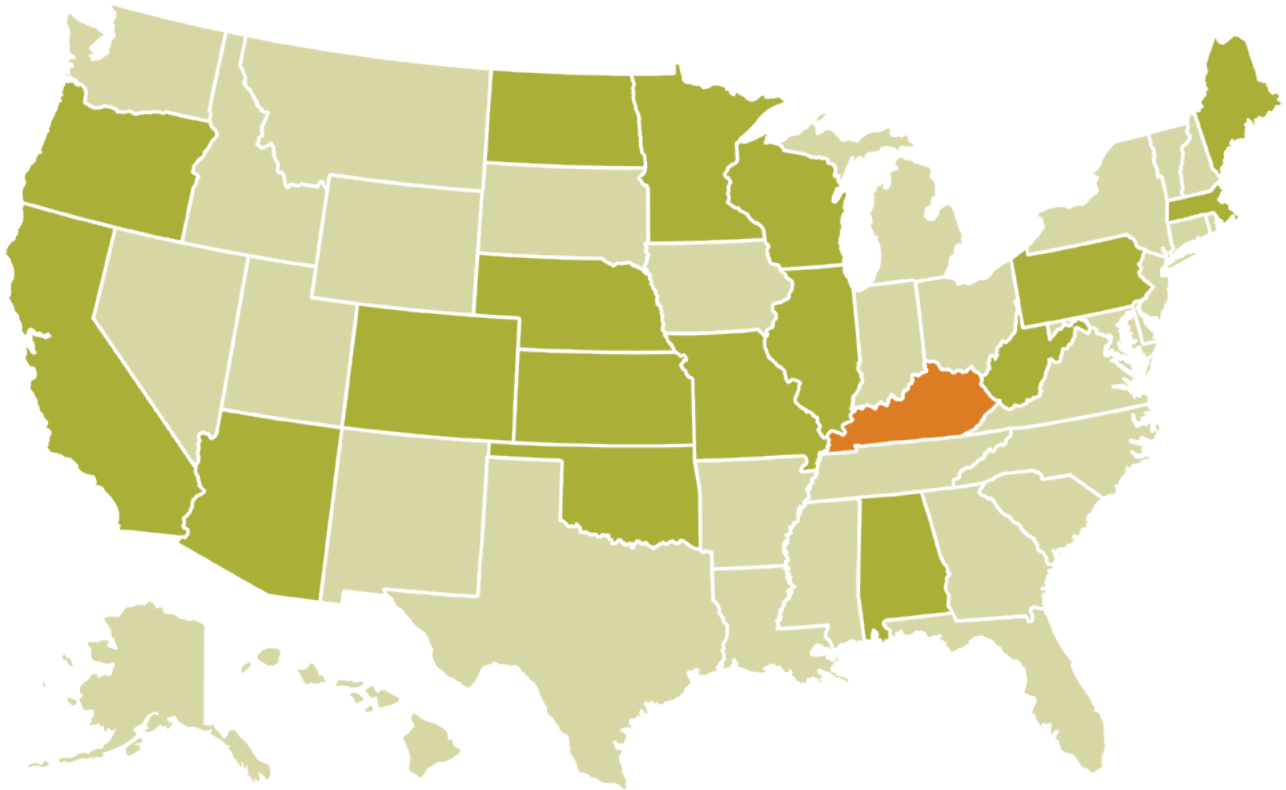


WHAT IS THE SHELTER VETERINARIAN'S ROLE IN RESPONSE TO ANIMAL ABUSE?

SHOULD THE VETERINARIAN REPORT ANIMAL ABUSE?

Human healthcare professionals and teachers are required by law in all 50 states to report suspect child abuse, elder abuse, and domestic violence abuse. Veterinarians are the advocate for animals in society and must speak out about the abuse of these silent victims. Are veterinarians required by law to report suspect animal abuse?

At time of this e-publication, only 18 states require veterinarians to report suspect animal abuse to law enforcement. Reporting is voluntary in 19 states. Twelve states do not have any laws for veterinarian reporting of suspect animal abuse. Kentucky is the only state that prohibits veterinarians from reporting suspect animal abuse unless there is an appropriate court order or subpoena for access to medical records. At this time, 28 states provide immunity from civil liability for veterinarians that report suspect animal abuse in good faith. Here is a map showing veterinary reporting laws by state .



VETERINARY REPORTING OF ANIMAL CRUELTY

● MANDATORY
 ● PERMISSIVE
 ● PROHIBITED

The [AVMA Animal Abuse Response website](https://www.avma.org/animal-abuse-response) contains state laws for reporting suspect animal abuse. Visit this site to learn more information about veterinarian reporting of animal abuse by state.

Test Your Knowledge



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There are several professional sources of support for veterinarian reporting of suspect animal abuse, whether it is required by law or not. Here are policies and position statements from the

American Veterinary Medical Association (AVMA) and the American Animal Hospital Association (AAHA):

Policies and Position Statements

Veterinarian's Oath

Being admitted to the profession of veterinary medicine, I solemnly swear to use my scientific knowledge and skills for the benefit of society through the protection of animal health and welfare, the prevention and relief of animal suffering, the conservation of animal resources, the promotion of public health, and the advancement of medical knowledge.

I will practice my profession conscientiously, with dignity, and in keeping with the principles of veterinary medical ethics.

I accept as a lifelong obligation the continual improvement of my professional knowledge and competence.

Source: [AVMA Veterinarian's Oath](#)

AVMA Policy for Animal Abuse and Animal Neglect

The AVMA recognizes that veterinarians may observe cases of animal abuse or neglect as defined by federal or state laws, or local ordinances. The AVMA considers it the responsibility of the veterinarian to report such cases to appropriate authorities, whether or not reporting is mandated by law. Prompt disclosure of abuse is necessary to protect the health and welfare of animals and people. Veterinarians should be aware that accurate, timely record keeping and documentation of these cases are essential. The AVMA considers it the responsibility of the veterinarian to educate clients regarding humane care and treatment of animals.

Source: [AVMA Policy for Animal Abuse](#)

American Animal Hospital Association Position Statement on Animal Abuse Reporting

The American Animal Hospital Association supports the reporting of suspicions of animal abuse to the appropriate authorities. The Association encourages the adoption of laws mandating veterinary professionals to report suspicions of animal abuse and providing immunity from legal liability when filing such reports in good faith. Veterinary professionals should be familiar with animal cruelty laws and their veterinary practice act, including any mandatory reporting requirements.

Studies have shown there is a link between animal abuse and other forms of violence, including child, spousal, and elder abuse. Reporting suspicions of animal abuse is important as it will trigger an investigation that may ultimately protect both animals and humans. It upholds the veterinary oath to prevent animal suffering and promote public health.

Veterinarians should seek education about animal cruelty and the profession should provide training on the recognition, documentation, and reporting of animal abuse and the development of forensic models. Collaboration with animal and human welfare groups, law enforcement and other professionals within communities is crucial to improve response and reduce the incidence of animal abuse.

Source: [AAHA Position Statement on Animal Abuse](#)

WHAT IS THE VETERINARIAN'S ROLE IN INVESTIGATIONS OF ABUSE?

Animal abuse is a **LEGAL**, not medical, determination. Just because a veterinarian feels that an act qualifies as abuse does not mean that the law recognizes it as such.

Fortunately, as a veterinarian you don't have to know how to prosecute animal cruelty. And as a veterinarian, you aren't expected to know whether some action qualifies as an act of cruelty or neglect. Such knowledge and decisions belong with investigators, attorneys, and judges.

It is not the role of a veterinarian to "make the case" for abuse. Veterinarians need only do what they are well-trained to do: document their examinations thoroughly, gather a minimum database, pursue necessary diagnostics, offer objective interpretations of medical findings, provide evidence-based therapies, and explain matters to their clients using understandable language.

The most common role for the veterinarian is performing a clinical forensic examination on live victims of potential abuse. For these exams, the veterinarian must address the following questions:

- Is the animal injured or its health compromised due to abuse or to another reason?
- Does the animal require veterinary care?
- Is the animal experiencing pain and suffering?
- Has there been a permanent deleterious effect on the animal's health?

THE CLINICAL FORENSIC EXAMINATION

The clinical forensic examination is a methodical and detailed physical exam performed to thoroughly document the animal's condition and search for case-specific evidence. Two unique components of the clinical forensic exam that differentiate it from routine physical exams are **forensic photography** and **evidence collection**.

Forensic photography is utilized to:

- Identify the victim
- Show the victim's condition at the time of examination
- Document injuries and evidence that cannot be preserved or left unaltered
- Document injuries or conditions before and after medical intervention

The photographic documents are evidence for a court of law.



Clinical forensic exams include taking photographs of each victim in an orderly sequence to document the animal's condition. These photographs serve as evidence for the case.

The basic clinical forensic exam steps are:

- Obtain case number and animal number from law enforcement or the investigator
- Write case-specific information on a dry erase board (photo board)
- Take photograph of the photo board with the animal
- Take overall photographs of the animal's body
- Perform physical exam
- Take orientation and close-up photographs of any lesions or abnormalities
- Collect samples for diagnostic testing
- Collect and preserve any evidence on the body



A forensic veterinarian is examining a puppy from a neglect situation.

Let's walk through the steps in more detail...

STEP 1: IDENTIFY THE VICTIM AND THE CIRCUMSTANCES

Obtain the official case number and animal number from the law enforcement officer or animal control officer that is conducting the investigation. If the officer does not provide a unique number for the animal, then the veterinarian should assign one. If multiple animals are involved, then each animal must have a unique number. Consistent with the ASV Guidelines, the number should be affixed to the animal via a neckband or tag.



Cat with a neckband containing the unique identification number



Dog with a neckband containing the unique identification number

Read the investigator report! As discovered in the case presented earlier in this module, the report contains critical information about the circumstances that the animal was in. Ultimately, your exam findings must be interpreted based on the circumstances. The report should provide answers to the following questions:

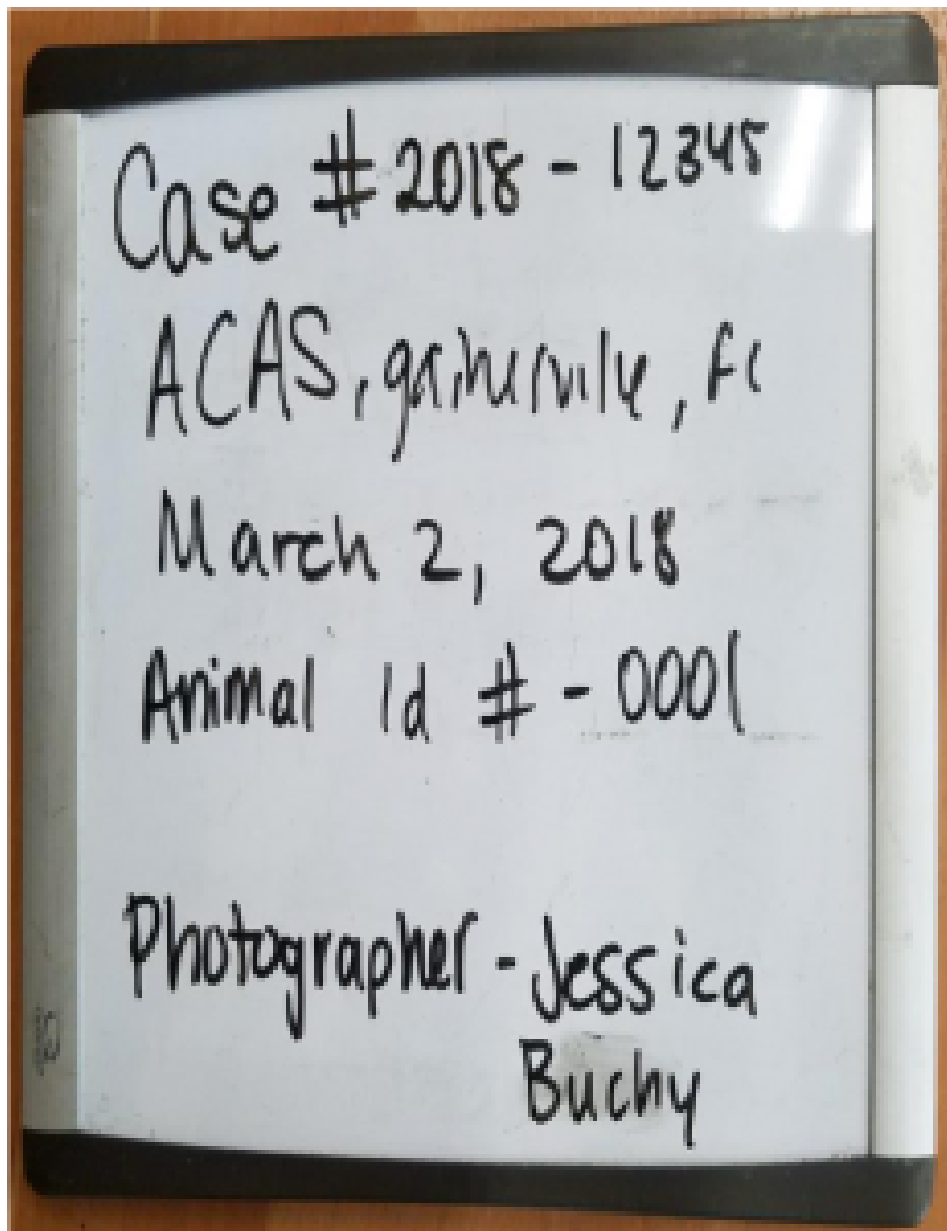
- Where was the animal?
- What were the living or environmental conditions?
- Did the animal have adequate shelter and access to food and water?
- What happened to the animal?
- Were there interviews of the owner, neighbors, or witnesses?
- Did the investigator take photographs of the animal on site and the environmental conditions?

STEP 2: PHOTO BOARD AND OVERALL PHOTOGRAPHS

Create the photo board by recording the following case information on a dry erase board :

- Case number
- Location of exam (agency name or town and state)
- Date
- Animal ID number
- Photographer's name

Take a photograph of the photo board.



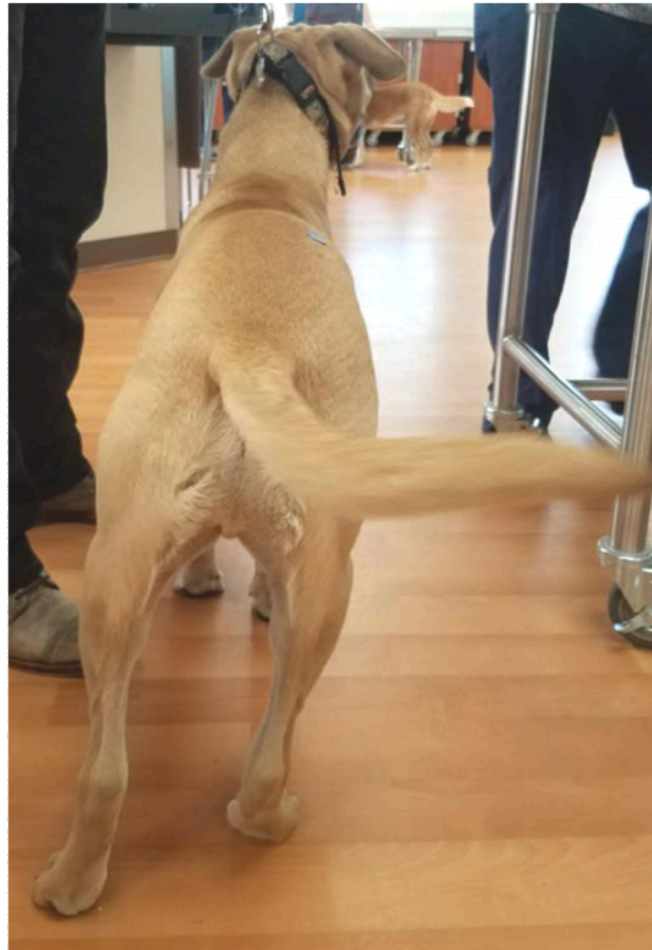
Take a photograph of the photo board with the animal facing the camera .



Take overall photographs of the animal that include the following 6 views . You do not need the photo board for these additional views. Be sure to include the animal's entire body in these views!



CRANIAL VIEW



CAUDAL VIEW



RIGHT LATERAL VIEW



LEFT LATERAL VIEW



DORSAL VIEW



VENTRAL VIEW

Test Your Knowledge

Review the photograph series below.





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STEP 3: PHYSICAL EXAMINATION

Perform a detailed examination of all body systems and record the findings. Here are the basic components of a complete forensic physical examination:

- Signalment
- Microchip scan
- Body weight
- Body condition score (BCS)
- Attitude
- Body temperature
- Mucous membrane (MM) color and capillary refill time (CRT)
- Hydration status
- Heart rate and rhythm
- Respiratory rate and effort
- Systematic examination of all body systems
- Presence of external parasites
- Pain assessment

Pain assessment is **ESSENTIAL** for forensic exams since unrelieved pain and suffering are core signs of abuse. Vocalization, restlessness, abnormal posture, panting, licking or biting painful areas, and muscle twitching are common signs of pain. The most commonly used scales for assessing the level of pain based on clinical signs include the [Colorado State University Pain Scale for Dogs](#) and the [Colorado State University Pain Scale for Cats](#).

Review the details of these physical examination components in this presentation. You can also download this for future reference.



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Test Your Knowledge

A shelter veterinarian colleague asks for feedback on his forensic physical examination form. Carefully review the form and try the quiz to provide feedback.



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STEP 4: ORIENTATION AND CLOSE-UP PHOTOGRAPHS

Take photographs of all abnormal findings, injuries, wounds, lesions, and any evidence on the body following this sequence :

- Orientation photo from a distance to identify the location on the body
- Close-up photo WITHOUT a ruler to provide detail
- Close-up photo WITH a ruler to document size

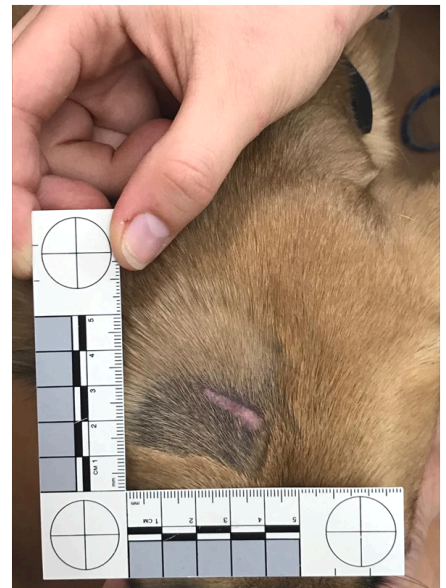
Here are examples of the orientation and close-up photos. The blue sticker pictured signifies the location of an imaginary wound.



Orientation



Close-up



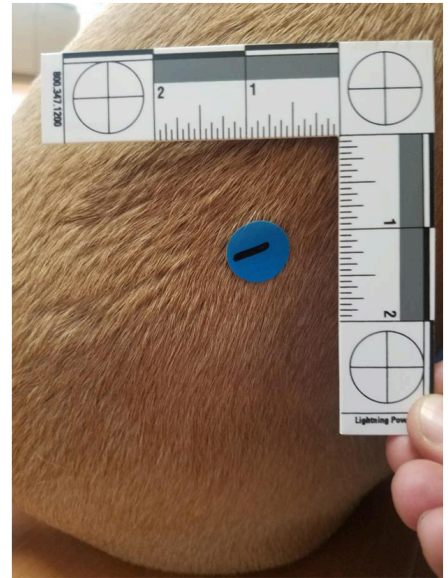
Close-up with ruler



Orientation



Close-up



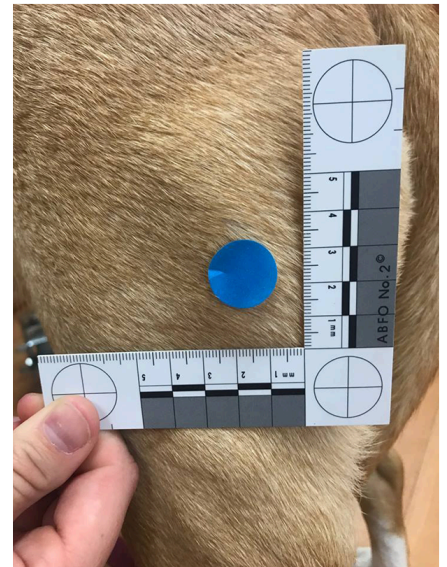
Close-up with ruler



Orientation



Close-up



Close-up with ruler

STEP 5: DIAGNOSTIC TESTING

Clinical forensic exams should include diagnostic testing for 4 reasons:

- Establish the health condition of the animal at the time of initial exam
- Determine if the medical conditions are due to abuse or a pre-existing disease. For example, is the animal emaciated because of starvation or an underlying disease such as a malabsorption syndrome?
- Test results serve as a baseline for comparison to future testing to determine if the condition resolves with proper veterinary care
- Test results serve as evidence for a court of law

These basic diagnostic tests should be performed for animal abuse cases:

- **Complete blood cell count with differential (CBC/diff)** to assess for anemia, infection, inflammation, blood cell parasites
- **Serum chemistry panel** to evaluate organ function
- **Urinalysis** to assess kidney function, diabetes mellitus, and urinary tract infections
- **Fecal analyses** for intestinal parasites
- **Heartworm test** for dogs
- **Feline leukemia virus/feline immunodeficiency virus (FeLV/FIV)** test for cats

Other diagnostic tests are performed based on physical exam findings. Examples include:

- Scrapes of skin lesions for demodex and sarcoptes mites
- Fungal cultures of skin lesions for ringworm
- Bacterial culture of skin lesions, wounds, urine
- Ear swabs for ear mites, cytology, bacterial culture
- Blood tests for tick-borne infections

Whole body radiographs are essential for ALL victims of blunt force trauma, sharp force trauma, and gunshots. Radiographs document old and fresh fractures, bullet fragments, other metal foreign bodies, organ damage, etc. Radiographs serve as evidence for a court of law.

Special diagnostic procedures that may be necessary for some cases include toxicology tests and DNA analyses.

STEP 6: EVIDENCE COLLECTION

Evidence is used to establish the facts of a crime. Evidence is commonly overlooked or lost because the veterinarian is not aware of its value or does not collect and store it properly.

Evidence includes:

- **Physical exam findings**
- **Pain assessment**
- **Forensic photographs of lesions.** This includes photos taken before and after treatment.
- **Diagnostic test results.** This includes before and after treatment.
- **Radiographs**
- **Any materials found on the animal** during the initial exam (collars, chains, paint, metal shavings, etc)
- **Response to treatments over time.** For example, does the animal's body weight and BCS improve with proper nutrition? Does anemia resolve with parasite treatment? Do infected wounds heal with antibiotic treatment?

STEP 7: FORENSIC MEDICAL REPORT

The purpose of the forensic medical report is to clearly convey what has or has not happened to a victim based on evidence. The report contains the physical exam findings, pain assessment, diagnostic test results, response to treatments, and forensic photographs. The report ends with a conclusion about whether the victim's conditions should have been recognized as requiring veterinary care and if the animal experienced pain and suffering from the conditions. The veterinarian must be impartial and only draw conclusions based on what the evidence shows.

Even if you are not required to write a formal forensic report, it is a good idea to summarize your medical findings into a one or two-page report that can be shared with investigators and attorneys to help them understand your findings. The veterinarian may also be called to testify about their findings months to years after the examination, so a thorough report and well-documented evidence will assist in providing accurate testimony.

Animal abuse is a LEGAL determination, not a medical one. The veterinarian does not need to make the case or determine if a crime was committed.

CONGRATULATIONS – YOU HAVE COMPLETED MODULE 3!



Want to Learn More?

- [Forensic Case Report Outline](#)
- [Forensic Veterinary Medicine: Investigation involving live animals](#)

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MODULE 4: THE CASE OF THE BARKING DOG

BRENDA GRIFFIN, DVM, MS, DACVIM, DABVP



Module Learning Objectives

- Describe the emotional impact of the shelter environment on the behavioral health of animals.
- Identify common behavior problems of sheltered animals.
- Identify the veterinarian's role in shelter animal behavior, welfare, and adoption.
- Identify and relate the components of shelter animal behavioral wellness programs to Fear Free concepts.

SHELTER ANIMALS AND BEHAVIOR PROBLEMS

Both stress and behavioral problems are common in animals housed in shelters. Behavioral problems may be the reason that the animal was relinquished in the first place, or may develop as a result of shelter life. Behavioral problems commonly develop in animals that are housed for a prolonged period of time in poorly enriched environments, but the stress of even short-term confinement in a shelter can significantly compromise both physical and behavioral health, negatively impacting animal behavior and welfare.



If you have ever visited a shelter before, you know that the sounds of barking can be stressful and sometimes overwhelming. They affect the other dogs, the people, and certainly the cats if they are housed within auditory range of the barking. As you continue on in this module, think of the many barking dogs that you might encounter working in an animal shelter. Likewise, also consider the many hissing and hiding cats that you could see as well. We will come back to animals like these later in this lesson.

Shelters must develop programs designed to minimize stress and prevent the development of behavioral problems, as well as to detect as many problems as possible. The importance of detecting

problems should never be discounted as even the best equipped shelter will not be able to manage or modify behavior, or match pets to appropriate homes, if they are unaware that any problems exist.

COMMON BEHAVIORAL PROBLEMS THAT LEAD TO RELINQUISHMENT OF PETS

For dogs, commonly reported behavioral reasons for relinquishment include: aggression, housetraining issues, jumping, barking, destructive behavior, hyperactivity/unruly behavior, and incompatibility with other pets. For cats, commonly reported behavioral reasons for relinquishment include: litter box issues, spraying, destructive behavior, scratching, nocturnal activity, hyperactivity, and unfriendliness. Many of these are typical or even normal behavior that could be easily prevented, managed, and/or modified in the home.

Shelter dogs and cats are often “diamonds in the rough” that would make wonderful pets with good adoption counseling, the right home, and a little training and proactive behavioral care. In some instances providing support for owners who are struggling with their pets’ behavior before they reach the “end of their rope” and decide to relinquish will keep pets with their owners and out of the shelter! By making behavioral health care a priority in practice, veterinary practitioners can play a life-saving role by helping clients to resolve these and other common problems and prevent relinquishment. Shelters can also serve as community resources to help prevent relinquishment, and many shelters offer pet behavior support programs to help keep pets in their homes.

SHELTER LIFE, STRESS, AND ITS POTENTIAL IMPACT

Shelter life is stressful! Housing cats and dogs in animal shelters presents enormous opportunities for introducing stressors and inducing stress. In fact, cats and dogs experience many stressors in animal shelters beginning at the moment of admission. Even under the best possible conditions, shelters are stressful by their very nature. Incoming animals are confined and exposed to varying intensities of new and novel stimuli. Stressors may include:

- transport
- confinement in a new environment
- social isolation
- changes in temperature, light pattern, and/or ventilation
- strange smells
- loud noises
- proximity to other animals
- diet changes
- handling and/or restraint
- irregular caregiving schedules
- unpredictable events

- illness
- the absence of familiar human contact or the presence of unfamiliar human contact

Anything unfamiliar to a cat or dog can activate the stress response. In addition, when animals are housed in shelters, stress frequently arises from the lack of opportunities they possess for engaging in activities that would help them to feel better or cope. For example, dogs may want to seek social contact with a person but be unable to do so because they are confined or because they are very scared. A cat may want to retreat to a quiet spot for a nap, but be unable to escape the sounds of barking dogs.

Keep in mind that stress responses are highly variable among individuals: what one finds distressing may not be to another. What is “stressful” is dependent on the perception of an individual animal. For many animals, stress is frequently accompanied by feelings of fear, anxiety, and/or frustration. And, stress has a profound influence on behavior. Some animals will refuse to eat. Some may refuse to move. Others will behave aggressively. In shelters, animals experiencing fear, anxiety, stress and frustration are more likely to become ill. Upper respiratory infections are especially common.

When confined in a shelter, cats and dogs may suffer from chronic anxiety, social isolation, inadequate mental stimulation, and lack of exercise, all of which adversely affect their physical and emotional health—both in the short- and long-term. These negative emotions affect the ways in which they behave and often lessen their adoptability. These changes may result in euthanasia of the animal in some shelters, or in others it will increase the length of their stay if they do not attract the interest of an adopter because of poor physical or emotional health. Over time, the animal’s emotional and/or physical well-being may be compromised even further. Chronically stressed animals are more likely to develop serious ongoing behavior problems. Fortunately, just as there are many ways for us to bolster the physical health of animals in shelters, we can also work to support their behavioral or emotional health as well.

HEALTH AND WELLNESS

Wellness is defined as the maintenance of good health. Both physical health and behavioral (or emotional) health comprise wellness. For example, a cat or dog may be physically fit, free from infectious or other physical disease, but suffering from severe anxiety. This animal cannot be assessed as truly healthy and this behavioral disorder must be addressed in order to ensure their well-being. A wellness program to optimize animal health in the shelter must therefore address both physical and behavioral (emotional) health.

EMOTIONAL HEALTH

Good emotional or mental health implies a state of psychological or behavioral wellbeing. When animals possess good emotional health, they experience an array of positive emotional states (contentment, playfulness, relaxation) and are able to effectively function, learn, and adapt in every day life. If faced with a stressful situation, they are able to cope, and do not experience significant or prolonged stress, fear, anxiety, or frustration as a result. In short, emotionally healthy animals are content and resilient and successfully enjoy their every day lives. This is the ultimate goal for any animal residing in a shelter.

THE REALITY OF SHELTER LIFE

Admission to any shelter may be a stressful event for animals because of the abrupt change in environment. The strange sights, smells, and sounds combined with the presence of unfamiliar people and animals trigger apprehension, thus almost all animals experience at least some degree of fear and anxiety following admission. Confinement in an unfamiliar environment makes coping difficult because it is generally challenging for cats and dogs in shelters simply to engage in normal every day behavior. The day-to-day interactions they receive may be inconsistent and unpredictable, making it difficult for them to learn what to expect, and therefore more difficult for them to adapt. For all of these reasons, even short-term confinement in an animal shelter can induce severe stress, anxiety, and fear. Furthermore, in tight confinement cats and dogs have little control and few behavioral options that might serve as effective outlets for their needs. With inadequate physical and mental stimulation, animals may experience increasing anxiety and frustration in the days and weeks following admission. If un-ameliorated, the negative emotional states that animals in shelters experience result in poor emotional health and compromised welfare. Tragically, some animals ultimately develop persistent or even life-long emotional problems as a result of experiencing severe or overwhelming stress (distress), or ongoing or prolonged stress during a long term shelter stay. Indeed, the

experiences that animals undergo during their stay in a shelter can impact their emotional health for the rest of life.



Admission to a shelter is stressful for animals and without careful attention to minimizing environmental fear factors, such as the sounds of barking dogs, many cats will experience profound fear. The kitten pictured here appears very tense with large round pupils and is hunkered down in the far corner of the cage. He is frozen in place in the back of the litter box where he is attempting to hide behind an upright shoe box.

TIME IS OF THE ESSENCE!

When considering emotional health in the shelter, it must be recognized that animal shelters are simply not normal or natural environments in which to house cats and dogs. They are meant to serve as temporary housing for pets waiting to be reclaimed, rehomed, or returned to the field, and in some cases temporary housing for animals that will be euthanized.

Over the past two decades, there has been a growing trend in animal sheltering to afford pets

awaiting adoption longer-term stays. This is especially common in limited-admission “adoption guarantee” and “no-kill” shelters that do not euthanize cats and dogs unless perceived as medically necessary. If not chosen by an adopter, an animal may stay in the shelter for weeks, months, or even years. Long term housing (i.e. greater than 2 weeks) predisposes animals to compromised behavioral health and welfare. In fact, maintaining the behavioral health and welfare of animals residing in shelters long term is extremely difficult because the risk of emotional distress and behavioral deterioration increase dramatically over time. For this reason, the best means of safeguarding the emotional health of shelter animals is to get them out of the shelter as quickly as possible! This can only be accomplished with good population management practices designed with efficiency in mind.

When sheltering organizations operate above their capacity for care, in other words, when they operate without sufficient resources to provide proper and efficient animal care, animal health and welfare are compromised. Increases in the prevalence of infectious diseases are common, and likewise increases in displays of fear, anxiety, stress and frustration-related behavior by resident animals can be expected. Providing behavioral wellness care in the shelter is a must, and ensuring the shortest length of stay possible will provide the best chance of preventing negative consequences associated with chronic stress and the development of serious problem behavior.

EMOTIONAL WELLNESS = BEHAVIORAL WELLNESS

When addressing behavioral health in the shelter, prevention is crucial. A behavioral wellness program starts with proactive strategies to decrease stress and promote a healthy emotional environment from the moment animals arrive at the shelter until the moment their stay ends. A thorough behavioral history and examination are essential and will provide an important baseline for action and follow-up. In addition, ongoing examination and observation of behavior during all interactions is crucial in order to ascertain as much information as possible about an animal's emotional state, welfare, and personality. Careful attention must be paid to housing and enrichment, and concurrent population management strategies must be employed to minimize length of stay and maximize best outcomes for animals.

Test Your Knowledge



An interactive or media element has been excluded from this version of the text. You can view it online here: <https://ufl.pb.unizin.org/integratingveterinarymedicinewithsheltersystems/?p=124>

BEHAVIORAL WELLNESS: IT STARTS WITH A GOOD HISTORY...

Getting a good history is all about asking the right questions. Of course, you would ask about the pet's medical health history, preventive health care, and any problems they may have had, as well as information about their behavior. More specifically in terms of behavioral history, your questions should help you discover information about the pet's:

- Personality and preferences: likes, dislikes, favorite things, fears
- Routine: where does he/she stay; what does he/she do on a typical day
- Tolerance of humans and handling: men, women, small children, being petted, being picked

up, etc.

- Tolerance of other animals: cats, other dogs he/she knows, unfamiliar dogs?
- Behavioral responses to common situations: a stranger visiting, a trip to the vet, a car ride, etc.
- House training / litter box habits
- Degree of training
- Reason(s) for surrender

Shelters typically use a standardized interview form to help staff consistently gather important history about physical and behavioral health. Ideally, staff should go over the form in person with the person admitting the animal. Here is an example of a [dog intake history form](#) from the Center for Shelter Dogs at Tufts University. And, here is an example of a [cat intake history form](#) from the San Francisco SPCA.

THE TRUTH ABOUT OBTAINING A HISTORY

Obviously, in the shelter setting, it may not always be possible to obtain an accurate history. Ideally, staff should always obtain a history at the time of admission. Even so, surrendering owners may or may not provide thorough or accurate information fearing that if they are honest about a pet's problems, the pet may be euthanized. Nonetheless, when available, a history can be extremely valuable and may save time, money, and stress on the animal and staff. Intake procedures should be in place to capture basic patient information, including both physical and behavioral data as well as the reasons for relinquishment. The importance of obtaining historical information cannot be overemphasized. In many cases, historical information may be used to expedite the disposition of the pet.

WHO SHOULD YOU ASK FOR A HISTORY?

Any available information can be extremely helpful to guide care when animals enter the shelter. For this reason, a history should be obtained from: owners surrendering a pet, good Samaritans who find and bring a pet to the shelter, and animal control officers who pick up animals in the field. Although it is not always easy to get an honest answer from people who are surrendering a pet, it is crucial to get as much information as possible. In some instances, fear that the pet might be euthanized will inhibit complete and truthful answers. For example, an owner may minimize a serious problem fearing it will lead to euthanasia of their pet. Studies of owner relinquishment indicate however that when people do confide information about a pet's problems, it is often truthful. It turns out that failing to divulge or omitting important information is more likely than reporting a problem that does not exist. As such, it is important to ask for behavioral history in a non-judgmental way in order to get as much information about a pet as possible. Asking open ended questions such as, "what does your pet do when he meets a stranger?" will likely provide more complete and reliable information than simple "yes or no" questions like, "is your pet aggressive when he meets a stranger?"

Good Samaritans may or may not have much information or experience with a stray animal that they have found. That said, in many instances they may have more knowledge of the animal than you might think. For example, they may have held the pet for several days or weeks to look for the owner

before bringing the animal to the shelter, or they may have seen the animal around the neighborhood for some time, or otherwise be familiar with them. As such, they may be able to tell you quite a bit about the animal's personality and behavior. Likewise, gathering historical information from animal control officers bringing in animals from the field can also be very useful. Animal control officers can provide initial information regarding how the animal behaved during capture and transport. For example, an animal's behavioral responses at the time of impoundment might be very different than what the officer saw in the field. Stress and fear can cause a previously friendly animal to become fractious by the time he/she is handled during intake at the shelter.

PHYSICAL AND BEHAVIORAL EXAMINATION

If you were looking to adopt a dog or cat, you would no doubt want to learn as much as you possibly could about that pet. But, how could you do that? Would the way in which the animal behaved in the shelter be the same as how he or she would behave in your home? If you decided to bring a dog or cat from the shelter to your home, how long would it take you to “get to know” them? And, once that pet had settled into your home and established a positive relationship with you, do you think that he or she might behave differently (as opposed to when you first brought them home)? You bet they would! The truth is that even in the ideal setting of a proper home environment with an experienced pet owner, getting to know a pet takes knowledge, skill, effort, and a considerable amount of time. Furthermore, some animals will be much easier to “get to know” than others.



How this cat behaves in the shelter may be nothing at all like how he would behave in someone's home. It is very difficult to predict behavior because it is greatly influenced by many factors including stress, the environment, and relationships with people and other animals.

DIFFICULT QUESTIONS THAT SHELTERS MUST CONSIDER

- How can a shelter predict how an animal is going to behave in a home? If an animal is stressed out, fearful, anxious, or frustrated in the shelter, how might this affect their behavior?
- How can a shelter determine with any certainty that an animal is a suitable candidate to safely re-home?
- If an animal is deemed “unsafe” for adoption, what happens to them?
- If an animal is adopted out and bites or otherwise seriously injures someone, is the shelter liable?

Let's explore some possible answers to such questions.

BEHAVIORAL EXAMINATION

Every animal (that is deemed safe to handle) should receive a physical examination at or as close to the time of admission to the shelter as possible. In addition to physical examination, behavioral examination or observation should also begin upon admission.

Some shelters use a “formal behavior evaluation test” aimed at helping them get to know an animal as well as to determine whether or not that animal is suitable for adoption—and what sort of home might be best. Most of these tests have been designed for use in dogs, although some shelters have also utilized such tests for cats as well. Such “formal behavior evaluation tests” typically follow a structured format and include things the pet would likely encounter in a home such as:

- Greeting and petting
- Handling, including handling in ways that might be annoying (such as lightly pinching a toe or flank)
- Engaging the pet in play
- Evaluating how a pet responds to a stranger, to other animals, etc.
- And, for dogs, evaluating how they respond to having their food bowl and chew bone taken away.

The tests are conducted by a person unfamiliar to the animal and all of the components are done one right after the next in a single session. As you can imagine, the tests themselves can be quite stressful for shelter animals and these evaluations are often very subjective. The [most common of these tests](#) are summarized on the ASPCA Pro website. Despite extensive research, such tests have not been scientifically validated. Attempts to standardize them have also not been successful and results and interpretations may vary substantially among those performing them. In addition, evidence demonstrating that these tests are useful for predicting future behavior in a home is sparse. In some instances, shelters hold animals in order to carry out these tests, creating back logs of animals waiting to be tested, and in turn affecting overall efficiency of care and increasing the average length of stay for each animal. For all of these reasons, the routine use of these “formal behavior tests” has been called into question by many experts and is no longer routinely recommended.

IF THERE’S NO RELIABLE “TEST” TO ASSESS BEHAVIOR AND ADOPTABILITY, WHAT’S A SHELTER TO DO?

It is true that there is no “test” that can reliably predict future behavior in the home. Behavioral responses are profoundly influenced by stress and the environment, as well as the relationship an animal has with the handler. Nonetheless, it is crucial to observe and monitor behavior in order to recognize and mitigate stress and other negative emotional states that animals may be experiencing in the shelter, as well as to learn as much as possible about each individual to aid in optimizing shelter behavioral care, outcome assessment, and adoption matching and counseling, to the extent possible. Assessment of behavior should include history, as well as information gleaned from every interaction with the animal. When available, history of how the animal behaved in previous homes and situations is one of the best predictors of future behavior. Information gleaned from interacting with animals

during routine intake and husbandry procedures as well as enrichment, play, and training activities can be used to guide care plans and provide for each individual animals' emotional needs, ensure their welfare in the shelter, and make the best possible decisions with regard to safety, placement, and matching. Criteria to identify dangerous animals, such as history and/or displays of severe or injurious aggression, combined with risk assessment, should be defined to protect staff and public safety.

In some cases, formal testing may be used by well trained and skilled observers. Although the results may not predict future behavior, these tests can provide valuable information about how animals react in specific situations in the moment. Such tests should not be used as a single snapshot view of an animal to make a life or death (euthanasia) decision. Instead, assessment and outcome decisions should always be based on all available information. Ascertaining whether or not a particular animal poses a safety risk to humans or other animals is a serious and difficult responsibility.

According to the ASV Guidelines:

"Animals believed to be dangerous should not be re-homed. A thorough investigation of individual circumstances must be undertaken before consideration is given to re-homing an animal with a history of biting or threatening behavior. Those with questionable behavior should be thoroughly assessed by persons with training and experience in animal behavior. All behavioral concerns should be documented and discussed with potential owners before adoption; recommendations for management should also be provided."

WHAT'S THE WORST THING THAT COULD HAPPEN?

In the News

Shelter animals are frequently in the news—often to raise awareness about the needs and plights of communities' homeless animals. But, sometimes they make headlines when horrible things happen to the people who come to their aid—particularly shelter dogs. In this [news story](#), a 57-year old man was killed by a dog he adopted just hours earlier. And, in this [story](#), a 64-year old woman was killed by a dog she adopted only 2 weeks prior.



Rottweiler dog on a leash in the shelter's kennel. The dog appears attentive but relaxed. This is the dog that killed his owner within hours of being adopted.

Sometimes the news stories involve dogs that attack or kill other dogs, like this [one](#) where a dog that was adopted earlier the same day, broke away from his new owner to grab and kill a beloved Maltese named Teddy. Teddy's owner was holding him on a leash outside of an ice cream shop when it happened. In a different [story](#), a foster mom describes what happened when her foster dog attacked her sister's dog and then redirected his aggression on her. According to the story, the dog inflicted severe damage to her and

went on to do the same to another caregiver at a later time. In this case, the dog continued to be actively available for adoption—with no mention in his description of his aggressive and dangerous behavior.

RE-HOMING ANIMALS WITH “BEHAVIOR ISSUES”

Shelters do not typically guarantee the pets they place for adoption. Adopters are usually asked to sign forms acknowledging the lack of guarantee for behavioral or medical health issues. This is certainly reasonable. However, if a shelter knowingly places an animal with a history of aggression and that animal later injures someone, there can potentially be serious repercussions for the shelter.

Liability is an issue that should be taken very seriously by any shelter, rescue organization, or individual that is considered the “owner” or “caregiver” of an aggressive animal. Liability does not necessarily end when ownership is transferred to another individual or agency by any method, be it sale, gift or adoption. Furthermore, even if there is a complete understanding of the problem and all necessary precautions are stringently adhered to at all times, there is no guarantee that a harmful incident will not occur for which a sheltering organization, including its veterinarian and board of directors, could be held liable.

Most government or municipal animal shelters are tasked with protection of public health and safety. It is the duty of animal control agencies to protect the public from stray and vicious animals, and to enforce rabies vaccination laws. Shelters must be cautious about releasing animals with known bite histories. Shelter policies often state that dogs that are deemed to pose a safety risk to the public will be humanely euthanized.

According to the ASV Guidelines

“Long-term confinement of any animal, including feral or aggressive animals, who cannot be provided with basic care, daily enrichment and exercise without inducing stress, is unacceptable.”

The public does not always agree with decisions to euthanize animals that are deemed dangerous. Legal battles over the custody of such animals can result in lengthy stays for sheltered animals that might be difficult for shelter staff to safely handle. During this time, the animal’s welfare will certainly suffer in long term confinement and their behavior may worsen. Such situations can be emotionally challenging for all involved, and often times the animals involved suffer the most. This [news story](#) is a real life example of these controversies: the article reveals that “Onion”, a family dog that tragically killed a 1 year-old boy in April 2012, was released by animal control, rather than being euthanized, after nearly two years in the shelter during which legal wrangling between the city and animal rights advocates was occurring.

GETTING ON TRACK!

Fortunately, most animals entering most shelters have the potential to become good and safe pets! Initial history and behavioral findings should guide initial planning and care for each animal. Good behavioral wellness care should be in place to set animals up for success by shielding them as much as possible from stressful stimuli, helping them adjust to shelter life, and providing them with social contact and activities to help meet their emotional needs. Fortunately, many aspects of such care can be easily implemented. Step 1 is to create a healthy emotional environment. Providing animals with the best possible housing will also go a long way towards supporting their emotional health. Step 2 is to create regular routines of enriching activities and behavioral options for the animals throughout their stays.

CREATING A HEALTHY EMOTIONAL ENVIRONMENT

With regards to the shelter environment, it is important that we think carefully and critically from the perspective of the animals—we need to think about what it is that they are perceiving and what we can do to make them as comfortable as possible when they come in to a shelter. Regardless of the physical structure of the facility there are a lot simple things we can do to promote a healthy emotional environment for animals and people alike.

The shelter environment and its animal housing facilities must satisfy the physical needs of animals, such as shelter and warmth. At the same time, they must also satisfy the emotional needs of animals as well, including the ability to engage in a variety of healthy activities and social interactions. Thus, both the physical and the emotional environments are crucial considerations. When shelters meet both the physical and emotional needs of animals, negative emotions such as fear and frustration are minimized. Because needs vary depending upon such factors as species, life stage, personality, and prior socialization and experience, shelters should maintain a variety of housing styles in order to meet the individual needs of different animals in the population. In all instances, a healthy emotional environment will also be required for success.

A healthy emotional environment provides regular and predictable schedules of care-giving by compassionate, well-trained staff members and actively reduces potential stressors and fear-inducing stimuli (“fear factors”) such as loud noises, other intense or overwhelming stimuli, haphazard schedules, and frequent interruptions. Animals quickly become accustomed to schedules of care (e.g., feeding, cleaning, enrichment activities), and rapidly learn to adapt to new and novel stimuli provided that fear responses are not overwhelming or sensitizing. For these reasons, from the moment an animal enters the shelter, steps should be taken to reduce stress and fear.

Indeed, a crucial part of creating a healthy emotional environment is reducing environmental fear

factors as much as possible. This involves making the environment feel as calm and safe as possible by minimizing potentially stressful sights, sounds and smells by closing doors, limiting foot traffic and cleaning well between animals. Speaking softly, in calming tones, and playing calming music at a low volume can make a world of difference. Providing visual barriers can help shield animals from the sites of a new environment and is crucial if they are feeling anxious, fearful or otherwise overwhelmed. Something as simple as draping a blanket, towel, or even a piece of newspaper over a carrier or cage door will provide privacy for the occupant.



In this example, a sheet is used to cover a carrier containing a cat in the intake area of the shelter. This simple act of shielding the cat from visual stimuli can reduce fear, anxiety, and stress during the admission process.



(Left) Inexpensive shower curtains are also useful for this purpose. (Right) In this example, a sheet of plastic sign board is attached to the front of a kennel run using zip ties. This barrier on the bottom of the kennel run door provides the dog with a bit of privacy and shields him visually from activity outside of his kennel. The dog here was frightened and cowering in the back of the run. She immediately felt safer and more confident with the barrier in place. She was relaxed enough to come forward right away and look out at her new world. In time, the barrier could be reduced in size or removed as the dog settles in to the new environment.



Kennels sometimes have built in barriers as seen on this inside facing run front. Note the spacious run with a separate raised area for bedding, as well as an outer compartment with natural light from which the dog can easily see out if he chooses.

A SENSE OF CONTROL

Think about the times in your life when you have been THE MOST stressed. You may remember thinking to yourself how everything just seemed completely “out of control”! In fact, a “sense of control” over conditions is well recognized as one of the most critical needs for emotional health. This means that we must provide animals with a variety of satisfying behavioral options—they need variety, and they need choice! Giving them a sense of control is an incredibly powerful means of improving their welfare in the shelter.

POSITIVE PREDICTABLE INTERACTIONS AND CREATURE COMFORTS

Not knowing what to expect is stressful for people and animals alike. Picture yourself far away from home, from all the things you know—deposited for unknown reasons in a strange, confining place where you don’t know anyone. What would help you cope? What would decrease your stress? One of the most important things would be for you to be able to know what to expect. If you knew what to expect, you could deal with and adjust to the daily routine. In fact, knowing when both pleasant and not-so-pleasant things are going to happen helps both people and animals cope because we can learn what to expect when, and can prepare ourselves. For example, if events that are perceived as stressful or scary (such as cleaning time) occur on a predictable schedule, animals can learn to cope more easily because they will know that they can relax afterward. Having positive predictable events to look forward to every day will also help tremendously. For example, if dogs know that they will reliably get to go outside for exercise at the same times every day, they will learn to look forward to these times, and learn to relax in between. Providing animals with a predictable daily schedule can go a long way toward decreasing stress! Likewise, we all like to feel safe, secure, and comfortable. Think about the many simple things that can make animals more comfortable—a soft bed, a cozy hiding spot, a safe refuge, something nice to look at, something pleasant to smell, or something tasty to eat . . .



Here's an example of a positive predictable interaction: the simple act of providing a dog with a tasty treat can go a long way towards creating a healthy emotional environment.



Cats utilize various resting perches inside their enclosures including the top of a purpose designed paper box (left) and a raised platform style perch (right). A huge part of being comfortable in a new place is feeling safe: cats need comfortable places to hide as well as the ability to perch at secure vantage points. Likewise, dogs need comfortable beds and the ability to take refuge if desired. For comfort and security, each animal needs its own familiar place with its familiar scent, and to be cared for by consistent, familiar people.



Creature comforts also include soft bedding, toys and other items or arrangements that provide animals with a variety of options, stimulate normal behavior and provide outlets for animals to help them cope in a new environment. (Left) A soft, dry bed is essential for all shelter animals: platform beds like the one pictured here are popular choices for the kennel because they elevate dogs from the floor, helping to keep them warm and dry. This dog also has a cozy blanket and a variety of chew toys to stimulate him. (Right) Having the ability to change locations, observe a pleasant view, and get some fresh air are also comforting: this cat partakes of all three of these as he lounges in this neat outdoor balcony compartment, which is an extension of his larger indoor enclosure. He has variety and choice!

When animals are provided with regular, consistent, predictable positive interactions and pleasant activities, they learn what to expect and can adapt and adjust to the routine. In other words, animals quickly learn consistent routines—and they will acclimate to a new environment much more quickly if they know who will be caring for them and when, and that the experience will be a positive one. Thus a good emotional environment promotes adaptation to the shelter environment because animals can learn to what to expect, have the ability to shield themselves from unpleasant stimuli, and are afforded the provision of basic essential creature comforts, as well as some control, variety, and choice.

ENRICHMENT

Enrichment refers to a process for improving the environment and behavioral care of confined animals within the context of their behavioral needs. The purpose of enrichment is to reduce stress and improve wellbeing by providing physical and mental stimulation, encouraging species-typical behavior, and allowing animals more control over their environment. Successful enrichment programs prevent the development and display of abnormal behavior and provide for the psychological wellbeing of the animals. Enrichment is not an optional task that can be neglected on busy days. Instead, it is a core component of daily routine animal care. It is a fundamentally important for animal health and welfare and should be a part of every shelter's wellness protocol. Enrichment is also therapeutic and can be tailored to meet the needs of individual animals and improve behavioral health and emotional wellbeing. Ultimately, enrichment reduces stress and promotes positive emotional states.

GET READY TO ENRICH!

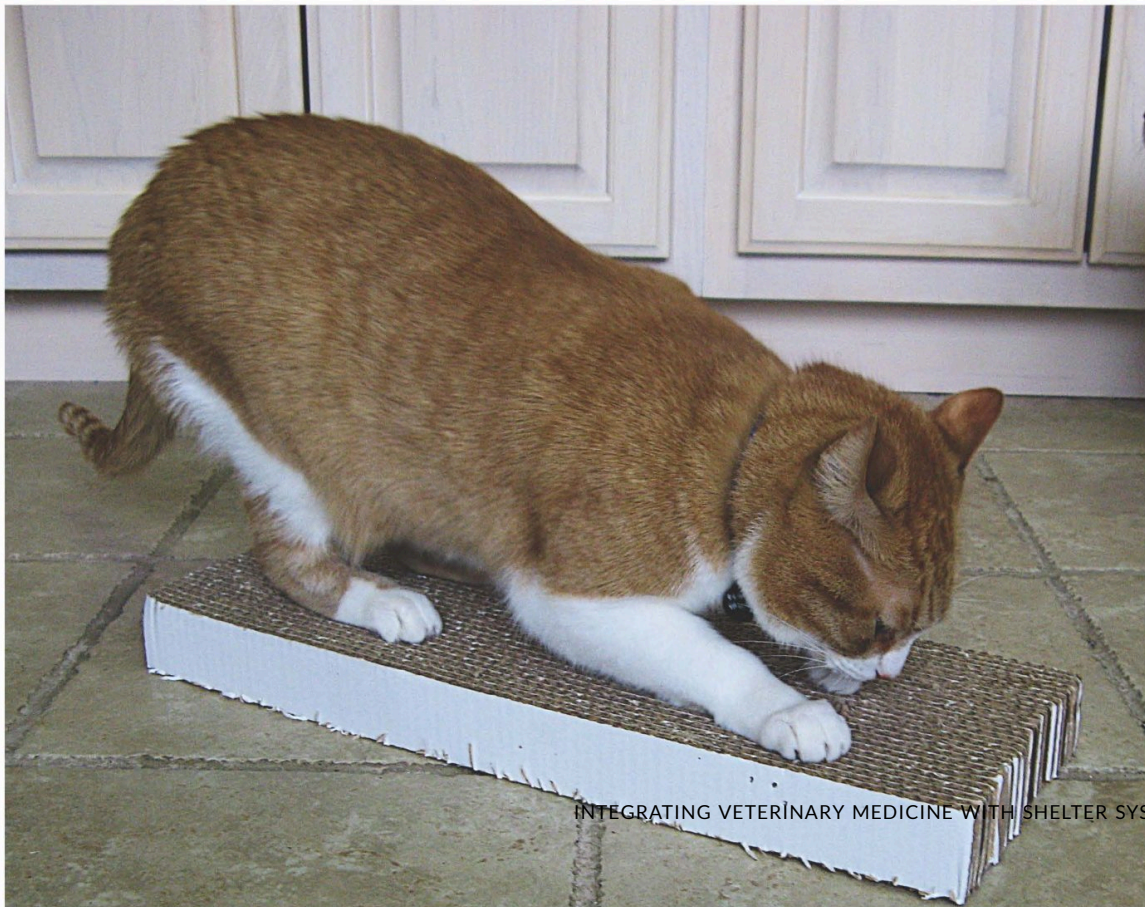
Engage the mind, body, and senses! Promote healthy mental and physical activities! Dogs and cats need nice things to look at and listen to, good things to smell, and satisfying things to scratch or chew and taste as well as activities that provide exercise and social contact. Once they have settled into shelter life (after a few days), their need for time out of their enclosures increases. Daily outings are a key to good welfare, offering opportunities to explore, stretch, play, relax and/or socialize in a secure setting. Cats and dogs need variety and choice, and individuals possess different preferences for environmental conditions, levels of activity, and social interactions with other animals and humans. The best enrichment program will provide for all of these choices. The following photos provide several examples while illustrating a variety of enrichment concepts and options for cats and dogs.



A good enrichment program should be designed to stimulate all of the senses, but that does not mean that it has to be complicated or expensive. (Top) Olfactory stimulation is one important source of sensory enrichment. Many cats like to smell and chew grass, and containers of cat grass or catnip can be introduced for brief periods to stimulate activity. (Bottom) In this case, a cat enjoys watching soap bubbles blown by a caregiver. This is visual enrichment that stimulates both mental and physical activity!



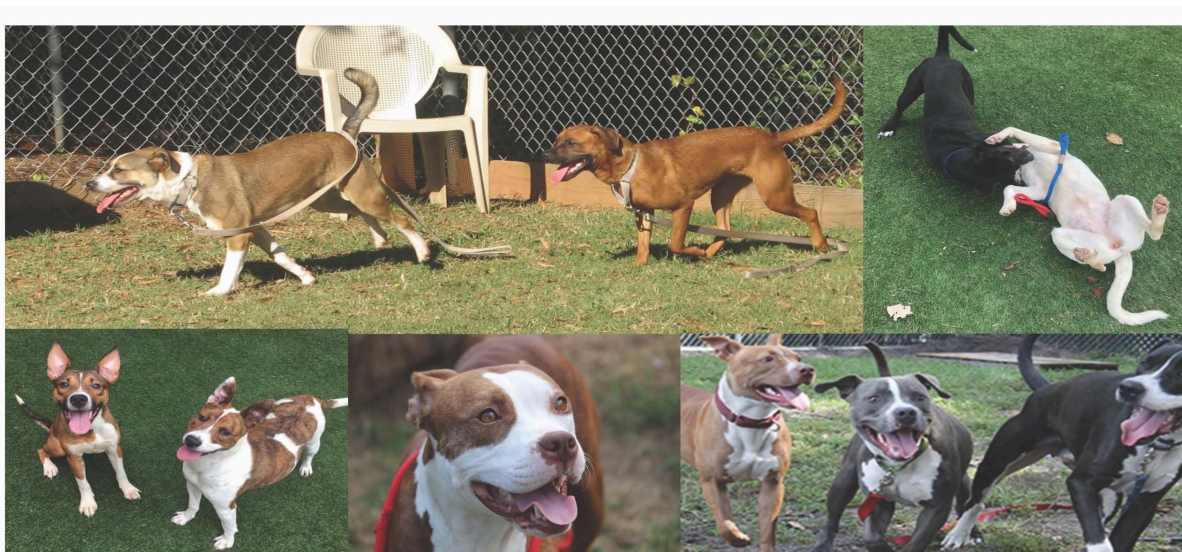
Novel feeding is another excellent source of enrichment, stimulating the sense of taste as well as providing both mental and physical activity. (Left) Kong toys can be stuffed with a variety of dog foods and treats (such that the dog has to work to extract them) and delivered at a set time, providing a predictable and enjoyable break to look forward to each day. (Right) Many shelters create disposable feeder toys out of empty soda bottles or paper tubes, like those pictured here. A variety of treats, including spreadable foods like peanut butter and soft cheese, make for good stuffing, and freezing food stuffed toys makes it more challenging for dogs to lick them out, extending the enjoyment time they provide.



(Top) For dogs, chewing is a natural, enjoyable, and necessary activity. It may reduce anxiety and frustration, and also serves to condition the teeth and gums. In addition to feeder toys, a variety of other chew toys should be provided. Rotating toys on a regular basis helps keep them fresh and interesting. (Bottom) Similarly, scratching is an essential need of all cats. It conditions the claws and serves as an important means of feline communication through both visual and scent marking.



One of the most important things for dogs is to get them out of the kennel every day for social contact with people, exercise, and play. (Left) Shelters should maintain a variety of play yards—like the one pictured here—to support their enrichment programs. (Right) The addition of items such as kiddie pools, digging pits, and climbing platforms are useful to expand the available activity options. In this case, a dog enjoys chasing floating toys around a kiddie pool.



Healthy, social play groups are one of the best means of providing enrichment for dogs. For safety, dogs are generally matched according to size and play style. Monitoring new groupings is important for detection of incompatibilities and to be sure everyone is comfortable in the social milieu.



(Top) Feeding enrichment is not just for dogs: cats surround a variety of food puzzle toys (a ball, a cardboard tube, and a plastic container with holes). Treats are hidden inside, and they will have to work to extract pieces of food. (Bottom) Like dogs, cats need time out of their enclosures. In this case, a cat enjoys time in an “office foster”



Playing with people is also an excellent form of enrichment and can help shelter pets to connect with potential adopters. (Top) Many people can't resist a good game of fetch with a dog! (Bottom) In this fun game of "cat fishing", cats approach a toy mouse on the end of a kitty fishing pole. Games such as these provide excellent mental and physical stimulation for shelter pets.



Positive reinforcement-based training combines pleasant social interaction, mental stimulation, and physical activity, making it a profoundly rewarding form of enrichment for both cats and dogs. It may also enhance a pet's appeal to adopters in a shelter setting. (Left) "Shake!" A dog shakes hands with a shelter volunteer. (Right) "High five!" A cat raises her paw to touch a caregiver's hand.

MONITORING BEHAVIOR AND WELFARE

With training and experience, caregivers can ascertain a great deal about an animal's emotional health by observing their behavior. In fact, the best way to surmise how an animal is feeling is by carefully watching what the animal DOES and what he/she DOES NOT do. Through careful observation, skilled caregivers can deduce what an individual dog or cat is experiencing emotionally through accurate interpretation of their behavior and signaling (body language and vocalizations) and by recognizing more passive forms of communication such as withdrawal from normal behavior (i.e., not eating, grooming, or withdrawing from other healthy activities or social interactions). Recognizing both normal and abnormal behavior is crucial.

- Staff should be trained to evaluate animals beginning at intake and to recognize and respond to indicators of fear, stress, and frustration, including both active and passive signs.
- Daily monitoring for signs of fear, stress and other negative emotional states should be performed, and staff should record their findings daily, noting trends and making adjustments in the care of individuals and the population as indicated.
- When signs of emotional distress are noted, immediate action is warranted to alleviate suffering and protect animals' emotional health and welfare. In the case of feral cats, every effort should be made to neuter and return them to their original site of capture as soon as possible.
- Staff must also be trained in providing a healthy emotional environment as well as enrichment aimed at reducing stress and promoting displays of normal behavior and positive emotional states.

MAKING THE ROUNDS... DAILY ROUNDS!

Daily observations of behavior during an animal's stay are necessary and allow for prompt attention to any concerns. Early interventions can prevent serious behavior problems from emerging. The most common behavior problems that shelter animals develop stem from the fear, anxiety, stress and/or frustration that they may experience as a result of their shelter confinement and experiences. Keep this in mind as you take a look at the three photos below. Each photo provides an example of a common shelter-acquired behavior problem. Thinking about shelter life, what problems do you see, how do you think they might have developed in the shelter, and how might you prevent or respond to them?



A fearful cat might become highly defensive and difficult to handle. Simply moving her to a quiet ward with a nice hiding place and a consistent caregiver could potentially enable her to cope and accept handling in short order. Her welfare and adoptability would then be much improved! Keep in mind that most cats in shelters that hiss and hide are not feral: they are simply fearful and reactive. With a little time and a healthy emotional environment away from the sounds of barking dogs, most will relax and adapt to the shelter setting.



A high energy dog that is not provided with adequate exercise and social contact could easily develop obnoxious attention seeking behavior such as repetitively jumping on and nipping anyone who attempts to interact with him. Potential adopters won't like this, which will likely make placing this dog very difficult. Yet, a regular routine of social play and activity could prevent such behavior from developing in the first place! In addition, consistent, positive handling that avoids the undesired behavior, while rewarding appropriate behavior would go a long way towards helping the dog learn appropriate greeting behavior.



A dog that repeatedly experiences other dogs lunging and barking at him when he is in his kennel may develop aggression to other dogs. The solution is simple here: don't let this happen to him in the shelter! Move him to a quieter, low traffic area of the shelter and provide him with a "privacy curtain" on the front of his run—and of course, be sure he has a healthy emotional environment and plenty of enrichment!

THE BARKING DOGS

At the start of this module, we pointed out how overwhelming and stressful the sounds of barking dogs can be in a shelter. These sounds negatively impact the dogs themselves, as well as people in the shelter and particularly the cats in auditory range, who may hiss and hide in fear.

Dogs bark for a number of different reasons—they bark to solicit social support, they do it when they are anxious, when they desire attention, when they are excited, and when they are frustrated. Dogs also bark when they experience fear, and barking may also be used by dogs as a territorial warning signal. Sometimes it is motivated by a combination of different emotions and motivations in the shelter. We will never completely eliminate all barking in shelter dogs. Some barking will be appropriate and positive—such as occasional barks of excitement. That said, with a good behavioral wellness program, we can expect to greatly reduce the frequency of barking by bolstering the emotional health of shelter dogs, thereby reducing the negative emotional states associated with frequent barking including stress, anxiety, fear, and frustration.



Wellness relies on physical, environmental, and emotional health. A behavioral wellness program that effectively bolsters emotional health will promote wellness and reduce behavior associated with negative emotional states, including frequent barking.

With good behavioral care, it is possible to have a reasonably quiet kennel! Just imagine the positive

impact that a quiet kennel would have on everyone in the shelter—including the dogs, the cats, and the people alike. Helping animals feel good and behave well in the shelter is what a behavioral wellness program is all about—and, that is simply life-saving! Think, too, about how much more pleasant it would be to visit a quiet kennel with calmer dogs, and in turn to see more relaxed shelter cats, rather than those that are hissing and hiding. The positive impact would not only affect shelter animal health and welfare, but it would also be felt by shelter staff and visitors alike. In particular, think about the potential positive impacts for adoptions. If visitors were less stressed and dogs and cats were easier to approach, this would indeed make it much easier for potential adopters to connect with new four-legged friends!

THE ULTIMATE GOAL: FOREVER HOMES

In addition to behavioral care and monitoring in the shelter, post-adoption follow-up is another important means of monitoring and support. Follow up phone calls with newly adoptive owners can identify behavioral challenges faced in new situations and enable staff to assist with emerging problems. Follow-ups also allow staff to validate observations made during the animal's stay in the shelter.



Finding a home for a shelter pet is simply life-saving. Following up with new owners helps to ensure a smooth transition into the new home. By asking about and addressing any concerns or problems, shelters can promote and protect the human-animal bond and greatly improve the odds that a new pet stays in his/her home.

Providing sound advice and resources will help many new adopters to succeed with their new pet. The shelter veterinarian can help identify information and resources for adopters that are humane and scientifically valid. The first 3-6 months following adoption are especially crucial—the goal is to help people and pets to build strong bonds which will help prevent relinquishment!

CONGRATULATIONS – YOU HAVE COMPLETED MODULE 4!



Want To Learn More?

[HSUS Pets for Life Program](#)

ASPCA Virtual Behavior Help:

- [For Dogs](#)
- [For Cats](#)

Watch these Maddie's Fund webinars for more simple and fun ideas on enrichment:

- [Stress Reduction: Happy and Healthy Shelter Cats](#)
- [Stress Reduction: Happy and Healthy Shelter Dogs](#)
- [Playing with Shelter Dogs](#)

Animal Sheltering magazine articles:

- [Emotional Rescue](#)
- [Making the Shelter a Happier Place for Animals](#)

Dogs in Need of Space:

- [Living with challenging dogs: less stress, more joy!](#)

Shelter Dog Playgroups:

- [Dogs Playing for Life](#)

Fear Free and Low-Stress Handling:

- [Fear Free Professionals \(for veterinarians and veterinary technicians\)](#)
- [Fear Free Shelters \(for shelter staff and volunteers\)](#)
- [Low-Stress Handling](#)

Center for Shelter Dogs:

- [Resource Library](#)

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MODULE 5: THE CASE OF THE SNOTTY CATS

CYNDA CRAWFORD, DVM, PHD



Module Learning Objectives

- Assess different housing environments and sanitation procedures for compliance with the ASV

Guidelines, Five Freedoms, Fear Free Principles, and AVMA Animal Welfare Principles.

- Propose housing modifications that support better health and welfare for individually housed and group housed animals.
- Create a best practice protocol for daily sanitation of cages and kennels occupied by the same animals.
- Utilize the properties of different disinfectants to select the most appropriate for common shelter diseases.

WELCOME TO THE CAT WARD

In the DuGood County municipal shelter, one staff member is assigned to clean and feed cats in the Cat Ward each morning before the shelter opens. She begins by observing each cat to see whether it ate the previous night or has signs of possible illness.

Today she observes several new cats that are sneezing and have nasal discharge. She reports her findings to the veterinary staff before she continues with cleaning of their cages.



A staff member in the DuGood Cat Ward.

Snotty, sneezing, sick cats seem to be everywhere at this shelter. The shelter veterinarian is concerned that, despite best efforts, there remains a high incidence (new cases) of feline upper respiratory infection (URI) in this shelter for the past six months. On any day, 25% of the shelter's cat population is undergoing treatment for feline URI.

The shelter vet collected swabs from the caudal pharyngeal cavity of 10 sick cats to submit to a diagnostic lab for the Feline Upper Respiratory (URI) PCR panel to diagnose the causes of the URI.



Swabbing the caudal pharynx of a cat with URI for the feline URI pathogen PCR Test

The test results confirmed the majority of these infections are due to feline herpesvirus with several co-infections by *Mycoplasma felis* bacteria.

IDEXX Services: **Upper Respiratory Disease (URD) RealPCR™ Panel-Feline**

Molecular Diagnostics

Cat ID #12345

TEST	RESULT	REFERENCE VALUE
Chlamydomphila felis RealPCR	NEGATIVE	
Feline Calicivirus RealPCR	NEGATIVE	
Feline Herpesvirus 1 RealPCR	POSITIVE	
FHV-1 Quantity	^c 764	THOUS/SWAB
Fold Difference Above Cutoff	5.11 TIMES	
FHV-1 Interpretation	FHV-1 Active Infection: The FHV-1 viral load is high indicating an active infection. FHV-1 is likely contributing to the upper respiratory and/or ocular signs in this cat. Application of nasal vaccines or modified live vaccines within a few weeks of testing can also result in detection of high viral loads.	
Bordetella bronchiseptica RealPCR	NEGATIVE	
Mycoplasma felis RealPCR	NEGATIVE	

FELINE URI

The shelter vet reviewed this document on feline respiratory infections in shelters to refresh her knowledge about feline herpesvirus in order to make a plan for decreasing feline URI.



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<https://ufl.pb.unizin.org/integratingveterinarymedicinewithsheltersystems/?p=175>

Feline URI Takeaways

- 90% of feline upper respiratory infections (URI) is caused by feline herpesvirus (FHV) and feline calicivirus (FCV), with FHV being the most common
- The FHV incubation period is < 1 week
- FHV shedding in ocular, nasal, and oral secretions persists for **1 to 3 weeks**
- FHV establishes a life-long carrier state by latent infection of the trigeminal ganglia in the face
- Stress reactivates FHV replication leading to recurrent URI
- Stressed adult cats start shedding FHV within the first week of shelter stay and are the usual source of infection for kittens housed in the same areas
- Feline URI due to FHV is strongly associated with stress from poor housing conditions and long lengths of stay in the shelter. The most effective strategy to reduce occurrence is elimination of environmental stress and employment of sound population management practices that shorten length of stay to placement in a home

Test Your Knowledge

Select the best answer to the questions in the Feline URI Quiz below.



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The shelter vet reviewed the ASV Guidelines for Standards of Care in Animal Shelters and implemented these changes in the shelter:

- Conduct daily medical rounds to promptly identify new cases of feline URI
- Move URI cats to an isolation room for treatment
- Follow the new Feline URI Protocol for treating URI cats in the isolation room, including wearing PPE
- Clean cat cages with a disinfectant that kills feline herpesvirus, feline calicivirus, and panleukopenia virus.
- Vaccinate all cats immediately on intake with a modified live FVRCP (herpesvirus, calicivirus, panleukopenia virus) vaccine

Unfortunately, these changes did not reduce the incidence of URI in the shelter cats. The shelter vet begins to wonder...WHAT AM I MISSING?

A DIFFERENT PERSPECTIVE

The shelter vet recently attended several presentations in the Shelter Medicine track at a national veterinary conference and remembered one in particular that discussed the relationship of feline URI to stress due to poor housing in shelters. She retrieved the presentation handout to review:



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The Link between Feline URI and Housing Quality

- Feline URI is the number one disease concern for shelter cats.
- Feline herpesvirus (FHV) is the most common cause of endemic URI in shelters.
- Stress due to overcrowding, inappropriate housing, loud environments, poor air quality, and poor sanitation is directly linked to URI occurrence through reactivation of FHV.
- Good quality housing directly impacts feline well-being by relieving stress and is likely the most important single factor in reducing URI frequency in shelters.
- Good housing provides ample hiding spaces, separation of litter and food, isolation from dogs and dog noise, care of the cats without moving them around, and the space for cats to make normal movements and body postures. Housing that meets these recommendations has floor space of 9 square ft or greater.

After review of the handout and the ASV Guidelines, the shelter veterinarian decided to re-assess the cat healthcare practices in her shelter to find the causes for the endemic URI problem.

Test Your Knowledge



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GENERAL CAT ROOM

The shelter vet grabs a camera to take pictures and videos of the cat housing areas in her shelter. She starts with the General Cat Room where healthy cats and kittens are housed from intake to adoption.

General Cat Room

Click on the hotspots to learn more about the General Cat Room housing.



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Watch This



Watch this video taken in the [General Cat Room](#). [1 min]

In this video, note that most of the cats are hiding in or behind their litter boxes at the back of the cage due to fear, anxiety, and stress from the sounds of barking dogs in the room next door.

This video contains no relevant audio.

General Cat Room Housing

Click on the hotspots to learn more about the General Cat Room housing.



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Staff put a noisy, barking puppy in one of the cat room cages pending pick-up by a rescue group. There is a cat in the adjoining cage.



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CAT ISOLATION ROOM

The shelter vet moved to the Cat Isolation Room used to house cats with URI.

Watch This



Watch this video taken in the [Cat Isolation Room](#). [1 min]

Most of the cages are occupied by sick cats on any given day in this shelter. During kitten season in the summer months, wire crates and a bank of old rabbit cages are moved into the room to provide additional housing because the number of sick adult cats and kittens exceeds the housing capacity in the room. Most of the cages have 4 square feet of floor space. Some of the cages only have 2 sq feet of floor space.

This video contains no relevant audio.

Cat Isolation Room Housing

Click on the hotspots to learn more about the Cat Isolation Room housing.



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ENVIRONMENTAL STRESS AND URI

The shelter veterinarian for the DuGood Municipal Shelter was correct to look for “something else” influencing the incidence of feline URI in the shelter. The “something else” is the stress that the cats were experiencing because of poor housing conditions. Noisy rooms, inability to express normal behavior in the small cages, no hiding places, and lack of comfortable living quarters are commonplace for cats in many animal shelters (and many veterinary clinics).

The association of feline URI with environmental stress in shelters, including cage size and lack of hiding areas, has been documented in several studies. The recommendations for cat housing in the ASV Guidelines are grounded in these results.

Evidence Supporting the Link between Environmental Stress and URI

[Associations among weight loss, stress, and upper respiratory tract infection in shelter cats.](#)

Tanaka A, Wagner DC, Kass PH, Hurley KF. UC-Davis College of Veterinary Medicine

J Am Vet Med Assoc. 2012 Mar 1;240(5):570-6.

This study evaluated changes in body weight, behavioral stress score, food intake score, and development of URI among cats during the first week in a shelter. More than 80% of the cats lost weight, with 25% losing at least 10% of their body weight in one week. More than 50% of the cats developed URI. Cats admitted to an animal shelter were likely to lose weight and develop URI in the first week, and cats with high stress scores were most likely to develop URI.

[Cage size, movement in and out of housing during daily care, and other environmental and population health risk factors for feline upper respiratory disease in nine North American animal shelters.](#)

Wagner DC, Kass PH and Hurley KF. UC-Davis College of Veterinary Medicine

PLoS One. January 2, 2018 <https://doi.org/10.1371/journal.pone.0190140>

URI is not an inevitable consequence of sheltering homeless cats. Housing and care of cats, particularly during their first week of stay in the shelter environment, significantly affects the rate of upper respiratory infection. This study demonstrated that cage floor space >8ft squared and <2 housing moves during the first week in the shelter were significantly associated with lower risk for URI in adult cats. The type of housing associated with reduced URI risk may reflect lower stress levels for cats, and therefore may serve as an indicator that the shelter environment is more successfully meeting the cats' needs for comfort and well-being.

[Will a hiding box provide stress reduction for shelter cats?](#)

C.M.Vinke, M.Godijn, W.J.R.van der Leijb. University of Utrecht

Applied Animal Behaviour Science 2014; 60(Nov):86-93.

This study determined the effect of a hiding box on the stress levels of newly arrived cats in a Dutch animal shelter. Cats provided with a hiding box had lower cortisol levels and appeared more relaxed compared to cats without a hiding box. The hiding box was an important enrichment tool for coping effectively with stressors in a new shelter environment the first two weeks after arrival.

HOUSING FOR HEALTH

If you were a cat in a shelter, how would you prefer to spend your days while waiting for a new home? Think about the surrounding environment – is there constant noise from people talking, dogs barking, metal doors clanging shut? How about the size of your house – is there space to walk, stretch out, get away from the litter box? Can you curl up in a soft bed or retreat to a hiding area to feel safe? Does the housing environment support good physical and mental health, or does it cause stress, compromised welfare, and ultimately illness?



A stressed cat hiding underneath newspaper in a small cage

Ensuring that animal welfare principles are met is a critical role for all veterinarians. Shelter veterinarians must address the welfare of sheltered dogs and cats because welfare directly affects their health. The ways in which sheltered animals are handled, cared for, housed, and managed during their

stay in a shelter influence the incidence of disease and thus become central to a comprehensive shelter medicine program.

THE FIVE FREEDOMS

One way to evaluate animal welfare is by considering whether shelters provide the “Five Freedoms” for the animals in their care. The “Five Freedoms” are the framework for the ASV Guidelines for Standards of Care in Animal Shelters.

Five Freedoms

1. **Freedom from Hunger and Thirst:** By ready access to fresh water and a diet to maintain full health and vigor
2. **Freedom from Discomfort:** By provision of appropriate shelter and a comfortable resting place
3. **Freedom from Pain, Injury, Disease:** Through prevention, diagnosis, and treatment
4. **Freedom to Express Normal Behavior:** By provision of adequate space, proper facilities and the company of the animal’s own kind
5. **Freedom from Fear and Distress:** By ensuring conditions and treatment that avoid mental suffering

THE ASV GUIDELINES

The ASV Guidelines recommendations for animal housing build upon the Five Freedoms and result from studies performed in shelters.

The ASV Guidelines – Primary Enclosures for Cats

- Wire-mesh bottoms or slatted floors are **UNACCEPTABLE** for primary enclosures for cats.
- Cages or crates intended for short-term temporary confinement or travel are **UNACCEPTABLE** for use as primary enclosures.
- Primary enclosures for cats **MUST** provide sufficient space to allow each animal to make normal postural adjustments (e.g. turn freely, easily stand, sit, stretch and move head without touching top of the enclosure).

- Primary enclosures for cats **MUST** provide sufficient space for cats to lie in a comfortable position with limbs extended, move about and assume a comfortable posture for feeding, drinking, urinating and defecating.
- Primary enclosures for cats **MUST** provide sufficient space for cats to sit, sleep and eat away from areas of their enclosures where they defecate and urinate.
- Cats **MUST** have litter boxes large enough to comfortably accommodate their entire body.
- Cats **MUST** have places to hide.
- Cats **SHOULD** have a minimum of 30 cubic feet (9 square feet of floor space) and more than 2 feet of triangulated distance between litter box, resting place and feeding area.
- The room or enclosure **SHOULD** provide for proper separation of animals by species and predator/prey status.
- Cats **SHOULD NOT** be exposed to the noise of barking dogs.
- Cats **SHOULD NOT** be housed in floor level cages since this can cause stress.
- Cats **SHOULD** have elevated resting places provided whenever possible.
- Cats **SHOULD** have soft resting places.

THE EIGHT ANIMAL WELFARE PRINCIPLES

The American Veterinary Medical Association (AVMA) has adopted 8 principles to guide development and evaluation of animal welfare.

AVMA EIGHT ANIMAL WELFARE PRINCIPLES

1. The responsible use of animals for human purposes, such as companionship, food, fiber, recreation, work, education, exhibition, and research conducted for the benefit of both humans and animals, is consistent with the Veterinarian's Oath.
2. Decisions regarding animal care, use, and welfare shall be made by balancing scientific knowledge and professional judgment with consideration of ethical and societal values.
3. **Animals must be provided water, food, proper handling, health care, and an environment appropriate to their care and use, with thoughtful consideration for their species-typical biology and behavior.**
4. **Animals should be cared for in ways that minimize fear, pain, stress, and suffering.**
5. Procedures related to animal housing, management, care, and use should be continuously evaluated, and when indicated, refined or replaced.

6. Conservation and management of animal populations should be humane, socially responsible, and scientifically prudent.
7. Animals shall be treated with respect and dignity throughout their lives and, when necessary, provided a humane death.
8. The veterinary profession shall continually strive to improve animal health and welfare through scientific research, education, collaboration, advocacy, and the development of legislation and regulations.

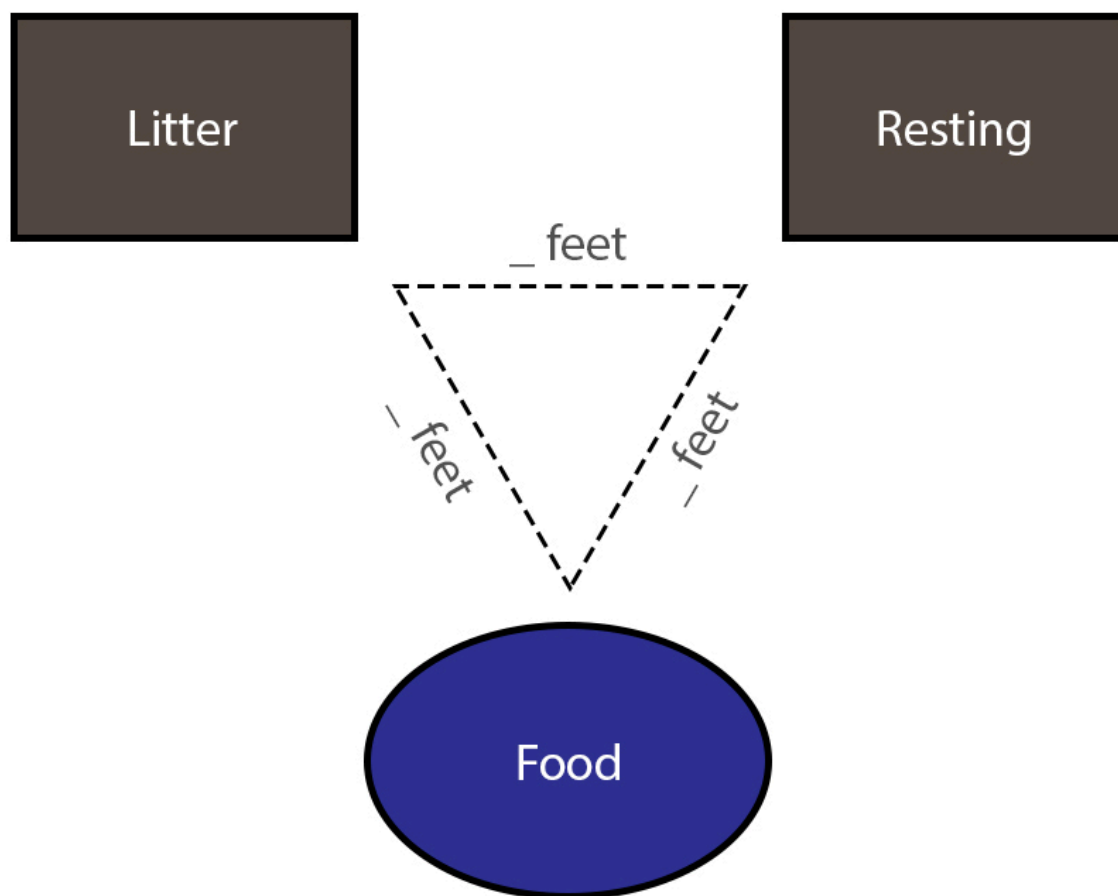
FEAR FREE PRINCIPLES

Fear Free is a program that teaches veterinarians how to create an environment in their hospital practice that diminishes fear, anxiety, and stress in both their patients and clients. Many of the principles of this program can be applied to the shelter environment to create a safer and less stressful experience for the dogs, cats, and staff. Here are some of the principles that you learned in the Fear Free Certification program applied to dogs and cats in shelters, particularly with regard to creating a fear-free living environment.

Fear Free Principles

- Understand how patients experience the *shelter environment*.
- Create Fear Free *housing for each animal in the shelter*.
- Distinguish between the special species needs of cats and dogs *in the shelter*.
- Identify issues causing patients to experience fear, anxiety and stress *in the shelter*.
- Implement protocols to respond to fearful, anxious, and stressed patients *in the shelter*.
- Understand how anxiety and medical problems overlap, including the impact of long-term stress on a patient *in the shelter*.
- Use a considerate approach and gentle control handling. Choose basic gentle control handling techniques that minimize stress for your patients *in the shelter*.

TEST YOUR HOUSING SMARTS



Test Your Knowledge



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Test Your Knowledge

Using the ASV Guidelines recommendations, answer the questions about the primary enclosures for cats in this presentation.



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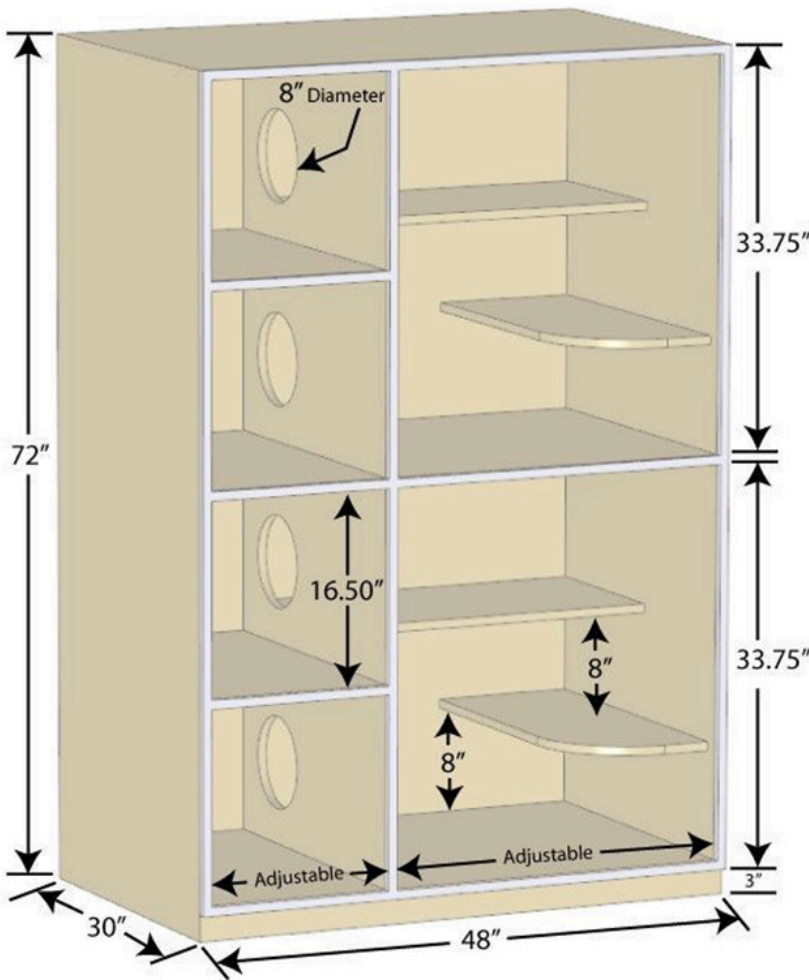
DOUBLE-COMPARTMENT HOUSING

Cats need stuff. They need litter boxes, food bowls, and water bowls that take up floor space in their cages. They need a place to rest that isn't in their litter box. And they need a bed to sleep and hide in if they choose. How do you fit all of that into a cage while still providing adequate space for the cat to have freedom to express normal behavior?

Double-compartment housing contains 2 separate areas that are connected by a door or portal so the cat can pass freely from side to side. The door or portal between the two compartments can also be used to temporarily confine the cat to one side or the other for cleaning and other procedures. Double-compartment housing promotes animal and staff well-being by providing the following benefits:

- Floor space for each cat to eat and rest in an area that is separate from where they urinate and defecate and to express normal behavior such as stretching out to full body length and walking around.
- Sufficient floor space for a soft bed, hiding area, and an elevated resting area.
- Safe confinement of each cat to one side while cleaning the opposite side.
- Hands-free care reduces risk for disease transmission and protects staff safety.
- Adequate space and less handling minimize both animal and staff stress.

Here are examples of some commercially available multi-compartment housing for cats, typically called cat condos. Note that each design has separate living and litterbox compartments joined by a portal that can be closed to confine the cat to one side or the other during cleaning.



This is a schematic of a bank containing two cat condos. Each condo has two compartments accessible via portholes - one for food/water bowls and the other for a litterbox. The larger compartment is the resting area with vertical shelves for perching.



This is a bank containing two up-and-down-style cat condos. Each condo has an upper compartment and a lower compartment connected by a porthole. The upper compartment has a smaller cubby hole for food/water bowls. The lower compartment has a cubby hole for the litter box. The upper and lower compartments have shelves for perching.



This is a bank containing two side-to-side style cat condos. Each condo has two large compartments connected by a porthole. One compartment is for eating and resting, while the other contains the litter box. Both compartments have shelves for perching.

THE PORTHOLE PROJECT

Commercial multi-compartment housing costs more than \$2000 for a unit that houses 2 cats. Replacing old cages with these units is cost-prohibitive for most shelters without a major capital improvement campaign. A more cost-efficient alternative is retrofitting existing stainless steel cages with 4 square feet of floor space by connecting adjoining cages with a porthole, effectively doubling the floor space to 8 square feet for each cat. This is close to the recommended 9 square feet in the ASV Guidelines. Installing prefabricated portals is a great and affordable way to bring existing cages up to shelter standards. The Koret Shelter Medicine Program at the University of California-Davis provides written and video instructions on how to install the portals and where to purchase portal kits. Each prefabricated portal kit costs about \$70.

The UF Maddie's Shelter Medicine Program and the UF Student ASV Chapter partnered with Alachua County Animal Services on a porthole installation project to convert their 24" X 24" stainless steel cages into double compartment housing. The porthole project benefitted the cats by providing greater comfort and space for relaxation, grooming, stretching, and play.



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GROUP HOUSING FOR CATS

Some shelters solve the housing space problem by offering congregate living for cats that enjoy other cats. Often, these areas are designed to feel like a porch or a living-room environment. Potential adopters can visit with the cats housed in these larger rooms without cages. Group housing enhances welfare by providing cats with many choices in a varied environment and healthy social companionship.

According to the ASV Guidelines, there are several essential features for group housing rooms and criteria for selection of cats to put in group rooms. This presentation reviews the essential features and selection criteria.



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Test Your Knowledge



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MORE THAN HOUSING

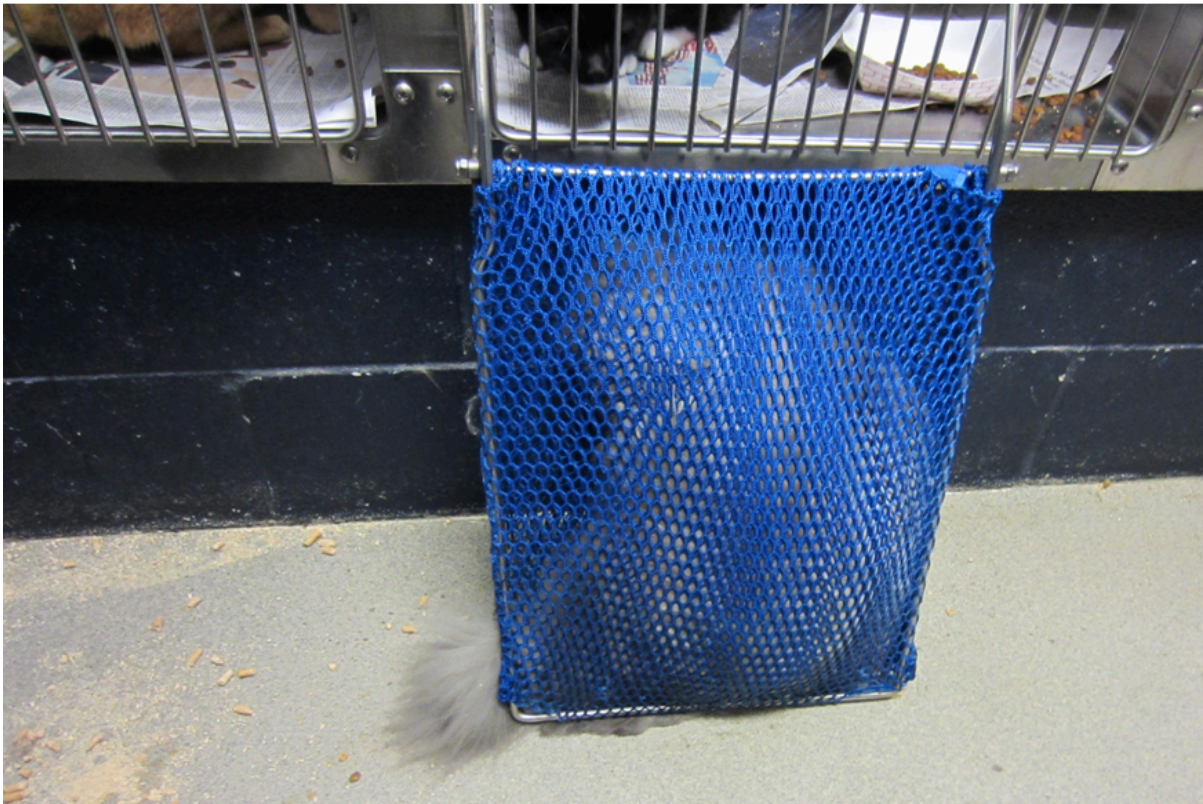
Let's return to the DuGood shelter with the high incidence of feline URI. As the shelter veterinarian was evaluating cat housing, she observed the morning sanitation procedures for the cat rooms.

Watch This



Watch this short video on [Cat Sanitation](#) practices in the General Cat Room at Du-Good shelter.

This video contains no relevant audio.



A cat enclosed in a cat napper placed on the floor



Three cats enclosed in cat nabbers placed on the floor

In the Cat Isolation Room, she saw this:



Cats placed in wire traps on the floor

Here is the shelter's protocol for daily sanitation of cat housing. Remember that the cat housing in this shelter is a single compartment cage with 4 sq feet of floor space.

- Remove the cat from the cage and put it in a cat nabber or wire trap
- Remove the litter box, bedding, and food/water dishes
- Wipe the cage down with Trifectant disinfectant
- Put new bedding, food/water bowls, and litter box in the cage
- Put the cat back in the cage.

The cat nabbers and wire traps are not disinfected between cats.

Test Your Knowledge

Think about this protocol and answer the following questions:



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The DuGood shelter veterinarian calls you for advice on the best practices for sanitation of cat cages. Before making recommendations, review the sanitation best practices.



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Test Your Knowledge

Examine the following protocols for daily sanitation of single compartment cages *occupied by the same cats*.



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THE DOG HOUSE

If you were a dog, where would you prefer to spend your days in the shelter while waiting for a new home?

Like cats, they need space to walk around, stretch out, express normal behavior and a place to go to the bathroom that is separate from where they rest and eat. They deserve a comfortable bed and daily mental enrichment. They enjoy exercise and fresh air.

Many shelters house dogs in a single compartment run. This does not provide separate areas for walking around, resting, eating, and defecation/urination. The best housing for dogs in shelters is the double compartment run with a central guillotine door. This provides a compartment for eating and resting that is completely separate from a compartment for defecation and urination.

Here are pictures of different types of dog housing in shelters.

As you view them, think about the impact on health and welfare based on the ASV Guidelines for primary enclosures, the Five Freedoms, Fear Free principles, and the AVMA Animal Welfare Principles. Click on the hotspots to learn more details about the housing.



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SANITATION CHALLENGES FOR DOGS

In shelters that house dogs in single compartment runs or Shoreline cages, staff are challenged every day by where to put the dogs while they clean their housing. Here are some of the choices they have to make. As you view them, think about the impact on health and welfare based on the ASV Guidelines, the Five Freedoms, Fear Free principles, and the AVMA Animal Welfare Principles. Tethering of dogs to walls or adjacent runs while their housing is cleaned also promotes disease transmission.



Multiple large dogs are tethered to a wall while their single compartment runs are cleaned. Adjacent dogs can directly interact with each other.



Multiple small dogs are tethered to the walls in a corridor while their single compartment stainless steel cages are cleaned. Adjacent dogs can directly interact with each other.



A dog is tethered to the front of the run of another dog while its run is cleaned. This dog is directly contacting the dog in the other run.

Sanitation is best facilitated by housing dogs in a double compartment run with a central guillotine door that divides the compartments. The central guillotine door is used to confine the dog to the compartment that is not being cleaned. This allows the dog to stay in its house with minimal handling to reduce stress, potential spread of disease, and exposure to water and chemicals. Review the sanitation best practices for dogs.



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Test Your Knowledge

Examine the following protocols for daily sanitation of double compartment runs with a central guillotine door ***occupied by the same dog.***



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SANITATION GONE BAD

Even when shelters provide double-compartment runs for dogs, poor welfare conditions can still happen during daily cleaning and disinfection if staff are not trained on proper sanitation procedures.

Watch This



Watch this [video](#) made during the daily cleaning and disinfection of double compartment dog runs in a shelter.

This video contains no relevant audio.

Test Your Knowledge



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The run in the video contained a male terrier mix dog that had just been neutered by the shelter vet 3 days before. The dog was chronically wet from daily contact with water from the hose and had to sit on wet surfaces for most of the day. The chronic exposure to wet surfaces caused the neuter skin incision to open up.



Dehiscence of the neuter incision
due to chronic exposure to water



THE DISINFECTANT DILEMMA

Selecting a disinfectant isn't always a simple process. Selection is based on 3 priorities:

- How well the disinfectant inactivates commonly occurring pathogens in shelters
- Safety for the dogs and cats
- Safety for humans

Here are other important considerations for selection of disinfectants:

- Nearly all bacteria are inactivated by commonly used disinfectants.
- Selection is mostly based on capacity to inactivate viruses and fungi spores.
- Non-enveloped viruses include canine parvovirus, feline panleukopenia virus, and feline calicivirus. These pathogens are very durable in the environment and require special disinfectants for complete inactivation.
- Ringworm fungal spores shed by infected animals into the environment also require special disinfectants or concentrations for inactivation.
- Enveloped viruses such as FHV, FeLV and FIV, and the canine respiratory viruses do not persist for more than a few hours in the environment and are easily inactivated by most disinfectants.

The ASPCA has created a reference guide for selection of disinfectants for shelters and veterinary clinics. These are the brand names for the disinfectants listed in the guide:

- Accelerated hydrogen peroxide = Accel or Rescue
- Potassium peroxymonosulfate = Trifectant
- Sodium hypochlorite = household bleach
- Calcium hypochlorite = Wysiwash
- Quaternary ammonium chloride compounds (QACs or Quats) = various brand names such as Roccal, Parvosol, Triple Two, Biocide



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DID YOU KNOW THIS?

Distributors of quaternary ammonium chloride disinfectants commonly claim that these products inactivate all viruses and bacteria, including parvovirus, panleukopenia virus, and calicivirus, often citing EPA test results as evidence for efficacy. However, several independent studies have conclusively shown that QACs or quats do not reliably inactivate canine parvovirus, feline panleukopenia virus or feline calicivirus.

Importantly, QACs are toxic for cats. Since cats are fastidious groomers, they can inadvertently ingest any chemicals on cage surfaces that contaminate their fur and paws. Ingestion or contact with QACs can cause ulcers in the mouth and on the tongue that resemble those seen in cats infected by FHV or FCV. Cats with QAC-induced ulcers have high fevers, drooling, and pneumonia indistinguishable from cats with virus-induced ulcers. As a matter of fact, there are cases of suspect calicivirus outbreaks in shelters that were actually caused by QAC toxicity.

QACs are not recommended for use in cat housing due to lack of efficacy for panleukopenia virus and calicivirus as well as the significant toxicity potential.

Test Your Knowledge

Here are 3 cats with severe ulcerations of the mouth and tongue. Which one has ulcers due to QAC toxicity?



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CONGRATULATIONS – YOU HAVE COMPLETED MODULE 5!



Want to Learn More?

- AVMA: [Doubling space for cats in shelters reduces upper respiratory disease](#)
- Journal of Feline Medicine and Surgery: [Shelter Housing For Cats – Part 1](#)
- Journal of Feline Medicine and Surgery: [Shelter Housing For Cats – Part 2](#)
- The Veterinary Journal: [Capacity for Care Impact on Shelter Cat Health](#)

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MODULE 6: THE CASE OF THE OVERWHELMED SHELTER

CYNDA CRAWFORD, DVM, PHD



Module Learning Objectives

- Evaluate shelter performance by analyzing trends over time in intake, outcomes, live release rate, and length of stay.
- Calculate length of stay, housing capacity, required holding capacity, staffing capacity, and adoption-driven capacity, and interpret how these metrics impact capacity for care.
- Utilize population management rounds to identify and correct barriers to animal flow-through.
- Explain how effective population management practices are critical to achieving capacity for care.
- Examine capacity for care in various shelter settings and propose solutions for those that are beyond capacity for care.

“OUTRAGE OVER DOG’S KILLING”

Read this Tampa Bay Times newspaper article about “Zeus”, a mixed breed dog that was euthanized in an open- admission municipal shelter due to lack of space.



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Zeus

A PLEA FOR HELP

In response to the “Zeus” incident, the shelter director contacted the UF Maddie’s Shelter Medicine Program to evaluate shelter operations and make recommendations for best practices to prevent such a tragedy from occurring again.

Here is what the consultants saw during the site visit to the shelter.



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There were 295 dogs and 204 cats for a total of 499 animals in the shelter during the site visit. Here are comments from shelter personnel:

- **Shelter Staff:** reported they felt overwhelmed and spent most of their day cleaning. Their biggest challenge was finding places to put animals while their enclosures were cleaned.
- **Shelter Veterinarian:** stated she spent most of her time treating sick dogs and cats, so she was very behind on spay/neuter surgeries for animals waiting for adoption.
- **Shelter Director:** complained that the county did not give them enough money to hire more people and to cover medical costs. He believed they were taking in more animals than ever before, causing the increased demand for housing space and forcing euthanasia decisions because of no other options.

What is the major cause of this overwhelmed shelter’s plight? Inadequate budget? Not enough housing? Not enough staff? Admission of too many animals? Holding animals too long?

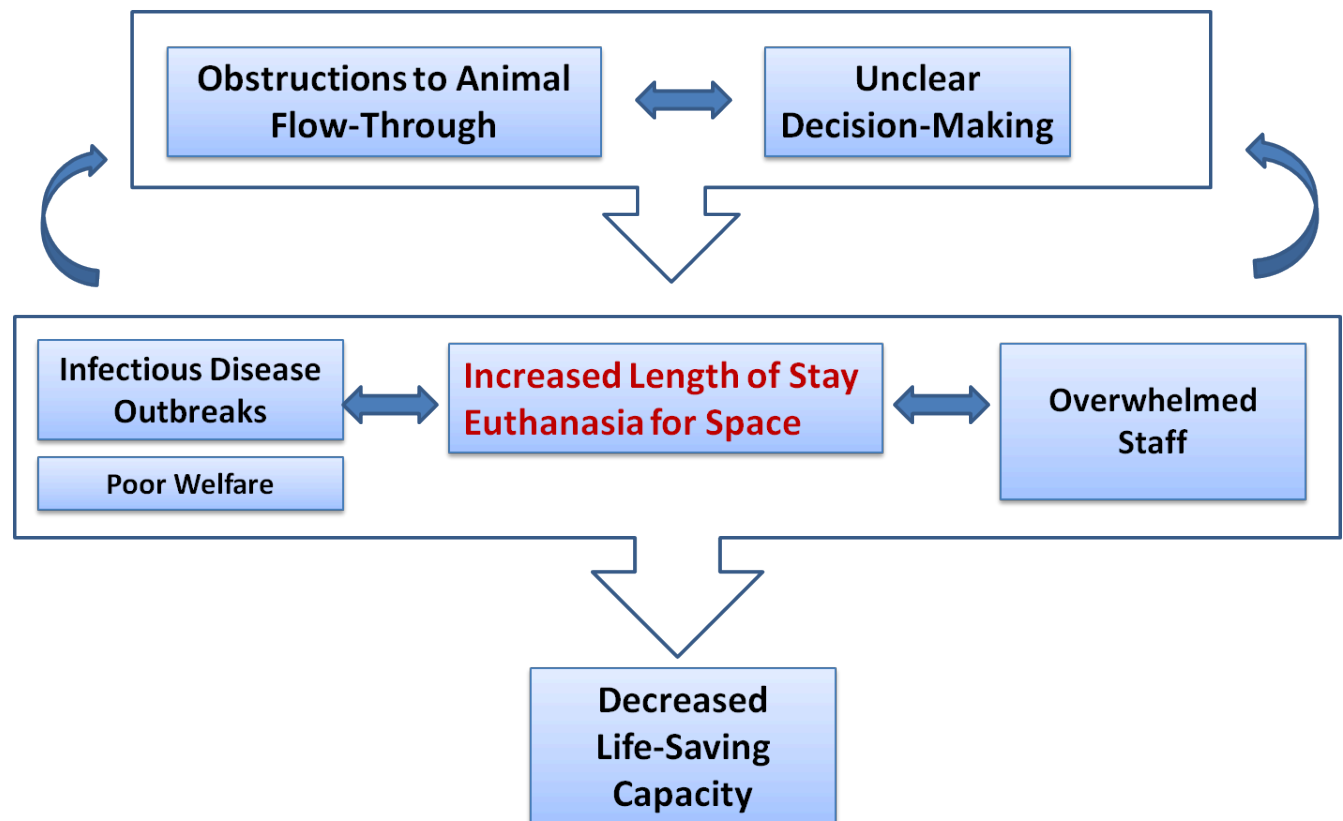
Are they operating beyond their capacity for care?

WHAT IS CAPACITY FOR CARE?

According to the ASV Guidelines, “Every sheltering organization has a maximum capacity for care, and the population in their care must not exceed that level.” ***Operating beyond this maximum capacity for care is considered an unacceptable and inhumane practice.***

Capacity for care essentially means that the needs of every animal in the shelter are met to provide the Five Freedoms of Welfare. Animals in shelters that operate within their capacity for care stay in humane housing that supports good health and welfare, receive appropriate medical care, and move toward their best possible outcome without delays. Timely movement from admission to outcome is facilitated by a proactive population management process that identifies and removes any barriers to flow-through, thereby reducing in-shelter stay to the shortest time possible.

Here’s what happens when a shelter operates beyond its capacity for care:



How can you determine a shelter’s capacity for care? There are some basic calculations to determine capacity for care. The most important are:

- Housing capacity
- Required stray holding capacity
- Adoption-driven capacity
- Staffing capacity for basic care
- Average length of stay

These calculations depend on shelter population data collected in a consistent way, recorded using agreed upon definitions, and analyzed using standard formulas. Quality data are needed to understand the capacity for care status and guide effective decision-making to bring the shelter within their capacity and maintain it. Analysis of quality data drives planning based on facts rather than emotions and opinions. Because shelters are rightly concerned with looking their best to the public, it is important for shelter veterinarians to fully understand how shelter population data are collected, reported, and calculated. Numbers can be misleading.

TRACKING SHELTER POPULATION STATISTICS

Many shelters use shelter software management systems to help them collect and analyze population data and track trends in data over time. But remember, all users of the software must be using standard definitions for entering data if reports made from these programs are to be meaningful and comparable to other shelters. Here is a list of the most common software packages used in shelters today. Click on the link to learn about what each one offers.

[Chameleon](#): a leading provider of animal shelter software since 1984. Contains standard features and reports for tracking animals in the shelter and is particularly strong in features supporting animal control activities such as investigations, calls for service, citations, licenses, etc.

[PetPoint](#): the PetPoint Animal Management Software is a cloud-based application developed and launched in 2005. PetPoint is one of the most widely used animal management application in North American animal welfare.

[ShelterBuddy](#): software for animal shelters for tracking in care pets, fosters, adoptions, volunteers, donors, etc.

[Shelterluv](#): software for tracking in care pets, fosters, adoptions, volunteers, donors, etc and includes advanced medical features, templates, and reports designed by a shelter vet.

Statistics are navigation devices – they tell you where you are, where you’ve been, where you need to go, and what you need to do to get to where you want to go.

The ASV Guidelines state that a **MUST PRACTICE** for all shelters is recording intake and outcome numbers for each species on a monthly basis. This includes recording both the intake numbers by category (stray, owner surrender, transfer in, confiscation, rabies quarantine) and the outcome numbers by category (adoption, transfer out, return to owner, euthanasia).

Here is an example of a basic monthly Kennel Statistics Report generated by the Chameleon shelter software system. Note that Intakes are categorized by species, age group, and source, and Outcomes are categorized by adoption, transfer to another agency for placement, and euthanasia.

Kennel Statistics Report Intakes from 05/01/17 to 05/31/17

	Cat	Dog	Kitten	Puppy
Owner Surrender	69	77	5	21
Stray	259	289	514	74
Total	328	366	519	95

Kennel Statistics Report Outcomes from 05/01/17 to 05/31/17

	Cat	Dog	Kitten	Puppy
Adoption	65	127	87	35
Euth	27	122	133	12
Transfer	239	111	117	47
Total	331	360	337	94

USING DATA TO ANALYZE TRENDS IN SHELTER ADMISSIONS

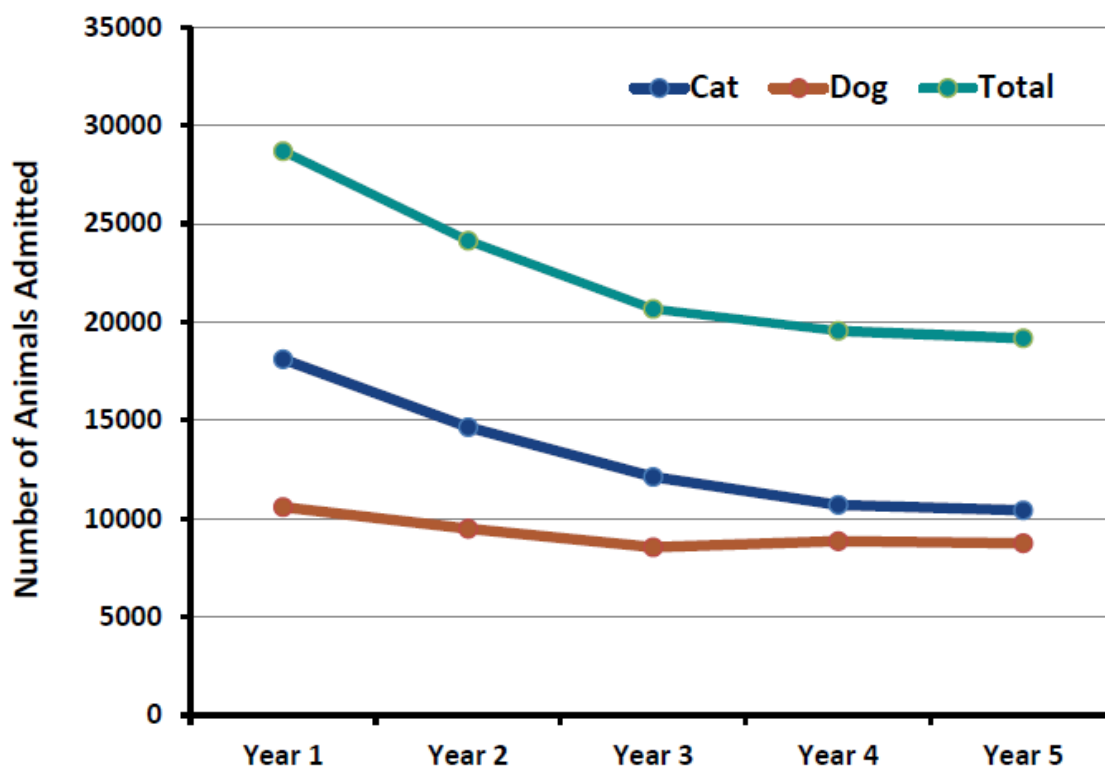
The most useful information about changes in a shelter's life-saving capacity is derived from analyzing trends in intake, outcomes, the number of animals released alive, and the number euthanized over time. These analyses can provide a big picture perspective about shelter performance and what areas to focus on to improve live release and decrease euthanasia.

Examine the table below that contains the number of dogs and cats admitted to a large Florida municipal shelter over a 5-year period. The numbers are derived from the Chameleon Kennel Statistics report.

CAT	Year 1	Year 2	Year 3	Year 4	Year 5
Stray	13,877	13,005	11,128	9,703	9,465
Owner Surrender	4,233	1651	992	992	960
Total	18,110	14,656	12,120	10,695	10,425
DOG	Year 1	Year 2	Year 3	Year 4	Year 5
Stray	7,520	7,381	6,919	7,176	6,992
Owner Surrender	3,066	2,104	1,627	1,680	1,756
Total	10,586	9,485	8,546	8,856	8,748
TOTAL	Year 1	Year 2	Year 3	Year 4	Year 5
Dogs and cats	28,696	24,141	20,666	19,551	19,173
% Cat	63%	61%	59%	55%	54%
% Dog	37%	39%	41%	45%	46%

Pictures are worth a thousand words – trends in shelter intake, outcomes, and live release over time are usually best visualized in graphic format.

Here are the admissions data for the large Florida municipal shelter that were in table format now displayed as a graph.



Test Your Knowledge

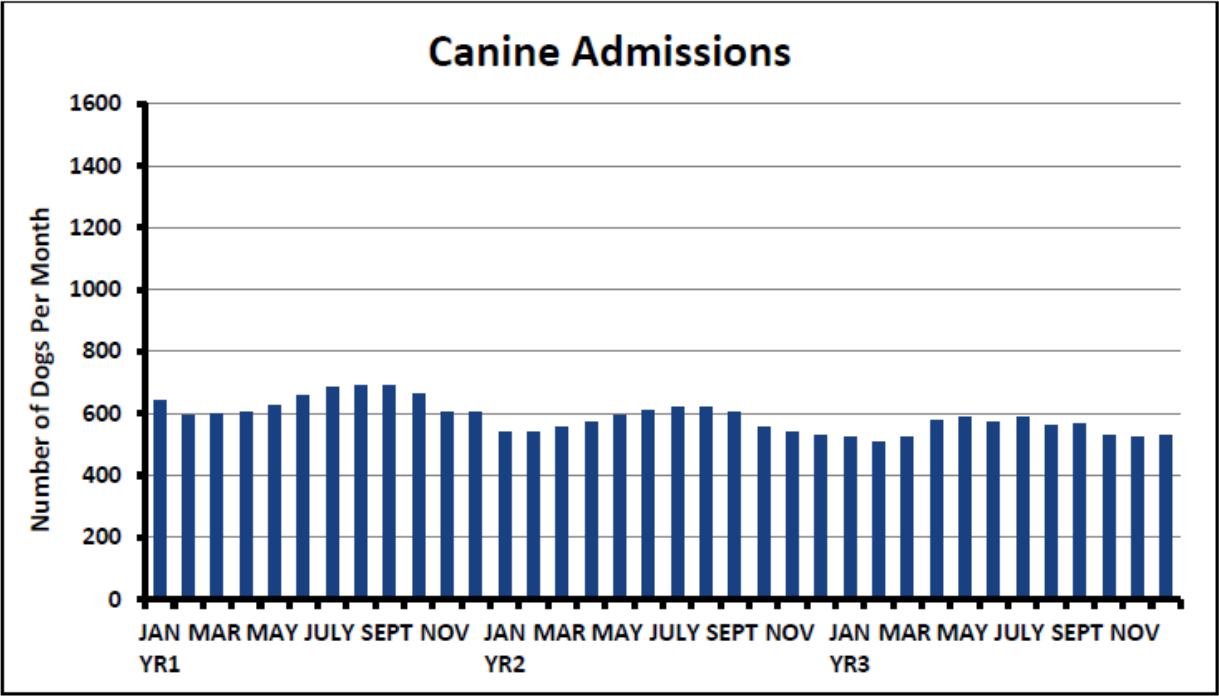


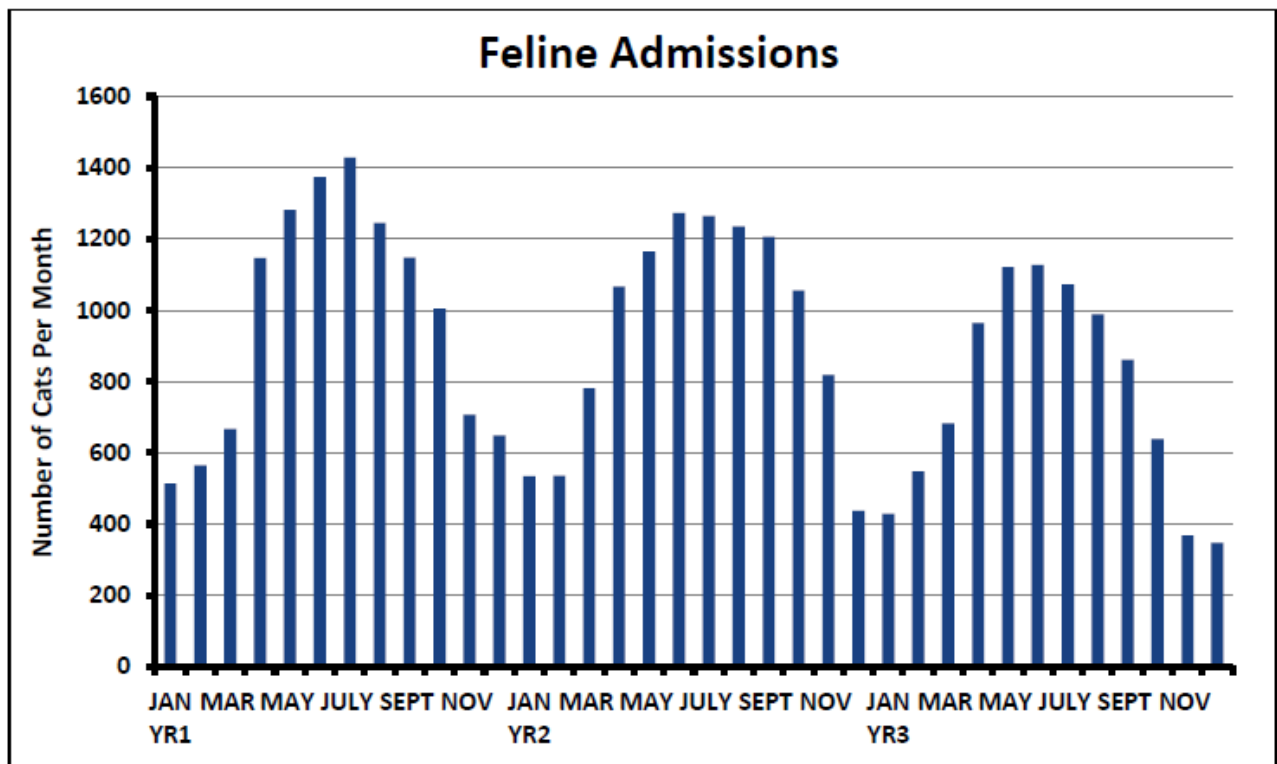
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USING INTAKE TRENDS FOR CAPACITY FOR CARE

Reviewing intake trends over time facilitates preparations for adequate housing, staffing, and veterinary care to insure capacity for care. Examine the number of dogs and cats admitted to the same large Florida municipal shelter each month for the past 3 years in the graphs below.





Test Your Knowledge



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USING DATA TO ANALYZE TRENDS IN SHELTER OUTCOMES

The life-saving capacity of a shelter is measured by the number of animals that leave the shelter alive through lost pets returned to owner (RTO), transfer to a pet placement partner (rescue group or another shelter), or adoption into a home. Stagnation or advances in life-saving are best recognized by analyzing trends in outcomes and live release over time. These trends can identify outcomes that have increased live release and those that need bolstering for further increases.

Live release is expressed as a rate where the number of animals released alive are expressed as a proportion of those admitted to the shelter during a period of time.

Live Release = RTO + Transfer + Adoption

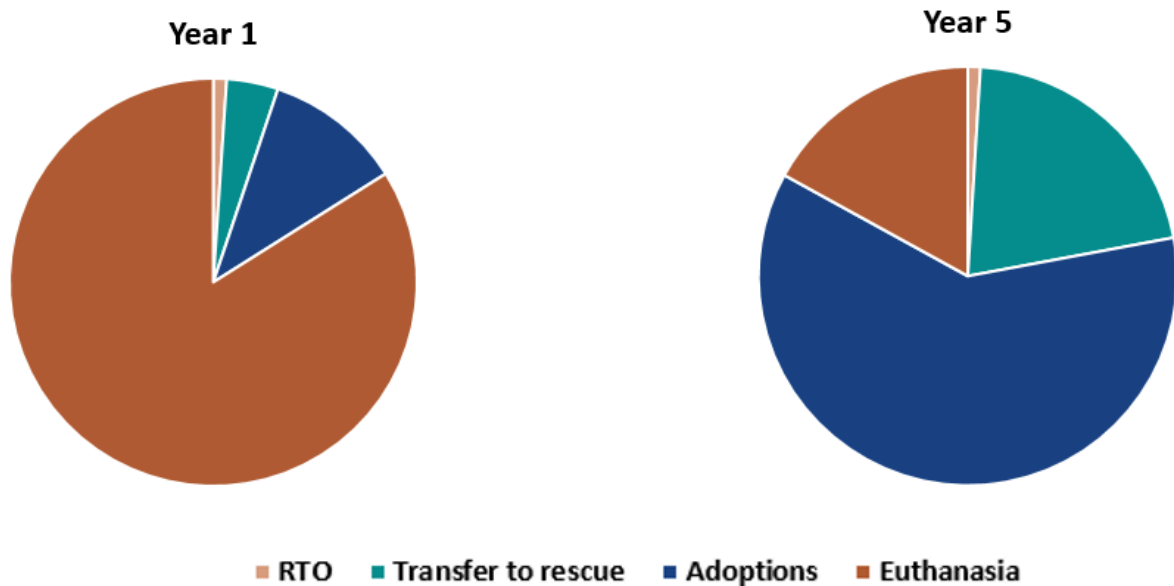
Live Release Rate (LRR) = Live Release/Intake X 100

Let's return to the large Florida municipal shelter. The table below contains the outcomes for cats for the past 5 years and the LRR.

CATS	Year 1	Year 2	Year 3	Year 4	Year 5
Intake	18,110	14,656	12,120	10,695	10,425
RTO	191	147	113	106	100
Transfer to rescue	740	1,107	1,733	1,818	2,200
Adoptions	1,977	2,132	2,555	4,697	6,353
Euthanasia	15,202	11,270	7,719	4,074	1,772
Live Release	2,908	3,386	4,401	6,621	8,653
Live Release Rate	16%	23%	36%	62%	83%

In Year 3, the shelter implemented new adoption policies that included fewer restrictions for adoption and adoption fee waivers. The shelter also waived transfer fees for rescue groups and performed spay/neuter surgery and vaccination for cats selected by the rescue groups.

The graphs below compare the feline outcomes in Year 1 to those in Year 5.



Test Your Knowledge



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The intake data showed that the largest source of feline intake for this shelter over the past 5 years is stray cats. The shelter vet determined that 70% of the cats euthanized in Year 3 were stray cats deemed unadoptable due to feral behavior. To increase the number of cats released alive, the shelter vet decided to start a [return-to-field program](#) where healthy stray adult cats without identification are spayed or neutered and vaccinated, then returned to the location where they were living and thriving. This community cat management strategy has revolutionized life-saving capacity for shelter cats, frequently changing the LRR from 10% to 90%.

SHELTER ANIMALS COUNT AND THE NATIONAL SHELTER DATABASE

Shelters that collect and report data in standardized ways can compare their statistics to similar shelters in other communities. Comparisons to similar shelters around the country enable understanding of the progress a shelter is making toward increasing positive outcomes for the animals in its care.

[Shelter Animals Count](#) is a nonprofit coalition of leading animal welfare organizations created in 2012 to share and steward a national database of shelter animals that provides facts and insights to save lives. Shelters and rescue groups voluntarily provide monthly intake and outcome data in a standardized Basic Data Matrix form to the SAC National Shelter Database.



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The Basic Data Matrix Form is a standardized data collection tool that tracks the number of dogs and cats that enter a shelter and the number that leave the shelter via various pathways each month. The Form includes the ASV Guidelines **MUST** recommendations for recording intake numbers by category (stray, owner surrender, transfer in, confiscation, rabies quarantine) and outcome numbers by category (adoption, transfer out, return to owner, euthanasia). It also divides the intake and outcome categories by age groups – adult and juvenile (up to 5 months of age).

The SAC National Shelter Database is a tool enabling each shelter and rescue group to recognize and understand trends, challenges, and progress in animal welfare at the local, regional, and national levels. Each agency can benchmark their life-saving work against similar agencies in their region or nationally.

The table below contains national intake and outcome summary data voluntarily submitted from 2,873 sheltering organizations across the country to the National Shelter Database.

	DOG	CAT
Gross Intake	1,937,990	1,730,947
Gross Live Outcomes	1,690,874	1,398,167
Other Outcomes (euthanasia)	235,822	315,105
Live Release Rate		

Test Your Knowledge



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Here are tables comparing canine and feline intake and outcome data for Alachua County Animal Services to the average for similar municipal shelters in Florida and the nation based on data submitted to the National Shelter Database.

DOG	Alachua County Animal Services			Florida	US
Gross Intake	2,536			3,063	2,476
Gross Live Outcomes	2,199			2,590	2,095
Other Outcomes (euthanasia)	316			460	360
Live Release Rate				85%	85%

CAT	Alachua County Animal Services	Florida	US
Gross Intake	2,086	3,739	1,864
Gross Live Outcomes	1,909	2,863	1,386
Other Outcomes (euthanasia)	197	959	454
Live Release Rate		77%	74%

Test Your Knowledge



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TO REPORT OR NOT REPORT – WHAT IS REQUIRED?

The National Shelter Database created by Shelter Animals Count depends on voluntary reporting of data by sheltering organizations. These organizations believe that transparent sharing of data will enable progress in the life-saving mission of shelters and have a positive impact on pet homelessness over time.

But voluntary reporting likely underestimates the numbers of animals in shelters and their outcomes. Right now, only about [20% of states](#) in the US require sheltering agencies to report their intake and outcome data.

What about Florida? [Florida Statute 823.15 Section \(2\)\(a\)](#) was passed into law in July 2013. Here is Section (2)(a):



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LENGTH OF STAY

Let's explore in detail another important number for animal shelters to track: **length of stay (LOS)**. LOS is the duration of an animal's time in the shelter from day of admission to day of disposition. These days are referred to as "animal care days". This statistic has a big impact on whether a shelter is within or beyond capacity for care.

It seems logical that if you give an animal a few more days in the safety of a shelter that it would increase the chances for that animal to exit the shelter alive. Wouldn't a few more days give the animal a better chance of being found by a lost owner, to find a new home, or to go to a rescue placement?

LOS can have a dramatic effect on the daily shelter population and the capacity for care. The table below is a simple example to show how daily population (animal census or inventory) increases as LOS increases even when the number of animals admitted each day remains constant.

Daily census = number of animals admitted/day X LOS

Daily animal intake	Length of stay	Daily population (census)
5 animals	5 days	25 animals
5 animals	10 days	50 animals
5 animals	20 days	100 animals

Reducing the number of animal care days (LOS) per animal can dramatically reduce the potential for crowding and disease and improve the level of care available for each animal without increasing euthanasia or reducing live release. In fact, reduced crowding and illness through increased speed of flow-through can lead to increased numbers of lives saved.

Watch This



Watch this [shelter flow simulation](#) that demonstrates the effect that LOS can have on a shelter population. [5:51 min]

As the daily population rises and exceeds shelter capacity for care, there is a concomitant increase in the risk for infectious disease, stress, and behavioral deterioration. Reducing the number of animal care days (LOS) per animal can dramatically reduce crowding and improve the level of care available for each animal.

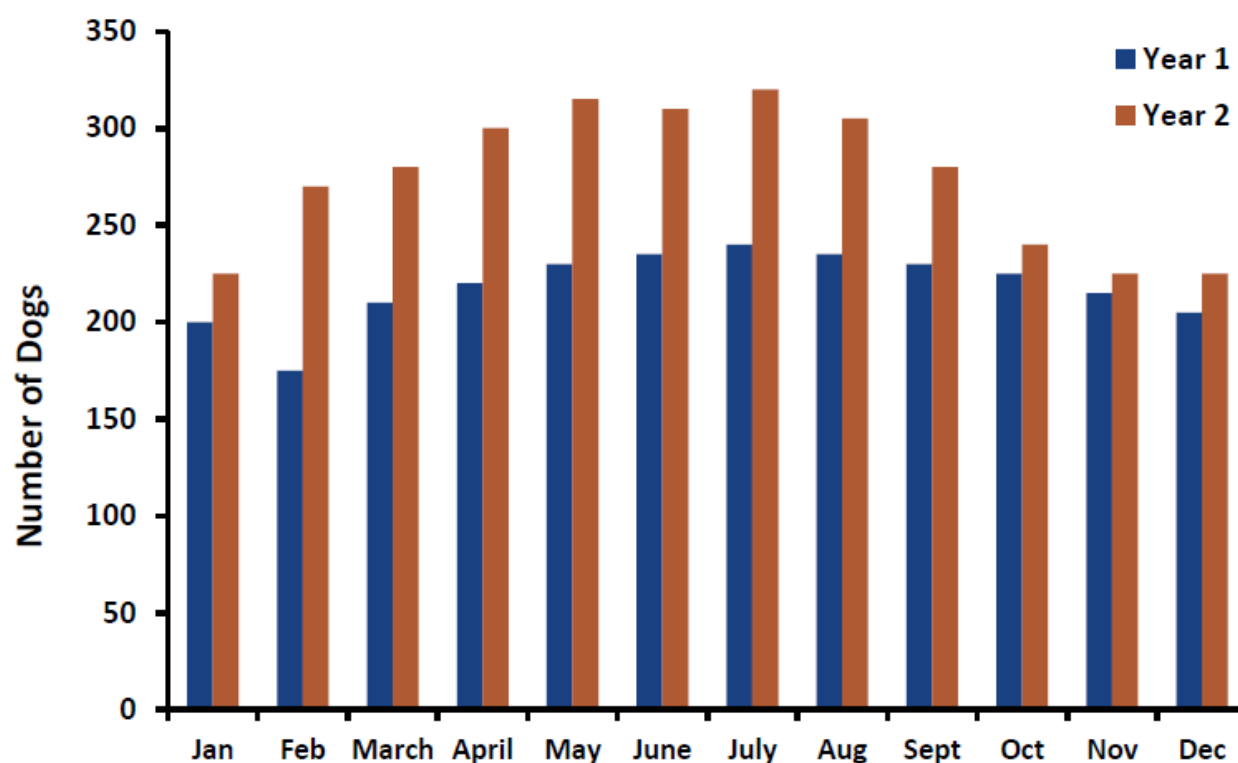
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HOUSING CAPACITY

The graph below shows the number of dogs in a shelter each day from January to December in Year 1 vs. Year 2. The number of dogs admitted in each year was the same. The reason there were more dogs in the shelter per day in Year 2 was that the average LOS increased from 8 days in Year 1 to 12 days in Year 2.



HOUSING CAPACITY is the number of runs, preferably double-sided runs, appropriate for housing one dog each. The shelter represented by the graph above has 250 double-sided runs for a housing capacity of 250 dogs on a daily basis. Examine the graph more closely – notice the number of dogs in the shelter for most months in Year 1 was within the housing capacity. The number of dogs exceeded the housing capacity for most months in Year 2 when the average LOS increased by only 4 days.

According to the ASV Guidelines regarding capacity for care, staying within the housing capacity is a **MUST PRACTICE**. LOS has the most profound impact on staying within the housing capacity.

Test Your Knowledge



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HOLDING CAPACITY

HOLDING CAPACITY is the minimum number of housing units required for housing **stray** dogs and cats in municipal shelters. Many counties in each state have laws or ordinances that dictate the number of days stray dogs and cats must be held in the municipal shelter before they can be dispositioned to an outcome. ***This is called the “stray hold” time and this actually represents the minimum LOS for each stray.*** The stray hold time provides an opportunity for the stray animals to be reclaimed by owners. Once the stray hold time expires, the shelter becomes the owner of all unclaimed animals. At this point, the animals can be put into a pathway for release (adoption, transfer, euthanasia).

The holding capacity is determined by the stray hold time (required LOS for strays) and the number of stray animals admitted each month. Here is the formula for calculating the holding capacity:

Holding capacity = [# stray animals admitted/month] X [# days required for stray hold] / [30 days per month] = # housing units required

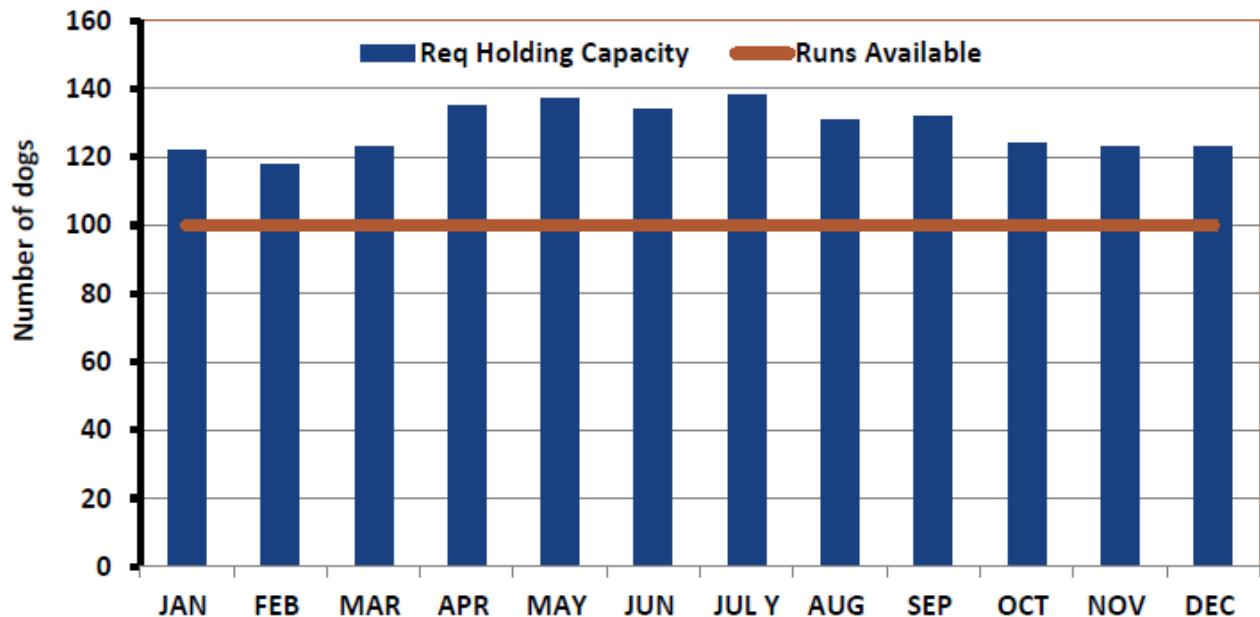
Test Your Knowledge



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Here is a graph of the required holding capacity calculations for stray dogs entering a shelter each month based on a 7-day stray hold time. The blue bars represent the required holding capacity or minimum number of runs needed each day based on the month (number of stray dogs admitted each month X 7-day hold per dog/30 days). The red line represents the number of runs available for housing one stray dog each (100 runs).

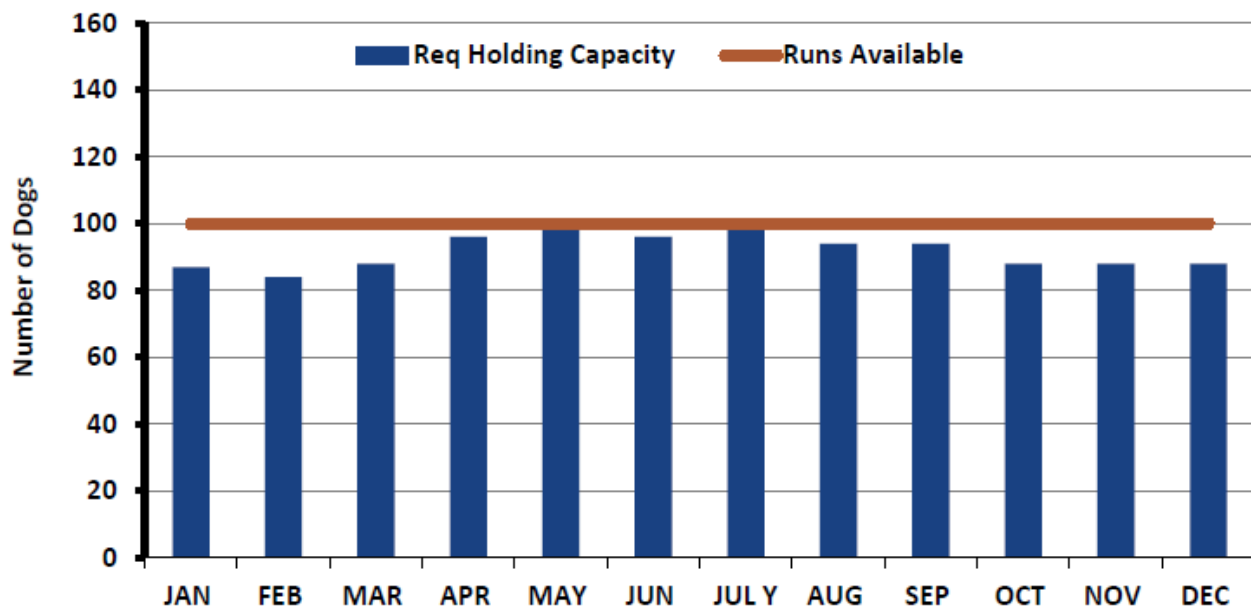
7-Day Stray Hold Time



What can the shelter do to stay within the available housing capacity for stray dogs? Build more runs? Increase the stray hold time? Decrease the stray hold time?

Here is a graph of the required holding capacity calculations for the same number of stray dogs entering the shelter but the stray hold time is reduced to 5 days.

5-Day Stray Hold Time



Still want to build more runs? Reducing the stray hold time by just 2 days allows the shelter to stay

within the housing capacity available for stray dogs without changing the number of dogs admitted each month.

ADOPTION-DRIVEN CAPACITY

What is the perfect number of animals to have up for adoption at any one time? How do you know if there are too many or too few?

The UC-Davis Koret Shelter Medicine Program has developed a concept called Adoption-Driven Capacity to answer this question. Simply put, **Adoption-Driven Capacity (ADC)** is the number of animals to offer for adoption that will promote their adoption chances in the shortest amount of time possible. The number of animals available for adoption will directly impact the likelihood of adoption for each one – the higher the number available, the lower the adoption probability for each animal. By extension, the lower the adoption probability, the longer the average LOS in adoption for each animal. If 10 animals are waiting at any given time for adoption and 1 is adopted each day, the odds of adoption for each animal will be 1 in 10 and the average length of stay to adoption will be 10 days. If 20 animals are waiting at any given time for adoption and 1 is adopted each day, the odds of adoption are 1 in 20 and the average LOS will be 20 days. The only way to decrease LOS is to increase the number of adoptions or decrease the number of animals waiting.

The ideal target LOS in adoption (ready to go with all required holding periods and pre-adoption procedures completed) is 7 to 10 days. To stay within capacity for care, the number of animals in adoption on any given day should not exceed the number of appropriate housing units.

The Koret Shelter Medicine Program created the [ADC Calculator tool](#) for calculating ADC based on a shelter's average number of adoptions per year and a target LOS in adoption.

Open the [ADC Calculator tool](#). Note that there are work tabs at the bottom for calculating Yearly ADC and Monthly ADC. Using the tool, let's perform some ADC calculations for the following scenarios.

1. The Phil Goode shelter adopts on average 2000 cats per year. Calculate the daily adoption population for target LOS in adoption of 14 days, 10 days, and 7 days.

1. Open the Yearly ADC worksheet.
2. Go to the Basic Yearly Adoption-Driven Capacity calculator in Rows 5 to 7.
3. Enter 2000 in the Adoptions per year cell (Column A/Row 7)
4. Enter 14 in the Target length of stay cell (Column B/Row 7).
5. The recommended daily population (Column C/Row 7) is **77 animals**.
6. Repeat the process for a target length of stay of 10 days. The recommended daily population (Column C/Row 7) is **55 animals**.
7. Repeat the process for a target length of stay of 7 days. The recommended daily population (Column C/Row 7) is **38 animals**.

Basic yearly adoption driven capacity calculator		
Adoptions per year	Target length of stay	Recommended daily adoption population (# of animals)
2000	14	77
Basic yearly adoption driven capacity calculator		
Adoptions per year	Target length of stay	Recommended daily adoption population (# of animals)
2000	10	55
Basic yearly adoption driven capacity calculator		
Adoptions per year	Target length of stay	Recommended daily adoption population (# of animals)
2000	7	38

2. The Phil Goode shelter's cat adoption room contains 55 double-compartment cages appropriate for housing one adult cat each. Review the calculated daily adoption populations for target LOS in adoption of 14 days, 10 days, and 7 days. What should the target LOS be to stay within the adoption housing capacity?

1. Based on a housing capacity of 55 cages, the target LOS should be **10 days or less**.

3. This shelter would like to increase the annual cat adoptions from 2000 to 2500 next year. To achieve this, what must the target LOS be to stay within the adoption housing capacity of 55?

1. In the Yearly ADC worksheet, go to the Reverse calculator for average LOS based on adoptions and daily population in Rows 13 to 15.
2. Enter 2500 in the Adoptions per year cell (Column A/Row 15).
3. Enter 55 in the Actual daily population cell (Column B/Row 15).
4. The target LOS to stay within the adoption housing capacity is in the Average length of stay cell (Column D/Row 15) which is **8 days**.

Reverse calculator for average LOS based on adoptions and daily population				
Adoptions per year	Actual daily population	Adoptions per day	Average length of stay (days)	% "fast track"*
2500	55		8	

4. For most shelters, kittens are adopted more quickly than adult cats. To increase overall adoptions, the Phil Goode shelter decides to fast track kittens to adoption and put the adult cats on a slow track for adoption. If they do 2500 cat adoptions a year with an overall target LOS of 8 days and 70% of the cats are fast track kittens with a target LOS of 3 days, how many fast track

kittens should be available per day? How many slow track adult cats? What is the target LOS for the slow track cats?

1. In the Yearly ADC worksheet, go to the Adoption driven capacity calculator: fast track/slow track in Rows 9 to 11.
2. Enter 2500 in the Adoptions per year cell (Column A/Row 11).
3. Enter 8 in the Overall target LOS cell (Column B/Row 11).
4. Enter 3 in the Target LOS: fast track cell (Column C/Row 11)
5. Enter 70 in the Percent fast track cell (Column D/Row 11)
6. The recommended daily population of cats for fast track is **14 kittens** (Column G/Row 11).
7. The recommended daily population of cats for slow track is **40 adults** (Column H/Row 11).
8. The target LOS for adult cats is **20 days** (Column E/Row 11).

Note that a daily population of 14 fast track kittens and 40 slow track adult cats is within the adoption housing capacity of 55 cages.

Adoption driven capacity calculator: fast track/slow track*							
Adoptions per year	Overall target LOS	Target LOS: fast track	Percent fast track	LOS: slow track	Percent slow track	Recommended daily population: fast track	Recommended daily population: slow track
2500	8	3	70%	20	30%	14	40

STAFFING CAPACITY

The ASV Guidelines state that staff work hours **MUST** be sufficient to ensure that the basic needs of animals in the shelter are met each day. The Humane Society of the United States and the National Animal Control Association recommend 15 minutes for basic care of each animal per day. Basic care is feeding (6 minutes) and cleaning (9 minutes). Capacity for care requires an adequate number of staff to provide this basic care within a defined period of time in their work day (**STAFFING CAPACITY**).

The typical number of hours desired for completion of feeding and cleaning all animals in a shelter is 3 hours in the morning. This provides a clean shelter for most of the day and time for staff to perform other duties to support animal health and welfare (intake processing, laundry, enrichment, play groups, adoptions, medications, rounds, etc).

The **staffing capacity calculation** includes the following steps:

1. Number of animals in the shelter X 15 min/animal = total minutes
2. Total minutes/60 = total hours
3. Total hours / 3 hours = # staff needed for completion of basic care within 3 hours

Test Your Knowledge



An interactive or media element has been excluded from this version of the text. You can view it online here:
<https://ufl.pb.unizin.org/integratingveterinarymedicinewithsheltersystems/?p=273>

POPULATION MANAGEMENT

The ASV Guidelines state a **MUST PRACTICE** for every sheltering organization is active population management strategies that move pets to the best outcome in the shortest period of time to stay within capacity of care and prevent deterioration in physical and mental health. Population management is one of the foundations of shelter animal health and well-being and is based on an appreciation that capacity for care has limits in every organization.

Population Management is an active process of planning, on-going daily evaluation, and response to changing conditions. Effective population management requires a plan for intentionally managing each animal's shelter stay to achieve the best outcome in the shortest amount of time. The goal is to maintain the population within the shelter's capacity for care based on number of appropriate housing units and available staff. Loss of the shelter's life-saving capacity is caused by ineffective population management rooted in unclear decision-making and obstructions to animal flow-through.

Another **MUST PRACTICE** according to the ASV Guidelines is the daily inspection of all animals in order to routinely evaluate and monitor adequacy of capacity and to identify needs for housing, care or service.

This daily inspection is called **Population Rounds**, a critical decision-making tool for pathway planning to achieve the best outcome for each animal. Every shelter must make a concerted effort to assign an outcome path to each dog and cat starting at intake and ensure efficient movement along that path to reduce LOS. A reduced LOS for each animal creates more housing space, provides more time for animals that take longer to reach a live release, results in enormous enhancements in the welfare of the animals, and reduces animal care days and animal care costs. Animals should not languish in the shelter because an outcome plan does not exist or is otherwise prevented from being implemented.

Population Rounds should be conducted by a Rounds Team, ideally consisting of the Shelter Manager, an animal care staff member, the Rescue Coordinator, the Adoptions Coordinator, and a member of the veterinary care team. The team approach is the most efficient and proven method to facilitate pathway planning and decision-making for each animal, and ensures that everyone is "on the same page" so there is no confusion or mistakes. The Team moves quickly from run to run and cage to cage without handling any animal. They review the kennel card information to identify the animal's current status and the next step in the pathway so that no animals are "stuck" in the system without a plan tailored to their individual needs.

Effective population management rounds prevent delays or bottlenecks at critical flow-through points:

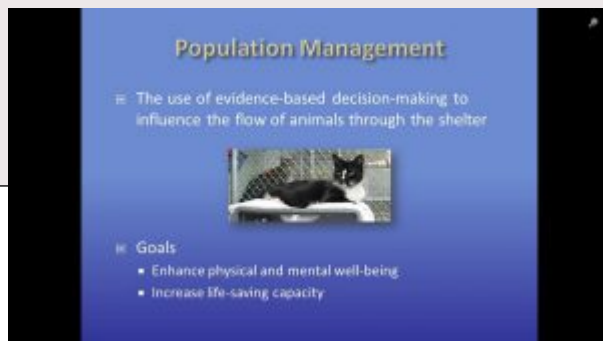
- Returning an animal to an owner
- Setting up transfer to a pet placement partner

- Scheduling pre-adoption health exams and spay/neuter surgery
- Scheduling euthanasia if that is the best outcome for the animal

The Population Rounds Team should address the following questions for each animal:

- Who are you?
- How are you?
- Are you where you should be?
- Do you need something today?
- Do you need something to be scheduled?

Watch This



Watch this short presentation on [Population Management](#) by Dr. Brian DiGangi. [11:11 min]

CONGRATULATIONS – YOU HAVE COMPLETED MODULE 6!



Want to Learn More?

- ASPCA: [Fast Track Planning](#)
- ASPCA: [Population Wellness Rounds](#)
- DVM 360 [Shelter Snapshot: Questions about community cat programs?](#)
- Million Cat Challenge: [Pathway Planning – What to do with all these cats](#)

FIND A BUG? TELL US ABOUT IT!

We are committed to keeping this e-book as pest-free as possible. You can help by [submitting a bug alert here](#). No problem is too small, including broken links, typos, or content errors.

MODULE 7: GET TO KNOW A SHELTER

JULIE K. LEVY, DVM, PHD, DACVIM, DABVP



Module Learning Objectives

- Analyze a real shelter's operations, its role in the community, compare to best practices, and advise on improvement.
- Identify and describe barriers to communicating change to shelter staff and ways to overcome them.
- Analyze a shelter marketing promotion and the role of community engagement.
- Identify and describe shelter operations and make practical recommendations for meeting best practices.

ANIMAL SHELTERING: PAST AND PRESENT

In the United States, animal sheltering dates back more than 200 years to the 1800s. At that time, there was a need for addressing animal control (primarily dogs), related public safety issues (such as rabies), and prevention of cruelty to animals. Most facilities were originally designed to admit large numbers of dogs for only brief periods of time. Since then, animal sheltering has evolved considerably.

Today's sheltering services are diverse and range the spectrum from those provided by large, well-funded "brick and mortar" facilities to those of small, loosely organized grass-roots groups or individuals. For some animals, shelter stays continue to be short, whereas others may receive extended, even lifetime, care. Intake and subsequent euthanasia have both declined substantially in many communities. Today, approximately 5.3 million dogs and cats enter United States animal shelters, of which 1.5 million are euthanized. Lifesaving for dogs continues to outpace that for cats, although the gap is narrowing.

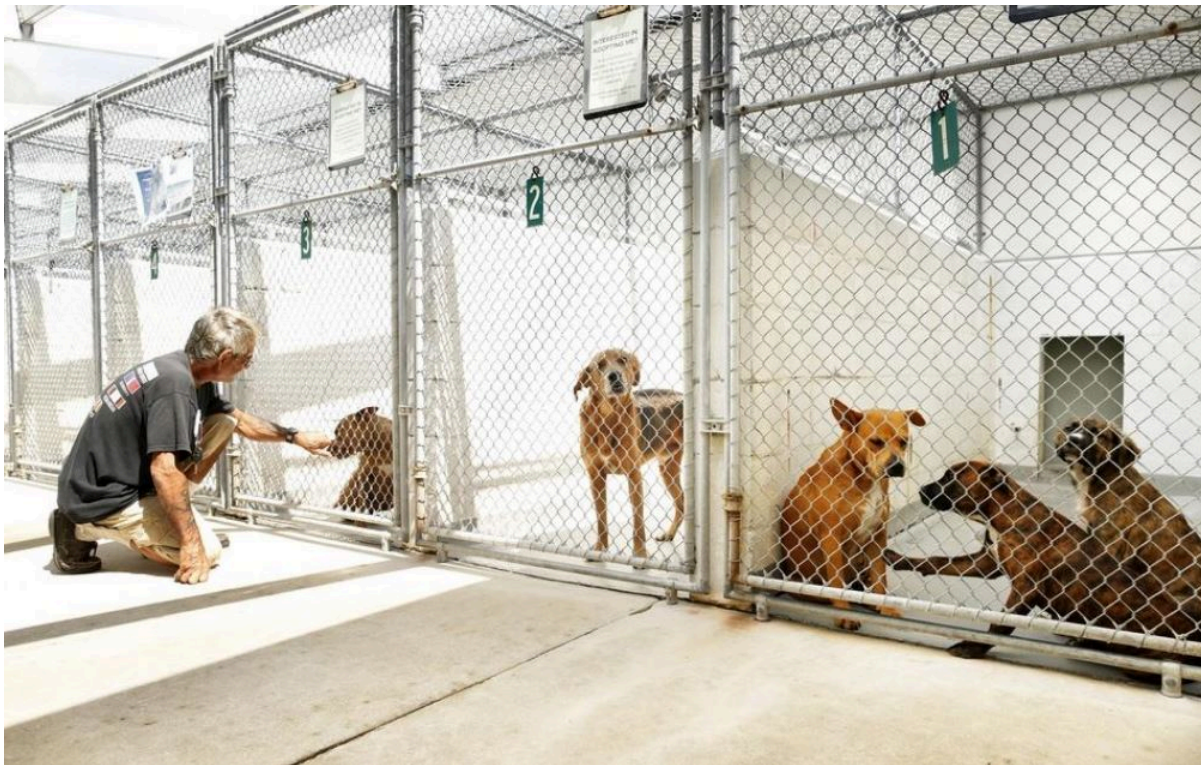


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<https://ufl.pb.unizin.org/integratingveterinarymedicinewithsheltersystems/?p=287>

COMMUNITY ANIMAL SHELTERS

Sheltering agencies run the gamut in size from those that are very large, handling tens of thousands of animals per year, to those that are very small, including grass-roots groups and private individuals. Similarly, sheltering facilities vary tremendously in their physical structure, ranging from those with modern buildings equipped with state of the art animal care facilities, to small, dilapidated sheds lacking adequate climate control and plumbing. Others operate without facilities by utilizing networks of foster homes. Most communities today have at least one local animal shelter, if not several shelters of varying types.



Dogs await adoption at Alachua County Animal Services, an open-admission government shelter in Gainesville, Florida.

GOVERNMENT VERSUS NONPROFIT SHELTERS

The terms “government” and “nonprofit” refer more to how shelters are funded and governed, rather than how they are operated. **Government shelters** are primarily funded by taxpayers and operated by a governmental staffing hierarchy that ultimately answers to elected officials. These elected officials

also approve municipal animal control ordinances. Government shelters are responsible for enforcing local [municipal animal control ordinances, such as this one for Alachua County, Florida](#).

Nonprofit shelters are funded primarily by grants and donations and operated by a staff supervised by an executive director who answers to a volunteer board of directors. Nonprofits must be incorporated and exempted by the IRS as 501c3 organizations in order for donations to be tax-deductible.

Most Government animal control facilities were originally established with public safety in mind – to protect the public from animals. Animal control functions, such as impounding free-roaming animals, quarantining biting animals, distributing licenses, responding to nuisance complaints, responding to injured and abused animals, and enforcing local laws, are typical municipal functions to protect the public from animals.

In contrast, most nonprofit shelters were originally established with animal welfare as their primary function – to protect animals from the public. Historically, life-saving programs such as adoptions, emergency care, spay-neuter programs, cruelty investigations, and subsidized veterinary care were developed by non-profit organizations.

Today, increasing public demand for humane communities has prompted all types of shelters to extend their spectrum of services and collaboration. For example, animal control functions may be performed in a shelter operated by the municipality itself, or the municipality may assign these services to a **private non-profit shelter with a government contract**. Increasingly, shelters, rescue groups, and veterinary clinics are working proactively together to share information, transfer animals into the most appropriate program, and develop safety net programs to reduce the need for animals to enter the shelter system altogether.



The Miami-Dade Animal Services government shelter offers a full palette of life-saving services, including adoptions, trap-neuter-return, neonatal kitten raising, heartworm treatment, and cruelty investigations to 30,000 animals that pass through its doors each year.

OPEN ADMISSION VERSUS LIMITED ADMISSION SHELTERS

Regardless of the governance structure and funding source of shelters, there are also differences in their intake policies.

Open admission shelters accept all animals within a jurisdiction. This policy may be mandated by local ordinance, required by contract, or determined by the shelter's internal policies.

Limited admission shelters select the number and types of animals taken in. Both shelters and

foster-based rescue groups may match intake numbers with available space, select certain types or breeds of animals, or specialize in particular medical and behavioral treatment cases.

Managed admission can be used by both open admission and limited admission shelters to maximize positive outcomes for each animal. This policy matches the flow of intake with the capacity of the shelter to house and care for the animals and to provide an opportunity for shelter staff to speak with members of the public and offer alternatives to giving up their pet. Scheduled appointments and pre-intake counseling may be used to balance community needs with shelter resources in a way that doesn't say, "no," but says, "not now."

Intake policies may play a role in how much euthanasia is used as a population management tool in some organizations. However, admission policies are not necessarily correlated with life-saving capacity, and there are many examples of high-intake open-admission shelters that achieve remarkable save rates.

Read how a large open-admission government shelter in Florida is saving more than 90% of the animals taken in.

Brevard County Animal Services



By Tim Shortt

Brevard County Sheriff Wayne Ivey announced Friday that Brevard County Animal Services has officially received the status of a "No Kill Community."

To earn the status, Ivey said, locales have to have a live release rate at above 90 percent for more than a year.

Ivey noted the progress since the Brevard County Sheriff's Office assumed command of the shelter on Oct. 1, 2014.

"If you remember, 55 percent is where we started, and, today, our live release rate for the past 12 months is at 94.86 percent, which is just an amazing accomplishment by an amazing team," Ivey said. "Our live release rate has gone as high in some months as 96 percent. I think, for the month of September, as a matter of fact, we're at 95 percent." [Read more...](#)

Brevard County Animal Services, an open-admission government shelter in Florida managed by a sheriff's department, reached a 90 percent live outcome rate in 2016 through a variety of supportive field services and progressive programs.

RESCUE GROUPS AND SANCTUARIES

Rescue groups are often small organizations that may be formally incorporated as 501c3 nonprofit organizations governed by a board of directors or may simply be a loose collection of like-minded individuals. Rescue groups frequently acquire their pets from animal shelters or directly from the public and foster them in private homes pending adoption. Most rescue groups do not have their own facilities so they use private veterinary clinics for medical care and conduct adoption events in public places such as pet stores or from their homes. Some rescue groups specialize in specific types of animals, such as a single species or breed, age group, or medical and behavioral conditions. In many shelters, transfer of animals to rescue groups is a major contributor to live outcomes.



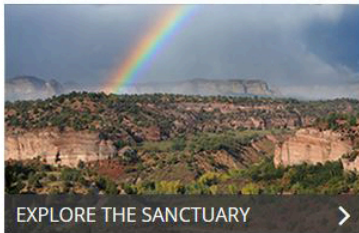
Sanctuaries are defined as a place where animals are admitted to live out their lives. In most cases, finding alternative homes is not a function of sanctuary operations.

Perhaps the best-known sanctuary is the [Best Friends Animal Society](#) property located outside of Kanab, Utah. Founded as a traditional sanctuary for life-long care for many different species, operations have now expanded to include adoptions, conferences, hands-on sheltering programs in major cities, and national advocacy. BFAS also hosts a popular externship for veterinary students in its expansive sanctuary clinic.

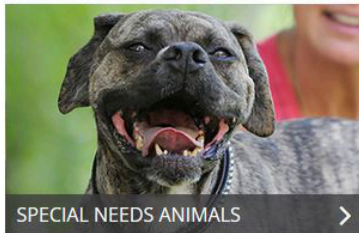
Since providing lifelong care requires the commitment of adequate space, personnel, and funding, sanctuaries must limit the number of animals they take in to avoid exceeding their capacity for humane care. Several failed sanctuary operations have deteriorated into [mass hoarding cases](#) requiring emergency interventions.

THE SANCTUARY

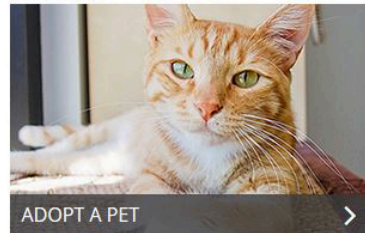
Located in Kanab, Utah, Angel Canyon is the home of Best Friends Animal Sanctuary and nearly 1,600 homeless animals. Come and explore this unique and extraordinary place.



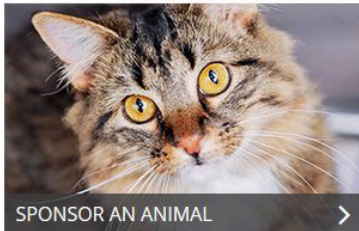
EXPLORE THE SANCTUARY



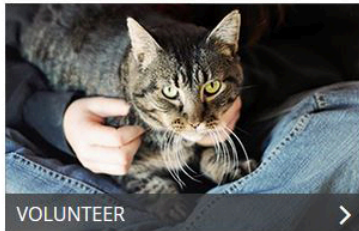
SPECIAL NEEDS ANIMALS



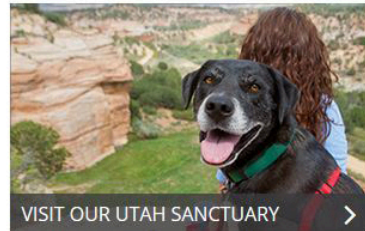
ADOPT A PET



SPONSOR AN ANIMAL



VOLUNTEER



VISIT OUR UTAH SANCTUARY



Best Friends Animal Society operates a sanctuary for a variety of species including, dogs, cats, horses, pigs, birds, and other species. Many of the animals have special medical or behavioral needs. An on-site veterinary clinics offers externships for veterinary students.

EMERGENCY SHELTERS

Not all shelters are built to last. Trained teams of emergency responders have the capability of setting up temporary shelters for hundreds of animals in just a few hours. Large shelters are needed when disaster strikes, whether it's a natural disaster, a mass cruelty case, a hoarding intervention, or an infectious disease outbreak.

Many veterinary schools have a response team capable of deploying veterinary units when mission requests are received. At UF, students can join the college's [UF Veterinary Emergency Treatment Service \(UFVETS\)](#) team to help with local and statewide animal rescues. Many students also sign up to deploy with the [American Society for the Prevention of Cruelty to Animals \(ASPCA\)](#) and [Humane Society of the United States \(HSUS\)](#) to assist in large-scale animal cruelty and disaster responses.

Temporary Emergency Animal Shelters



At a quarantine center in Queens for cats exposed to a rare strain of avian flu, workers must wear full protective gear at all times, even playtime.

Avian Influenza Virus: 500 Cats

By Andy Newman

In an industrial corner of Queens on Monday, on the second floor of a cavernous warehouse, in a gated-off area known as Pod C, a worker in a hazmat suit, goggles and a respirator mask sat on the floor of a metal cell.

She held a colored string with a ball dangling from it. With the other hand, she petted a cat. “Psswsswss,” the woman said through the mask. The cat arched its back against her latex-gloved hand.

All around her, other workers in hazmat suits attended to other cats, playing, feeding them, changing their litter. A bigger room downstairs held hundreds more, many of whom had the sniffles.

This scene, like something out of a post-apocalyptic cat video, is now playing daily at a temporary quarantine center the American Society for the Prevention of Cruelty to Animals opened on Dec. 29 to house the entire feline population of New York City’s shelter system, some 500 cats. [Read more...](#)



Cats seized from a cat sanctuary were held for two months in a warehouse in Gainesville, Florida.

Cat Hoarding Case: 700 cats

By Karen Voyles

The next chapter is about to begin in what some have called the nation’s largest cat hoarding case.

According to Alachua County officials, Steve and Pennie Lefkowitz have surrendered the hundreds of cats seized earlier this summer from their Haven Acres Cat Sanctuary near High Springs.

Since the nearly 700 cats were seized, they have been held at a warehouse while their legal status was determined. County officials said the Lefkowitzes’ decision to surrender the animals means the cats will soon be available for adoption. [Read more...](#)



This dog was one of 367 dogs seized in a dogfighting investigation.

Dog-Fighting Case: 367 dogs

By Clair Aiello

Animal rescue groups worked with law enforcement agencies in Alabama, Georgia and Mississippi to seize 367 dogs on Friday, August 23. It's believed to be the second-largest dog fighting raid in U.S. history.

The Humane Society of the United States and The ASPCA (The American Society for the Prevention of Cruelty to Animals) worked with police departments in several cities, in conjunction with the United States Attorney's Office and the Federal Bureau of Investigation.

Law enforcement agencies served 13 search warrants on Friday morning in Alabama, Georgia, Mississippi and Texas. They arrested 10 people who were indicted on felony dog fighting charges. Federal and local officials also seized firearms and drugs and more than \$500,000 in cash from dog fighting and gambling activities. [Read more...](#)



600 pets were rescued following a tornado in Joplin Missouri and brought to a temporary shelter established by the ASPCA emergency response team.

600 Pets: Tornado

By Arthur Jeon

A chocolate lab who washed into a storm drain lost all her toenails desperately trying to claw out from the rising water. Another dog is wandering the streets with deep lacerations from flying glass still embedded in her side. These are just two pets whose post-tornado circumstances have changed for the better this week, thanks to well-organized animal rescue organizations mobilized in Joplin.

Approximately 600 pets have been rescued following the tornado that devastated the Missouri town, which is said to be the biggest in the nation's history.

With the help of the Joplin Humane Society and the American Society for the Prevention of Cruelty to Animals (ASPCA), more than 120 people have reunited with their four-legged family members. [Read more...](#)

WHAT'S IN A NAME?

With all of the different types of shelters, their funding streams, their philosophical missions, and their changing roles over time, it's easy for the public to become confused about who they should go to for different needs, such as finding a lost pet, helping an injured animal, getting a rabies vaccine and license tag, reporting an animal nuisance, or volunteering to help.

One thing that surprises many people is that there is virtually no relationship between individual shelters in the United States. An SPCA in one town has no affiliation with an SPCA in another town or with the national ASPCA. Similarly, humane societies are all independent organizations with no affiliation with the national HSUS.

There is also a surprising lack of oversight and regulation of animal shelters; virtually anyone can open a shelter and start taking in animals. Since no national directory of shelters exists, it's not even possible to know how many there are.

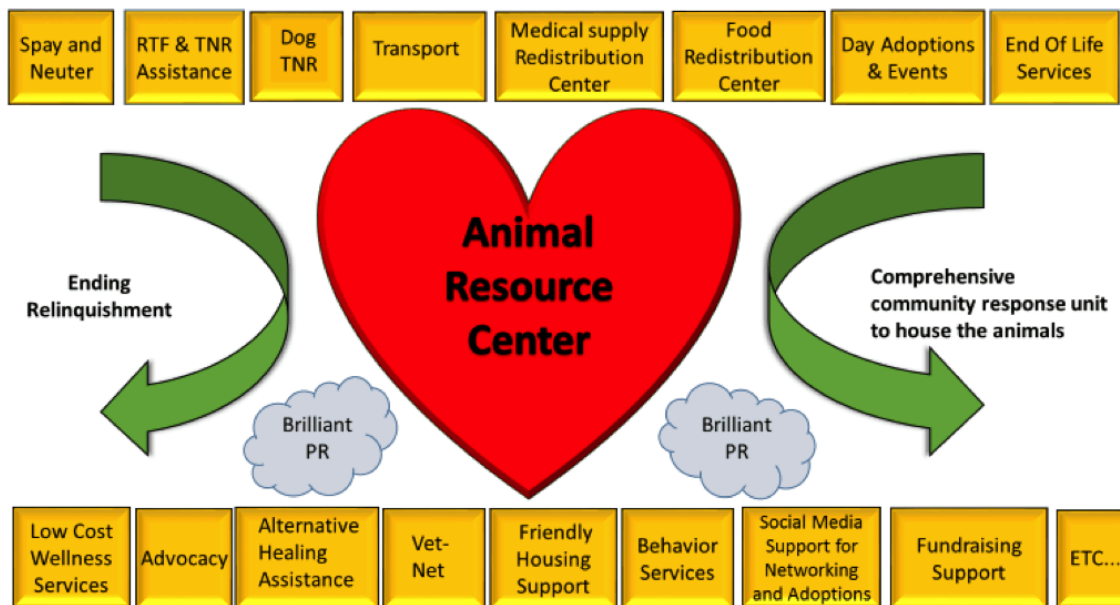
What can be said, however, is that it is not possible judge a shelter by its name. High-quality animal care and life-saving can take place in shelters run by both municipalities and by non-profit organizations. Sometimes more lives are saved in open-admission shelters than in ones that define themselves as "No Kill." Similarly, any kind of shelter can fail to meet minimum standards of care and even find itself to be the focus of an animal welfare investigation.



“SHELTERLESS” SHELTERING

North America has a long tradition of building facilities to house all manner of animals at risk. Neonatal kittens, free-roaming animals, lost pets, dangerous animals, cruelty victims, and animals displaced by housing insecurity, domestic abuse, or financial constraints of their families . . . they can all flow to facilities that may or may not be fully prepared to care for them.

A new movement is arising that seeks to replace the concept of the shelter as the first response to animal issues. Often, animals (and their people) can be better served by community resources, such as programs to raise neonatal kittens to weaning age, behavior counseling, temporary boarding, and subsidized veterinary care. These “safety-net” programs minimize the need to institutionalize animals, while assuring that shelters do exist for animals with emergency needs and those whose best outcomes can be achieved at a shelter.



Based on their experience working on small islands lacking traditional animal shelters, the nonprofit animal welfare organization Animal Balance envisioned a scenario in which an extensive network of community-based services to help keep pets in their homes, provide for free-roaming community-owned animals, and meet the needs of animals as an alternative to institutionalizing animals in shelters.

HOME TO HOME

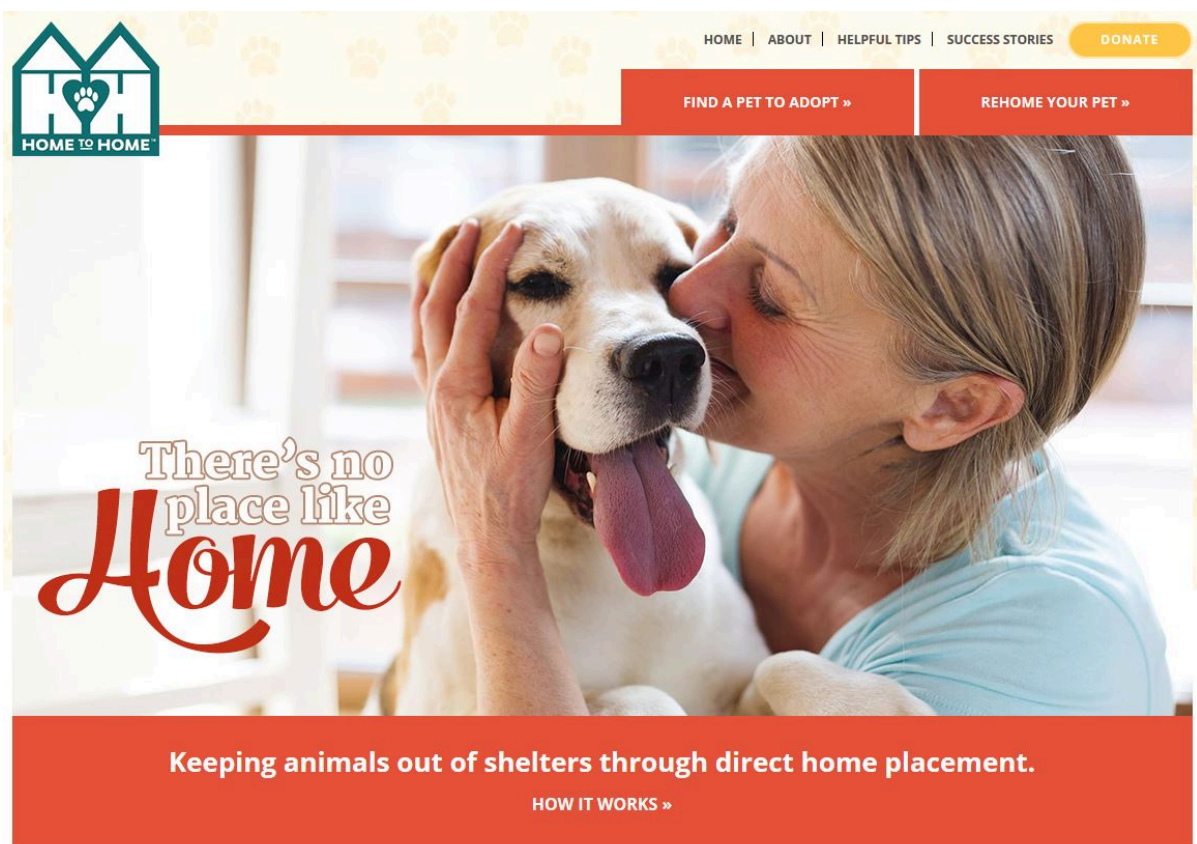
Families usually acquire pets with the intention of having them for life. But unforeseen events can arise, such as the death of an owner, loss of a home, debilitating health conditions, incompatibility between pets, or behavior that becomes unmanageable.

If life circumstances changed and you had to give up your pets, or if someone reached out to you for help with rehoming, what would you do? Take your pets to a shelter? Give them to a rescue group? Find another home for them?

In many cases, the best outcome for a relinquished pet is to move straight to another family, without spending time in a shelter where fear, anxiety, stress, frustration, and disease are risks and shelter resources are strained.

However, finding a good match can be difficult. Once options for placement with friends and relatives are exhausted, most families don't know where to turn.

One shelter filled the gap by creating a website where people looking to rehome or adopt a pet can connect – in the “virtual” shelter of cyberspace. The project was so successful that intake plunged 31%, triggering the shelter to share the [Home to Home](#) program at no cost to any other interested shelter or rescue group.



Home to Home is an interactive website designed to help pet owners find new homes for their pets without having to relinquish them to a shelter.

ANIMAL SHELTERING IN THE AGE OF COVID

Animal sheltering has never faced anything like the COVID-19 pandemic before. Like other businesses and public services, shelter operations quickly pivoted to essential functions overnight. Spay/neuter programs were shuttered. Shelter workers and volunteers were unable to work. Shelters braced for pets coming in from families stricken by the virus, not knowing if the pets themselves would be infected.

Cutting back to essential functions necessitated a quick reduction in the number of animals in shelters to minimize bringing personnel together to care for them. Shelters called upon their communities to help by delaying relinquishments, reuniting lost and found animals outside of the shelter system, and providing temporary homes to foster pets.



Shelter personnel donned personnel protective equipment (PPE) as the COVID-19 pandemic spread across the US.

Beginning in late February 2020, national humane organizations and shelter leaders began meeting daily to share experiences and protocols, to develop guidelines in response to rapidly changing conditions, and to preserve critical functions while staying safe by social distancing. In the early days of the pandemic, the following guidelines were developed to identify the essential functions of animal control organizations in protecting public safety and animal welfare in the face of workforce reductions and the need to slow the spread of the virus.

National Animal Care and Control Statement on Animal Control Functions During the COVID-19 Pandemic



For the safety of our officers and the public they serve, NACA is advising all officers to take extra measures to mitigate the short and long-term effects of the COVID-19 pandemic. These measures include protecting themselves properly to reduce risk of spreading the virus, as well as working to manage and minimize the number of new animals entering our shelters.

As members of the public safety community we have an obligation to perform our sworn duties during disasters both natural and man-made. To that end, NACA recommends the following: High priority/emergency calls: At this time, officers should continue to respond to emergency and high priority calls.

High priority/emergency: calls include law enforcement assistance, injured or sick stray animals, cruelty and neglect complaints, bite complaints, and dangerous and aggressive dog complaints.

Non-emergency calls and activities: Officers should suspend low priority/non-emergency activity. This includes non-aggressive stray animal pick-up, leash law and licensing complaints, barking and nuisance complaints, trapping and transport of community cats, and conflict mitigation scenarios.

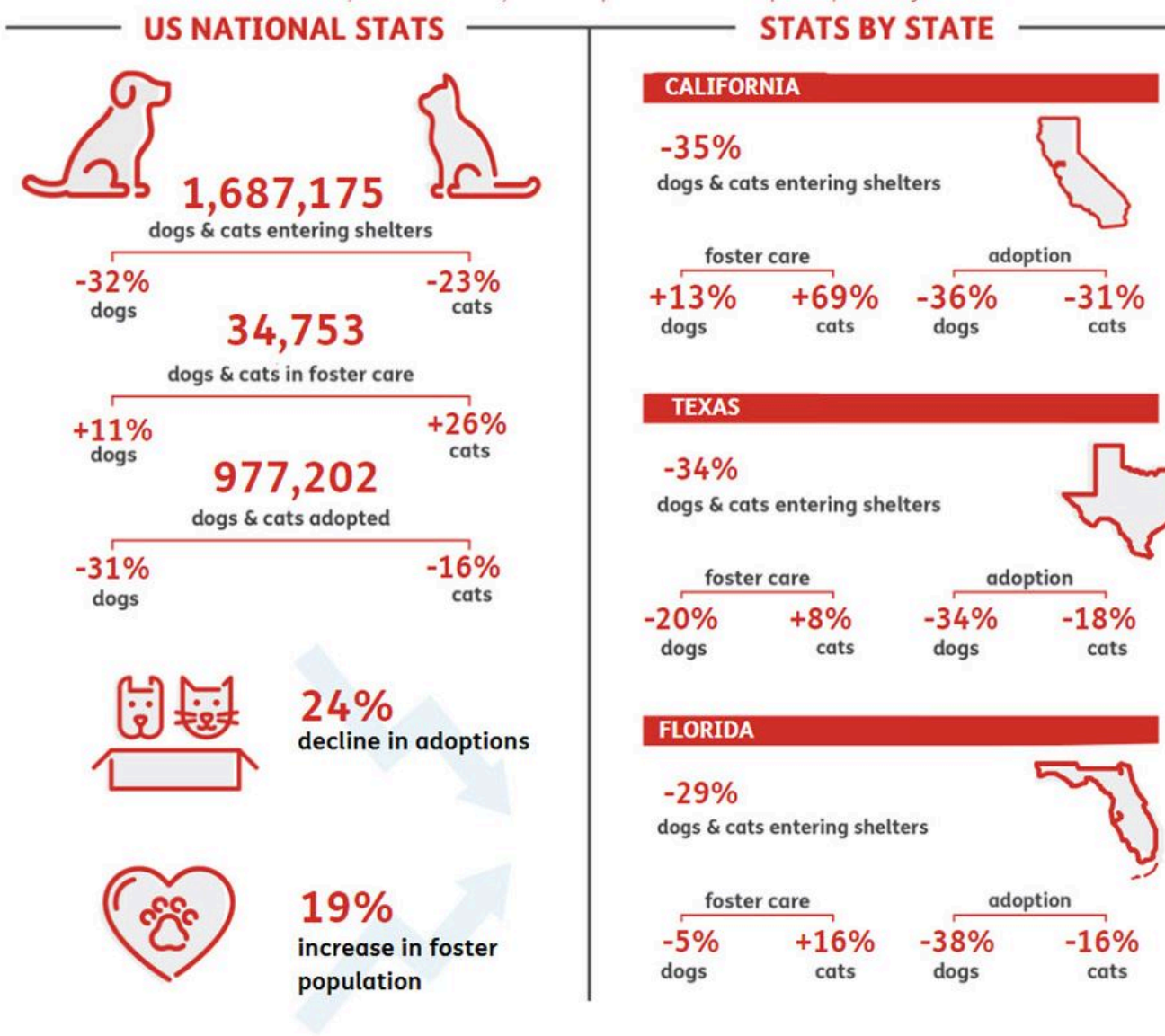
Shelter intake reduction: Animal control agencies should take active measures to reduce non-essential shelter intake. Measures taken should include returning pets in the field instead of impounding them, suspending non-emergency owner surrender intake, and encouraging owners who are ill to keep their pets at home whenever possible.

Personal protective equipment: Animal control officers should be provided with personal protective equipment (PPE) for cases requiring a response to a location with someone who is sick or has been exposed to COVID-19. Officers should make every effort to not enter the home of anyone who is known to have been exposed to the virus.

For ongoing information, please continue referring to all updates from the Centers for Disease Control: <https://www.cdc.gov/coronavirus/2019-ncov/index.html>

The following data from more than 1,000 animal shelters tracked in the first year of the COVID-19

pandemic revealed that shelter intake plummeted by more than 25%, whereas sending pets to foster homes reached all-time highs. Despite mass media assertions claiming a surge in adoptions of “pandemic puppies,” adoptions are actually down compared to the year before the pandemic, mostly as a result of drastic decreases in intake. Similarly, sensationalized media reports of increased returns of adopted animals to shelters as families return to work and school are not supported by shelter data. Fortunately, the number of animals coming to shelters because their owners were hospitalized or died of COVID was less than predicted. However, the long-term impact of the economic downturn, including unemployment reaching depression-era levels and a potential increase in evictions, may lead to more relinquishments. Municipal funding and charitable donations for shelters may decrease at least transiently as well.



CAN SHELTERS START BACK WITH A NEW NORMAL? THE ANIMAL SOCIAL SERVICES MODEL

Faced with social distancing (increasingly referred to as physical distancing) requirements, animal shelters replaced some of their routine face-to-face encounters with virtual ones. One of the most dramatic transitions was converting the pet adoption process to a curbside or totally online experience. Shelters have long posted their pet profiles online, but now adopters spend more time narrowing down the list in a process akin to a dating app. This matchmaking process has been remarkably successful, with no greater rate of adoptions that don't work out than with traditional meet and greets.

Shelters Empty Out and Flip to Virtual Adoptions



Florida Animal Shelter Celebrates Emptying a Kennel for the First Time Ever

By David Williams and Amanda Jackson

A Florida kennel that's normally packed with stray and abandoned dogs was filled instead with cheering staff and volunteers because all of the animals have found new homes.

Friends of Palm Beach County Animal Care and Control [shared video of the moment on social media](#) this week and said it's the first time the shelter has emptied one of its three kennels. *This video contains applause only, no dialogue.*

The kennel has 48 dog runs that often hold two dogs each, according to Elizabeth Harfmann, the community outreach manager for the shelter.

“It’s definitely been a combined effort from the community. The animals went to foster homes, adopters and to our partner rescue organizations,” Harfmann told CNN. “We’ve also seen a decrease in incoming animals, so that has helped as well.”

Many shelters across the nation are seeing a surge in adoption applications from people who have more time to devote to a new pet, since they’re staying at home to slow the spread of the coronavirus pandemic. [Read more...](#)



I Video Chatted with a Cat and Now She's Mine

By Marie Solis

“Should we Zoom?” I texted Valerie one Thursday evening, around 6 p.m.

“I think FaceTime works better,” she wrote back. “In case she’s on the move.”

A few minutes later, I answered my phone, and a small brown tabby cat appeared on the screen. After we exchanged hellos, Valerie, the cat’s foster mom, introduced the two of us: Ava was a playful and affectionate seven-month-old who didn’t get along with the resident cat in Valerie’s apartment. She had big, bright green eyes, a white smudge on the bridge of her nose, and a fluffy tail, like a raccoon. [Read more...](#)

Kristen Hassen-Auerbach, director of Pima Animal Care Center in Tucson, Arizona, of one the largest open-admission shelters in the country, observed that the COVID-19 pandemic forced an overnight transformation of animal sheltering from a focus on institutionalizing large numbers of animals in a central facility to helping keep families together and calling upon the community to open their homes to animals while permanent solutions could be identified.

“In considering what a different future for homeless pets might look like, we know that ultimately, we must de-institutionalize the work of caring for lost and temporarily homeless pets, create a distributed model of animal social services to serve pets in the neighborhoods where they live, with the ultimate goal of keeping the vast majority of pets home or very close to home. Serious thought and planning around implementing this model would have seemed

insurmountable, if not impossible, prior to the emergence of COVID-19. The emergence of this disease, tragically spread through much of the world has profoundly disrupted life and the status quo for many institutions, including animal services.

Over the past five weeks, shelters have had to change their entire operating structures, at lightning speed, shelters have discarded many of the old systems, in an attempt to keep people safe. Shelters have done away with barriers to placement, punitive policies, and discontinued the use of available kennel space to house any pet for any reason. In just a few days, many shelters emptied their kennels, sent most pets to live in foster homes. In addition, they suspended all but the essential intake, embracing a new pilot model that slows or stops the constant flow of animals into the institution. They asked their communities to take collective responsibility for stray and homeless pets, holding pets in homes to avoid bringing them to the shelter. In this one moment, when so much uncertainty, sadness, and fear exists in the world, there is a glimmer of hope for what animal sheltering will be if we let go, once and for all, of the broken pound model.

The solution will require a new ethic for the care of companion animals in our communities. Learning lessons from human child welfare, education, social work, and human services, we will rebuild with the premise that animal services' primary functions are to maintain, support, and strengthen the bonds between people and pets."

Animal Social Services: The Future of Serving Pets and People in Our Communities

Goal: Build an animal services system that treats the shelter institution as a pet crisis response center, emergency room and place owners can come for pet support services. Create a distributed network model of pet social services to reduce the need for shelters to unnecessarily house pets who are better served by remaining in the community, in their homes or in foster homes.

Objectives:

- Reduce the number of pets physically entering the shelter by 50% or more
- Reduce the number of pets housed in the shelter by 50% at all times
- 80% success rate of pet retention efforts for owners facing barriers to keeping their pets
- House 50% of pets in foster at any given time
- Provide outcome pathway for 80% of pets entering the shelter system within 72 hours of arrival, reducing in-shelter length of stay to three days for most pets
- Reallocate 25% or more of total budget to providing pet support, returning lost pets home, pet retention services, self-rehoming support, and intake-to-placement programs
- Accommodates budget reductions necessary due to COVID-19 impacts
- Increase volunteer programs by 200% or more, creating a new range of volunteer functions operating outside the walls of the shelter

[Read more...](#)

As communities begin to open up, animal shelters have an opportunity to change their model from an institutional approach that separates animals from their people, to a case-management approach that seeks to keep families together, blending the best of One Health, animal welfare, and human social services.

Want to Learn More?

COVID resources for animal shelters and veterinarians:

- National Animal Control Association: [Guidance Statements for Animal Control Agencies](#)
- American Pets Alive: [COVID-19 Animal Shelter Preparedness Guide](#)
- American Veterinary Medical Association (AVMA): [What Veterinarians Need to Know](#)
- Centers for Disease Control and Prevention: [Pets and Other Animals](#)
- Worms and Germs Blog: [COVID Topics](#)
- Maddie's Shelter Medicine Program at UF: [COVID -19 Guidance and Webcasts](#)

SOCIAL JUSTICE: DIVERSITY, EQUITY, AND INCLUSION IN ANIMAL SHELTERS

2020's global racial reckoning triggered international outrage and difficult conversations about the toll of racial trauma and a call for recognition, accountability, and collective action for solutions. Animal shelters and rescue groups – like the veterinary profession – have long lacked diversity in leadership, staff, and volunteers, who are overwhelmingly white, female, and prosperous. There is ample evidence that this lack of inclusivity prevents shelters from fully serving the needs of their community.

Recent events have thrust institutions of all types, including universities, governments, businesses, and animal welfare organizations into an unexpected and urgent exploration of individual and structural bias, privilege, racism, and social justice. The following resources are offered for optional review to explore current conversations and resources about race in animal welfare. Fair warning — this topic is fraught and complex, so be kind to yourself while trying to understand and be kind to others.

What the Blogosphere is Saying



Recognizing and Dismantling Racism in Animal Rescue

By AJ Albrecht

Black Lives Matter. I'm proud to see how many fellow animal rescuers and advocates have shared these words over the past week. But I also find myself pausing and reflecting on how much racism is at play in the dog and cat rescue world. For years I've said I would write a blog about this. I've never built up the courage. I've convinced myself I'm not the right person to hold the microphone. But I've kept a list of ways that rescuers and organizations reinforce structural racism within our movement, and I've thought a lot about how we can do better. And I want to share it with you.

These are things I have seen over the years. Some of them are things I have done. And the ideas for changes

are just that—my ideas. They are not perfect. I haven't tried them all. But I can't stay silent. (This was first shared as an instagram story series over on [@ourpitstop](#), where it can still be viewed.)

Adoption requirements that are a coded way to "weed out" adopters from marginalized groups.

- Refusing to consider people who don't own their own home.
- Refusing to consider people who don't have yards, or fenced in yards.
- Refusing to consider people who live a certain number of miles from your community.
- Refusing to consider people who don't feed the high quality food you feed.
- Refusing to consider people who don't have a relationship established with a vet.

Instead: consider any home where the pet's needs will be met and they will be loved. Make a conscious effort to recognize when you are biased toward adopters who look like you, or whose homes are similar to yours, or you share a lot in common.

[Read more ...](#)



By Anne Dunn

Director, Oakland Animal Services, California

I want to share my thoughts on our industry and the incredible opportunity we have now to begin again, cooking social justice into our foundation.

The animal welfare industry lives at the intersection of white privilege and systemic racism. What is important to understand, and accept, is that we are all biased, and racist to some degree, but that doesn't make mean we're monsters. If you work in animal welfare, you are probably a good and compassionate person, but, if you are white, you may also be unaware of the extent to which you are a product of this culture, or the ways in which that both benefits you and harms others.

Read more ... [Anne Dunn, Racism & Animal Welfare](#)



At Toronto Humane Society, we strongly condemn all acts of racism including police brutality and racial profiling against the Black community. We recognize that this is not just an issue we see in the United States, but one that exists globally and right here in our own backyard. Systemic racism will not be fixed by one organization or one voice, it is going to take society to come together to make this change. The humane community we have been fighting for cannot exist so long as systemic racism does, and up until now we have been structurally blind to its impact and effects on and within our organization.

[Read more ...](#)

Try This



[Project Implicit: Complete a self-test for implicit bias](#) (15 min)

The IAT measures the strength of associations between concepts (e.g., black people, gay people) and evaluations (e.g., good, bad) or stereotypes (e.g., athletic, clumsy). The main idea is that making a response is easier when closely related items share the same response key

Explore This



"We believe in the inherent goodness and dignity of all people. Ex-offenders, People without Homes, Seniors,

Renters, Families with Small Children, and Yes, People of Color. To that end, CARE's mission is to bring diverse voices to the Animal Welfare industry while also advocating for a more inclusive path to pet adoption. CARE is using evidence-based tools and narratives to inspire organizations to be more inclusive and less biased. All in an effort to save more companion animal lives and elevate the value of all human life. CARE believes this effort is the defining challenge for the Animal Welfare field. How does a humane movement move forward with love and compassion for all the people? Ultimately, if we want people to adopt from shelters and rescues versus acquiring pets from other sources, we must become more inclusive and welcoming to all types of people and the varied lives they lead."

[Read more ...](#)

Hear This



MCVMA
Multicultural Veterinary
Medical Association

[Listen to A Profession in Crisis: Discrimination in Veterinary Medicine](#) (7 minutes)

"Diversity is one of the most critical challenges facing veterinary medicine today. Beyond the indisputable fact that our profession is one of the least racially and ethnically diverse in the nation, it can no longer be ignored that the future relevance of our field hinges upon the growth and development of a workforce that more closely resembles the American population at large. The veterinary community has discussed and explored the issue of diversity, equity, and inclusion enough. The time for talk is over. The time for decisive, committed action is now." – Multicultural Veterinary Medical Association



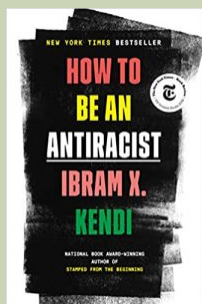
[Listen to the podcast with UFCVM's Dr. Carl Southern: Being a Black Veterinarian](#) (1 hr, 9 min) ([Download transcript](#))



[Listen to the podcast with Ibram X. Kendi: How to be an Antiracist](#) (1 hr)

"I'm talking with professor Ibram X. Kendi, *New York Times* bestselling author of *How to Be an Antiracist* and the Director of the Antiracist Research and Policy Center at American University. We talk about racial disparities, policy, and equality, but we really focus on *How to Be an Antiracist*, which is a groundbreaking approach to understanding uprooting racism and inequality in our society and in ourselves." – Brene Brown

Read This

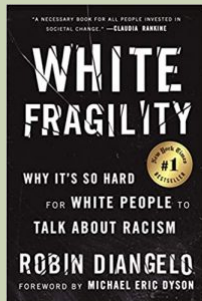


[How to be an Antiracist](#)

By Ibram X. Kendi

"From the National Book Award–winning author of *Stamped from the Beginning* comes a “groundbreaking”

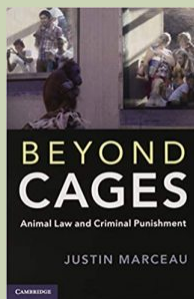
(Time) approach to understanding and uprooting racism and inequality in our society—and in ourselves.” – Amazon



[White Fragility: Why It's So Hard For White People To Talk About Racism](#)

By Robin DiAngelo

“The New York Times best-selling book exploring the counterproductive reactions white people have when their assumptions about race are challenged, and how these reactions maintain racial inequality.” – Amazon



[Beyond Cages: Animal Law and Criminal Punishment](#)

By Justin Marceau

“For all the diversity of views within the animal protection movement, there is a surprising consensus about the need for more severe criminal justice interventions against animal abusers. More prosecutions and longer sentences, it is argued, will advance the status of animals in law and society. Breaking from this mold, Professor Justin Marceau demonstrates that a focus on ‘carceral animal law’ puts the animal rights movement at odds with other social justice movements, and may be bad for humans and animals alike. Animal protection efforts

need to move beyond cages and towards systemic solutions if the movement hopes to be true to its own defining ethos of increased empathy and resistance to social oppression. Providing new insights into how the lessons of criminal justice reform should be imported into the animal abuse context, Beyond Cages is a valuable contribution to the literature on animal welfare and animal rights law.” – Amazon

Complete This



[BAM! Best Allyship Movement \(UF online course\)](#) (1 hour)

“BAM! is about helping you grow and expand your multicultural understanding. You’ll learn about diversity and how to be an active advocate and leader for social change. Please make a splash in this project with us at the CWC! During this course you will watch video clips about each topic, answer challenge questions to test your understanding, complete activities for expanding your multicultural understanding, and have opportunities for self-reflection.” – UF Counseling and Wellness Center

ANIMAL SHELTERS: COMMUNITY SERVICE OR COMPETITION?

There is a trend for both municipal and non-profit animal shelters to expand their services to better defend animal welfare, protect public health, and reach more underserved communities. Vaccine clinics, subsidized veterinary care, spay-neuter outreach, and restrictions on the retail sale of puppies and kittens have raised concerns about marketplace competition by non-profit organizations.

On the other hand, animals adopted from shelters and rescue groups are now the leading source of new pets and new veterinary clients. These pets generate an average of \$12,357 apiece in veterinary and retail expenditures during their lifetimes, demonstrating that saving pets in shelters and underserved communities is both good for families and good for business.

A recent economics study from Florida Southern College found that the non-profit animal shelter SPCA Florida in Polk County generated [\\$5.7 million in annual economic impact](#) in their local community, including more business for local veterinarians and cost savings at the local government shelter. And another report found that the drive to eliminate unnecessary euthanasia resulted in an infusion of more than [\\$150 million into Austin's economy](#).

Economic Impact of Shelter Programs in Texas and Florida



Adam Stanfield, director of SPCA Florida, holds a tabby kitten in his shelter

SPCA Impact Reaches Far and Wide

Editorial

Take a trip to the SPCA Florida's kennels on Brannen Road and we can guarantee the eager and warm reception from its furry, four-legged tenants will melt your heart, at least a little. But as much as the SPCA can provide joy from such a visit, or even better by finding someone a new pet, we now know the facility helps grease the skids of the local pet-centric economy.

Charles DuVal, director of Florida Southern College's MBA program, and a team of students recently completed a study outlining the SPCA's economic impact within and beyond Polk County. That amounted to \$71 million from 2010 through 2015, or \$12 million a year. Translated differently, the study concluded that each dollar spent at the SPCA returns \$1.67 to the local economy. [Read more...](#)



New study: Austin's 'No Kill' Policy Has \$157 Million Economic Impact

By Kylie McGivern

A newly released study from the University of Denver claims, between 2010-2016, Austin's "No Kill" policy has helped drive Austin's economy to the tune of \$157 million.

WaterShed Animal Fund, based in New York, paid for the study that's said to represent the most comprehensive analysis so far of the impacts of Austin's resolution that designated the city as "no kill" in its animal shelters.

The 69-page study states, "The majority of the positive economic impacts result from increased employment within animal services as well as the increased use of pet care and pet retail services. An additional benefit appears to be the positive contribution of Austin's progressive animal welfare policies to its brand equity. This impact is important as municipalities compete with each other to attract employee demographics that in turn draw new business and new economic growth to their area." [Read more...](#)

Think About It



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<https://ufl.pb.unizin.org/integratingveterinarymedicinewithsheltersystems/?p=311>

TAKING IT COMMUNITY-WIDE

Shelters, rescue groups, and other animal welfare organizations each have their own **missions** and operating policies, but they also play a role in their larger communities. Spay-neuter programs help reduce overpopulation, foster families provide a real-life home experience for animals, breed-specific rescues specialize in certain types of animals, safety net programs keep animals in their homes, trap-neuter-return programs manage community cats humanely, limited-admission shelters focus on high live-release rates, and open-admission shelters make sure that no pets are left behind. No one organization's contribution is necessarily more important than another, but together they can shape a community safe haven that assures there is a safety net for each animal's needs.

A community-wide compilation of statistics provides a much more comprehensive snapshot of progress than the data from any single organization. It also allows communities to benchmark their progress compared to other communities. A community save rate of 90% or a population-based euthanasia rate of 2 animals/1000 residents indicates a strong life-saving capacity. **Transparency** of shelter data is essential for communities to develop data-driven policy to maximize animal protection. [Shelter Animals Count](#) is a national organization in which shelters voluntarily submit monthly data for public review. Transparency is best served when shelters publish their data at least once a year using the standardized format of Shelter Animal Count's [Basic Data Matrix](#). Best practices also include sharing of annual income and expense information via budget reports or copies of non-profit tax filings known as IRS 990 reports.

Best Friends Animal Society published the first [interactive national map of shelter statistics](#) in 2019. This enabled residents across the country to access information about their own communities and to benchmark local statistics against state and national trends. The map also ignited a national discussion about shelter transparency, how shelter statistics should be interpreted, and the language used to define shelter metrics, especially euthanasia. The Best Friends map was compiled as the foundation of a campaign to drive the country to become No Kill by 2025, which they define as all shelters saving 90% or more of the animals taken in. Communities are defined as No Kill if every shelter in the area has achieved 90% lifesaving. Best Friends reserves the term "euthanasia" to mean "ending the life of an animal only to end irremediable suffering or ending the life of an animal when the animal is too dangerous to rehabilitate and place in the community safely" and all other deaths as "killing."

U.S.

76.6%
SAVE RATE

4.3K

NO-KILL
COMMUNITIES

5.3M

CATS & DOGS
ENTERED SHELTERS

4.1M

CATS & DOGS
WERE SAVED

733K

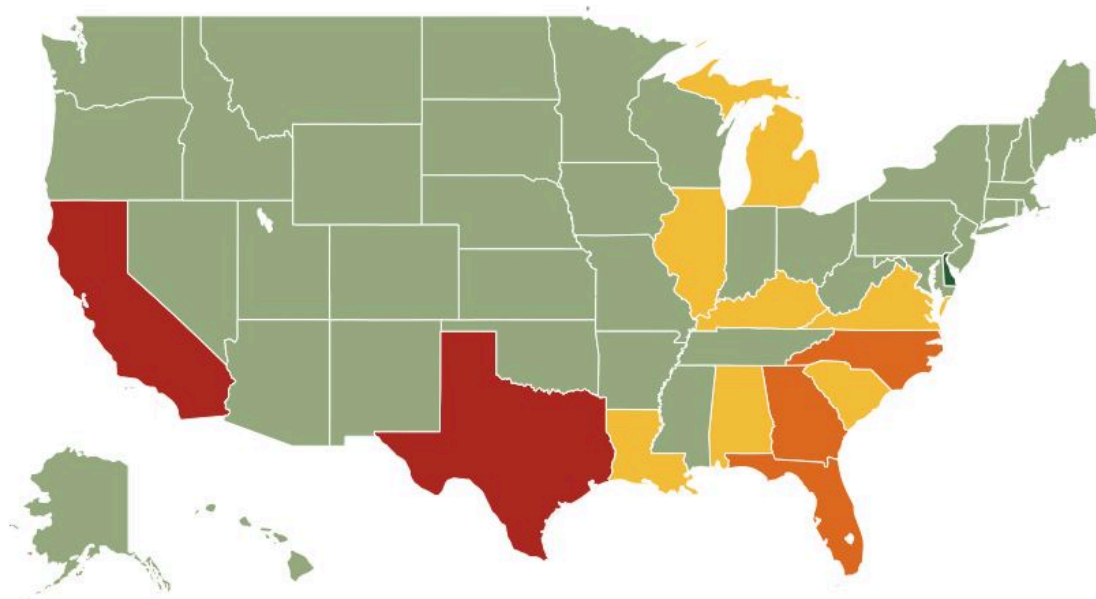
CATS & DOGS
WERE KILLED

i



Click on your state to find your community.

You can refresh the page at any time to return to this view or select a new state.



State colors reflect the total number of cats and dogs we still need to save in order to reach no-kill.

This interactive map lists shelter intake and outcome data for approximately 3,000 animal shelters in the United States

THE LANGUAGE OF LIFESAVING AND CULTURE CHANGE

A variety of terminology has been used in an attempt to define a sheltering philosophy around elimination of unnecessary euthanasia.

One approach was to provide an **Adoption Guarantee** for all adoptable animals, with the tricky part being how to define what “adoptable” means. A group of organizations came together to establish a framework called the [Asilomar Accords](#) in which communities were asked to evaluate what conditions a “reasonable and caring pet owner” would treat. This resulted in communities developing their own subjective lists of “healthy,” “treatable,” and “untreatable” conditions. Organizations and communities described themselves as **No Kill** or **Adoption Guarantee** if only the untreatable and dangerous animals were euthanized.

Another approach was to establish a numeric goal around shelter lifesaving. Saving 90% of animals that enter an organization has been a frequently used milestone. However, the applicability of this goal depends a lot on what kinds of animals are admitted. Organizations that take in primarily healthy animals with high adopter appeal may find it easier to meet the 90% bar than shelters that have a high intake of sick or difficult animals.

The use of humane euthanasia in the context of animal sheltering is an often confusing and controversial topic among the public and animal advocates. Although no shelter would describe itself this way, the inflammatory term **Kill Shelter** has been assigned by individuals as the opposite of no kill. Terminology used to describe organizational policies can become so polarizing that it explodes into public debates, criticism via social media, and cyber bullying so extreme as to include death threats over the euthanasia of individual animals.

Controversy over terminology reached a flash point in 2019 when a [Colorado shelter was shut down](#) by state inspectors for crowding and neglect shortly after the City Council passed an ordinance requiring the shelter to save at least 90% of the animals and awarded the sheltering contract to a small inexperienced organization. Some critics associated the failure with pursuit of a no kill philosophy, whereas others blamed incompetence of political and shelter leadership. The controversy ignited a debate about terminology and sheltering goals and the emergence of yet another term, **Socially Conscious Sheltering**.

In reality, there is nothing inherently conflicting between socially conscious and no kill. The high standards of lifesaving programs, welfare, and community safety can marry well with the metrics, goals, and transparency of no kill. Sometimes, moving beyond the false limits of language can reveal a vast common ground for effective collaboration around shared goals. Read on to explore the often heated discussion of the language of lifesaving and the tumultuous history of how animal shelters have adapted operations to meet public demand in the modern era.

The Words We Choose



Should We Use the Term No Kill?

By Dr. Ellen Jefferson

To some people, No Kill means saving 90% of pets who enter a shelter. Others think it means only saving pets considered 'treatable' and 'healthy,' or that only closed-admission shelters can be No Kill. Some critics of the term argue that it's so misunderstood we should stop using it altogether. But is getting rid of the term 'No Kill' really the best solution? ... No Kill is the belief and practice that every pet who enters a shelter should receive urgent, individualized treatment and care, with the goal of a live outcome. [Read more...](#)



Socially Conscious Sheltering

By Socially Conscious Sheltering Community

Now is the time for a different animal sheltering model. A compassionate model. A transparent model. A thoughtful model. Socially Conscious Sheltering is the future of animal welfare. There are eight tenets of Socially Conscious Sheltering. Shelters across Colorado have committed to this way of caring for animals and, as a result, animals in Colorado are having superior outcomes. Every community has a responsibility to its animals to know the facts and to demand that animals receive the care and respect they deserve. What follows is a summary of these tenets. [Read more...](#)



Surviving a Sea Change

By Katherine McGowan

In 1989, independent animal activist Ed Duvin wrote a series of articles under the title “Animalines.” One of the most well-known essays, “In The Name Of Mercy,” is credited by many as the spark that ignited the no-kill movement. In his piece, Duvin criticized shelters for failing to collect good data, for failing to invest in education, but most of all for accepting euthanasia as an outcome for the animals in their care.

“Euthanasia might be a relatively painless end to this journey of terror, but each death represents an abject failure—not an act of mercy . . . A new and larger vision is needed, a vision in which shelters hold themselves accountable for meeting demanding performance standards that preserve life—not destroy it.” The subsequent decades have brought both progress and culture clash to animal welfare organizations across the nation. Some immediately embraced the new philosophy; others rejected its premise or fell into bitter conflicts over language or policies. New organizations were founded. Some communities warred while others united. [Read more...](#)

ANATOMY OF A SHELTER

Understanding the mission, operations, and impact of a shelter helps donors, volunteers, board members, policy makers, and citizens align their values with the organizations they support.

The Humane Society of Silicon Valley is one of the oldest animal shelters in California. Explore the [shelter's website](#) and then complete this practice shelter profile.

Test Your Knowledge



An interactive or media element has been excluded from this version of the text. You can view it online here:

<https://ufl.pb.unizin.org/integratingveterinarymedicinewithsheltersystems/?p=321>

TEST YOUR KNOWLEDGE

Click through these flash cards to test your knowledge about animal shelter terminology.

Test Your Knowledge



An interactive or media element has been excluded from this version of the text. You can view it online here:

<https://ufl.pb.unizin.org/integratingveterinarymedicinewithsheltersystems/?p=323>

CONGRATULATIONS – YOU HAVE COMPLETED MODULE 7!



Want to Learn More?

- Free Webinar by ASPCAPro: [Innovations in Emergency Sheltering](#)
- Community-Based Solutions to Animal Homelessness: [Human Animal Support Services](#)
- Diversity, equity and inclusion in animal welfare organizations: [CARE](#)

FIND A BUG? TELL US ABOUT IT!

We are committed to keeping this e-book as pest-free as possible. You can help by [submitting a bug alert here](#). No problem is too small, including broken links, typos, or content errors.

MODULE 8: THE CASE OF THE SPAY-NEUTER SKEPTIC

JULIE K. LEVY, DVM, PHD, DACVIM, DABVP



Module Learning Objectives

- Identify and describe barriers to animals being sterilized and devise methods of mitigating those barriers in both owned and community animals.
- Explain the importance of pediatric spay-neuter, targeted spay-neuter, and community cat diversion as it affects shelter intake.
- Describe standards of care and outcomes in HQHVSN practice, including how standards can be maintained in remote and MASH clinics.
- Respond to common concerns regarding access to care, the impact of spay-neuter on shelter dynamics, the quality of HQHVSN programs, and controversies regarding health effects of spay-neuter on physical health.
- Develop a plan for mitigating the risk of physical and emotional stress experienced in spay-neuter practice.

BUSY NEW DOCTOR

Dr. Newgrad is the sole, full-time veterinarian at a non-profit, limited-admission shelter. Her days are long, busy, and very rewarding. After six months in her new position, she is gaining confidence in both her medical and managerial responsibilities. Even so, her heart leapt into her throat when her Executive Director peeked her head into the OR, and asked Dr. Newgrad to stop by her office.

“Has something gone wrong? Did a recently adopted animal come down with parvo? Did the staff member who has been here for years complain about my decisions? Or maybe the board approved purchase of that new dental machine we asked for last year?” were all questions racing through her mind as she walked to the E.D.’s office.

THE MEETING

“Ms. Rich, who has donated hundreds of thousands of dollars to our organization over the years, has her eye on the litter of 8-week-old pups that were just relinquished,” explained the director. *“She would like to adopt one of the females, but she has heard from her groomer that sterilizing puppies can have negative long-term health effects. She is asking that we allow her to adopt the pup now without surgery. She offered to pay her own veterinarian to spay her when she is at least 8 months old. I told her that it was our policy to sterilize ALL animals prior to adoption, but she is asking why. I’d like you to meet with her to explain the rationale behind our policy.”*

Nodding affirmatively and smiling weakly, Dr. Newgrad asserts that she would be happy to chat with the board member and begins to rise. *“Additionally,”* the E.D. continued, *“Our board has decided to open our spay-neuter and wellness clinic to the public, and we are hoping that the local veterinarians will be supportive of it. I’d like you to draft a letter to your colleagues in private practice, to inform them of this decision.”*

“I’m on it,” Dr. Newgrad thinks, as she leaves the E.D.’s office.

THE RESEARCH

While walking back to her office, Dr. Newgrad vaguely recalled a number of spay-neuter studies discussed when she was in veterinary school. She’ll have to do some research of her own when she gets home, to refresh her memory. Dr. Newgrad’s phone buzzes in her pocket, with a reminder that tonight is the monthly get-together of the local shelter veterinarians. Hooray! She can ask her colleagues if they have come across similar issues with donors and board members, and if so, how they supported their decisions. One of these colleagues is very research-oriented, and will undoubtedly be able to provide Dr. Newgrad with the latest information in the field of spay-neuter. A spring returns to her step.

THE RATIONALE FOR SHELTER POLICY

Throughout the remainder of the day, Dr. Newgrad thought about her training in veterinary school, and she recalls that the [Association of Shelter Veterinarians Guidelines for Standards of Care in Animal Shelters](#) has a section on spay-neuter. The first sentence in that section, “*Animal shelters should require that cats and dogs who are adopted into homes be spayed or neutered*” will provide an authoritative statement for her discussion with Ms. Rich, as the Guidelines were written and reviewed by experts in the fields of shelter medicine and animal welfare.

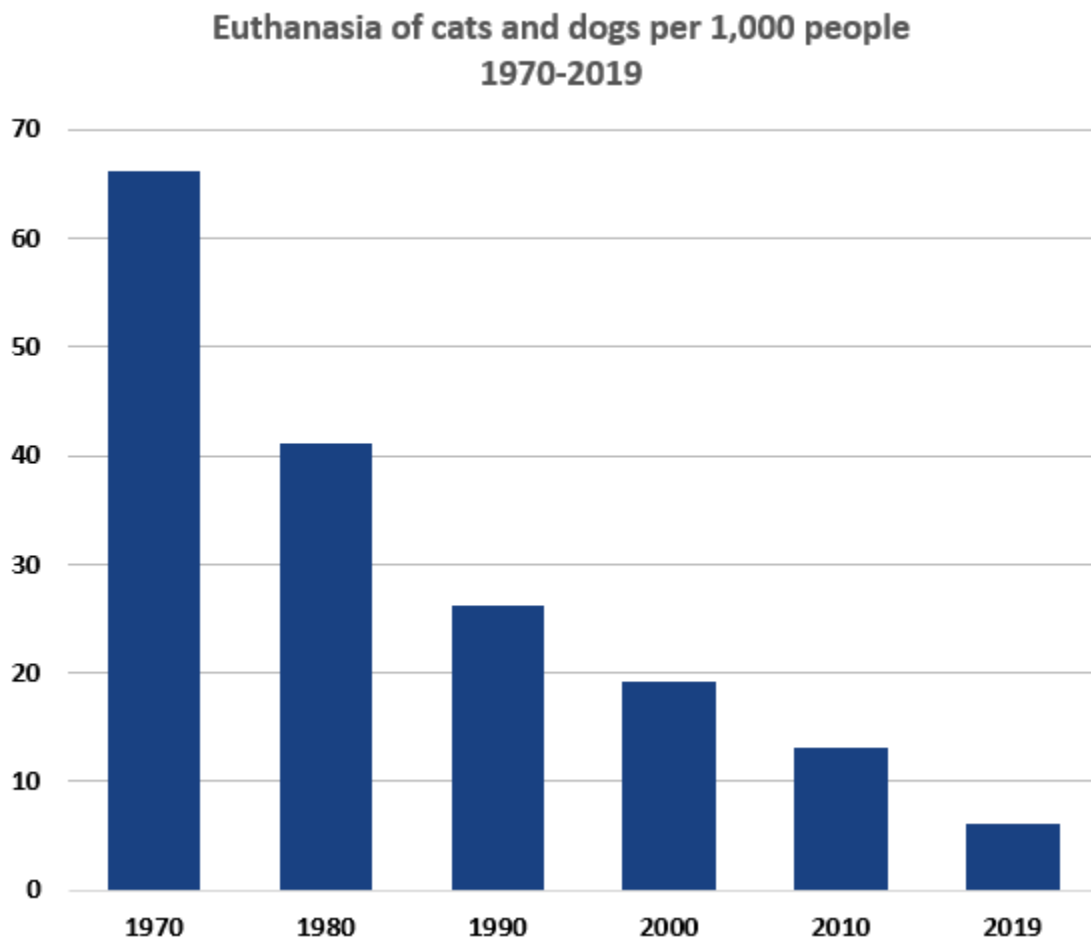
She reviews her shelter’s policies on pediatric spay-neuter, spaying and neutering all shelter animals prior to adoption, and their community cat diversion program. “**Targeted spay-neuter**” is likely to be a new concept for her colleagues in private practice. Dr. Newgrad decides to do some more research to enable her to write a succinct, yet effective letter to her colleagues, justifying her board’s decision to open a high quality, high volume spay-neuter (HQHVSN) clinic to serve the public, and hopefully winning their support.



Universal spay-neuter for animals adopted from shelters has been a tradition for several decades.

THE RELATIONSHIP BETWEEN SPAY-NEUTER AND POSITIVE OUTCOMES

In the past 40 years, US shelters have experienced a dramatic decrease in euthanasia rates, primarily due to the impact of sterilization. While this is good news, a recent report estimated that 1.5 million pets are euthanized in US animal shelters every year. Mortality due to euthanasia in animal shelters is still a leading cause of death for dogs and cats.

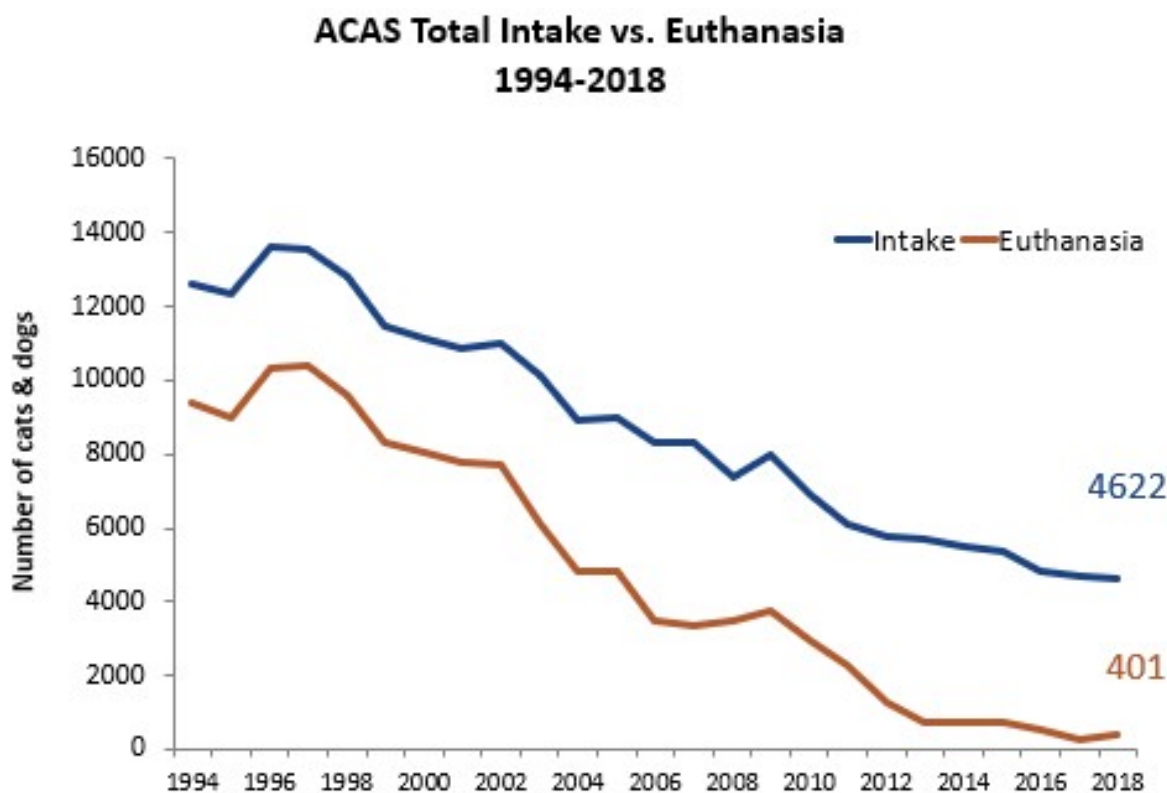


Per capita euthanasia of cats and dogs in U.S. animal shelters has plunged by more than 90% since large-scale spay-neuter clinics first opened in the 1970s.

REDUCE INTAKE TO REDUCE EUTHANASIA

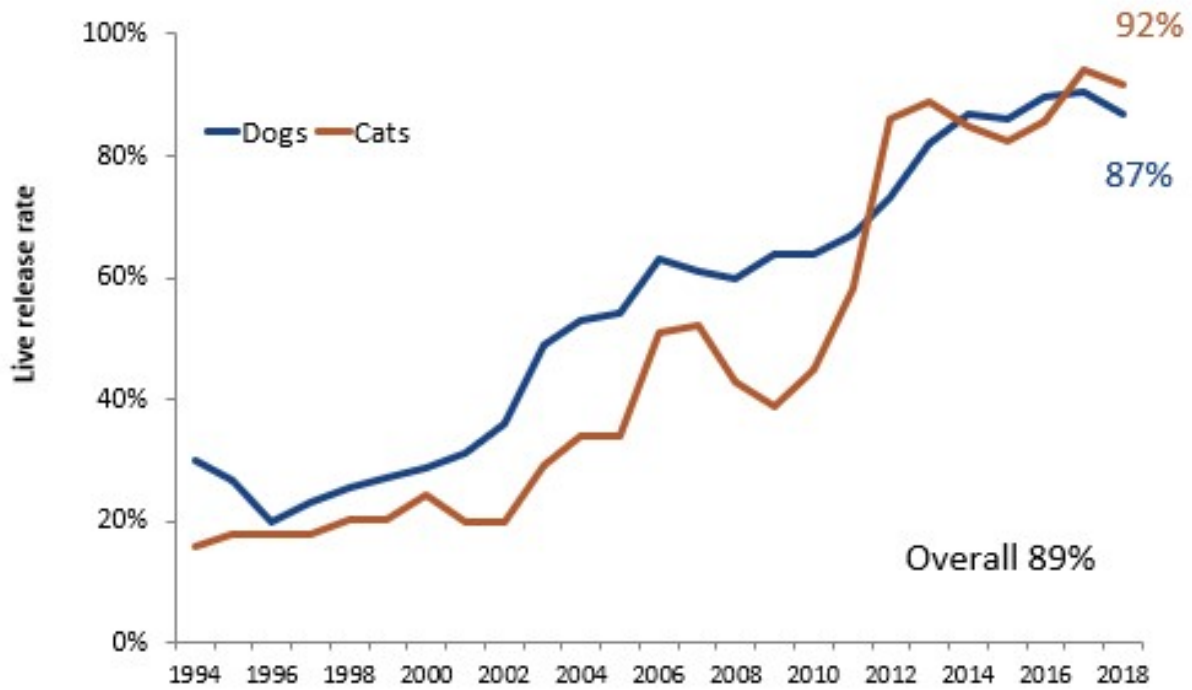
It is estimated that 6.5 million companion animals currently enter US shelters annually. Reuniting lost pets with owners, adoption, and transferring pets to other agencies with more room are important ways to save these pets. Even more important is preventing the need for sheltering in the first place. Controlling the birth of unwanted puppies and kittens and helping families keep their pets are two of the most effective methods for reducing shelter intake and subsequent unnecessary euthanasia.

In most shelters, the single largest driver of euthanasia is intake numbers. When the intake decreases, the euthanasia rate decreases in direct proportion. For example, in Gainesville's Alachua County Animal Services municipal shelter, intake and euthanasia peaked in 1997. In response, a strong community coalition formed with a goal of eliminating euthanasia of healthy and treatable animals. The coalition opened a spay-neuter clinic, started a community cat trap-neuter-return program, implemented subsidized veterinary care for low-income pet owners, grew foster-based pet rescue organizations, and removed barriers to adoption. Even though the proportion of pets euthanized plunged from 77% to 11%, the relationship between intake and euthanasia remained constant year over year.



Shelter intake and euthanasia has steadily decreased while the proportion of pets leaving the shelter alive has steadily increased since spay-neuter programs were introduced in Alachua County in 1998.

ACAS Live Release Rate 1994-2018



Shelter intake and euthanasia has steadily decreased while the proportion of pets leaving the shelter alive has steadily increased since spay-neuter programs were introduced in Alachua County in 1998.

“TARGETED” SPAY-NEUTER

Targeted spay-neuter refers to focusing on the populations of animals that represent the greatest risk for shelter intake and euthanasia. This might include community cats, specific breeds, or pediatric animals. Since funding for spay-neuter is limited, targeting assures that subsidized surgeries focus on animals that wouldn't otherwise be sterilized.

At the 2017 Society of Animal Welfare Administrators Annual Conference, Dr. Gary Weitzman, President and CEO of San Diego Humane Society revealed that 80% of pets living in poverty are unsterilized. At the same conference, Matt Bershadker, President and CEO of the ASPCA, reported that 77% of those relinquishing their animals in Los Angeles cited the inability to afford or access veterinary care (including spay-neuter) was the primary reason. This pattern of high intake from low-income neighborhoods was repeated in New York City, Miami, and other cities. For these reasons, many animal welfare agencies target spay-neuter programs in underserved areas.

While income qualification may seem like a simple method of targeting clients for subsidies, there is much more impacting access to veterinary care than raw income. Besides being potentially invasive and demeaning, “proof of poverty” screening fails to capture all of the challenges families face. There is no way to know who is facing their own medical bills, who has lost a job, whose controlling partner won't allocate money for pet care, who took on the pets of a relative who died, whose tuition just went up, and a myriad of other reasons that paying for the escalating cost of routine and emergency pet care is difficult. Many families are a paycheck or two away from housing insecurity, and 23 million pets live in families lacking access to care.

HOW DO TARGETED STERILIZATION PROGRAMS WORK?

Targeted programs work to help families sterilize their pets before they can reproduce. Mapping shelter intake and animal nuisance complaints can identify neighborhoods where more spay-neuter access is needed. Such programs provide convenient and subsidized pet sterilization services to the service areas that are producing the highest intake for shelters. The most effective targeted programs work to identify and remove any barriers in access to care, including cost, awareness, language, transportation, and lack of a permanent address.

While stationary clinics usually have the highest capacity and longer daily operating hours, sometimes bringing mobile clinics to the neighborhood is the best way to raise awareness and reduce transportation barriers. Targeted spay-neuter may also be integrated with more comprehensive programs that offer other essential veterinary services such as vaccinations, heartworm preventives, parasite control, and treatment of illnesses and injuries. And these access to care services may be

wrapped into even larger “safety net” programs that seek to keep pets in homes and out of the shelter, such as pet food banks, crisis boarding, behavior training, and pet rehoming.



Pet owners lined up for free spay-neuter services at a mobile clinic made possible by a collaboration between SPAY-4-LA and Downtown Dog Rescue. The clinics serve low-income and homeless pet owners in the Skid Row and Compton areas of Los Angeles. In the first year of regular clinics in Compton Park, shelter euthanasia of pit bulls from the area fell by 30%.

TARGETED PROGRAMS FOR COMMUNITY CATS

Community Cat Management



Shelter Snapshot: Questions About Community Cat Programs?

By Dr. Erin Katribe

Hundreds of thousands of cats are losing their lives in our nation's shelters every year, simply because there aren't enough homes for them. Bird populations are declining, too, because of the impact of humans and development.

What if there were a single solution that could help address both of these issues, one that satisfied cat lovers and wildlife aficionados alike? In reality, we already have this solution—it's community cat programming, and recent research is showing that targeted programs can achieve what both sides want.

Let's look at some common questions regarding community cat programs and what the research shows.

[Read more...](#)

COMMUNITY CAT MANAGEMENT SUPERHIGHWAYS

Across the US, cats are both taken into shelters in higher numbers than dogs and are euthanized in greater proportions. As a result, cats in shelters have a higher risk of a poor outcome. It is estimated that 30 million owned and 30-90 million unowned cats in the US are free-roaming. Given that more than 80% of owned cats are sterilized, **community cats** (unowned or loosely owned free-roaming cats) are likely to be the single largest source of new kittens and shelter cat intakes. Overcrowding of cats in shelters combined with the fact that many free-roaming cats already have a home (either with a traditional owner or as a neighborhood cat) calls for a more nuanced approach than simply bringing cats to shelters. A comprehensive approach to reducing feline intake and euthanasia involves a combination of trap-neuter-return and adoption.

Pathway Planning for Community Cats



No two shelters or cats are the same and how to manage a shelter's most vulnerable population varies by community. Read the complete [Million Cat Challenge Pathway Planning: What to Do with All of These Cats](#)

superhighway roadmap for a comprehensive plan that takes the guesswork out of cat management decision-making and identifies the best outcomes for cats, neighborhoods, and shelters.

FRIENDLY KITTENS (< 6 MONTHS OF AGE)

The superhighway, or preferred outcome, for friendly kittens is to a pet home. Friendly kittens are likely to adapt well to life as a pet, and filling homes in our communities with friendly, happy, healthy, sterilized, vaccinated pets is part of the mission of shelters. Kittens by definition have been born within the current breeding cycle, and therefore are not as likely as older cats to already be adapted to the environment of origin and occupying an ecologically important niche. The food source that their parent accessed may not be adequate to support another generation of cats, and removing these immature cats is not likely to trigger the immigration or increased breeding associated with removing mature adults. Read the complete roadmap for reasons why some kittens might exit the adoption superhighway.

HEALTHY FREE-ROAMING ADULT CATS (> 6 MONTHS OF AGE)

Whether feral or friendly, mature cats in good body condition are by definition occupying a niche in the community, and removal raises the risk of increased breeding or translocation of cats remaining in the community, thereby increasing risks to cats, public health and wildlife. In many shelters there are still abundant adult cats that truly need pet homes (owner surrendered cats, sick and injured cats, victims of cruelty and neglect, cats that can't go back to the location of origin) and fast tracking healthy cats that are doing fine back through RTF/TNR will reserve homes for those truly in need. It is often surprising the cats that turn out to be 'adoptable' when they are not competing with 50 other friendly healthy cats; even shy, older cats and those with medical challenges can be adopted when there is less competition. Mature feral cats are not candidates to become pets. Relocation is resource intensive and has a high failure rate, leading to risks for relocated cats. Limited relocation sites (working cat homes) should be reserved for cats that can't be returned. Read the complete roadmap for reasons why some adult cats might exit the return-to-neighborhood superhighway.

TRAP-NEUTER-RETURN PROGRAMS

Managing community cats by Trap-Neuter-Return (TNR) and Return-to-Field (RTF) are similar in that healthy cats that are thriving in their neighborhoods are captured, sterilized, vaccinated, and returned to the original location. The unique difference is that TNR is carried out in the community whereas RTF involves cats brought to the shelter.

Neuter-return programs



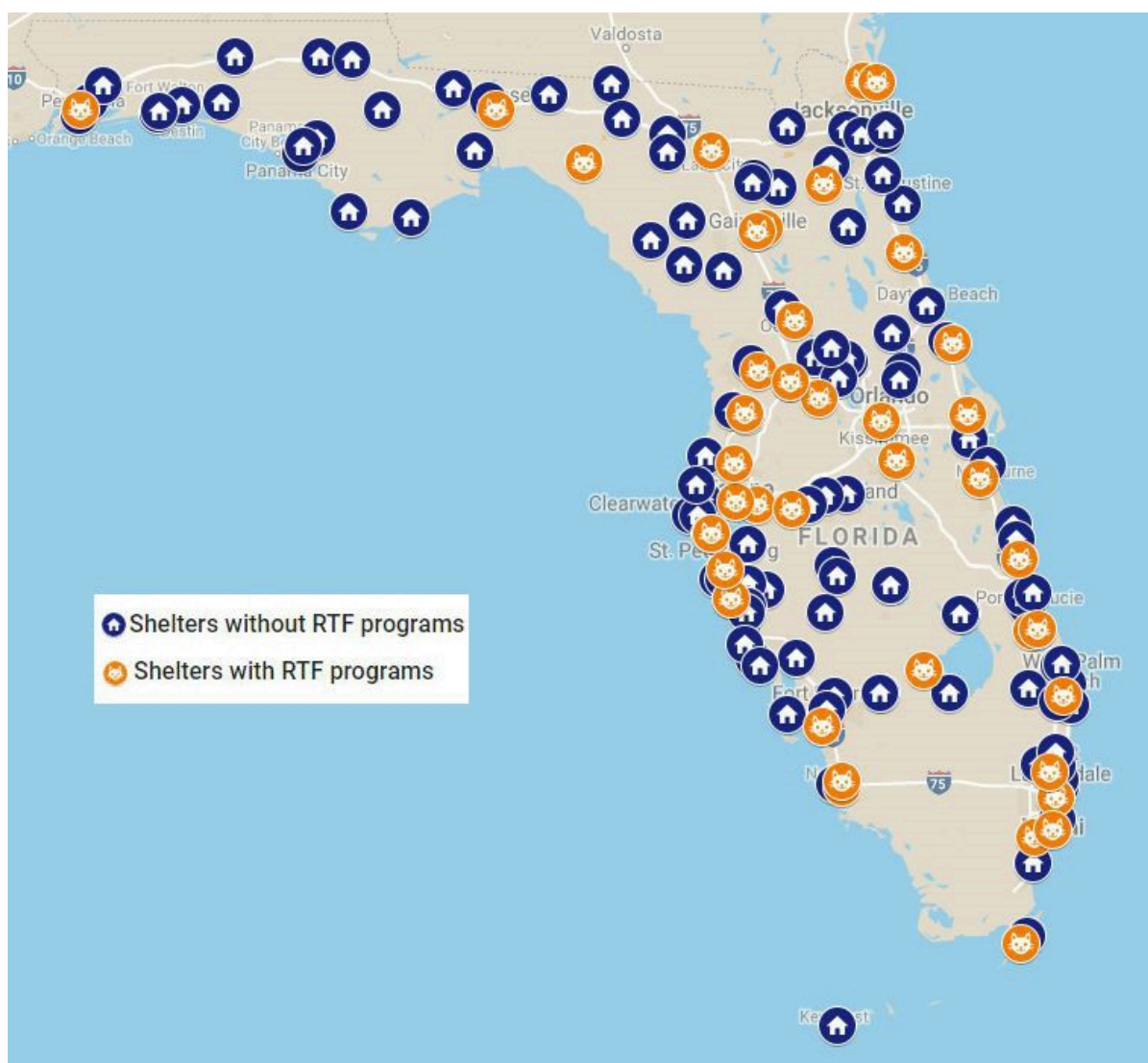
TRADITIONAL TRAP-NEUTER-RETURN PROGRAMS

Traditional TNR programs, such as [Operation Catnip](#) at the University of Florida, encourage caregivers to trap community cats, which are then sterilized, vaccinated, ear-tipped, and returned to their outdoor homes. These programs are generally carried out without the need for shelter services.

RETURN-TO-FIELD PROGRAMS

Building upon the success of traditional TNR programs, many shelters have implemented Return-to-Field (RTF) programs as well. RTF is similar to TNR, except that it is applied to free-roaming cats that have been admitted to the shelter. Good body condition of free-roaming is taken as evidence that the cats have an adequate source of food and are thriving in their neighborhoods. Many of these cats have one or more neighborhood feeders, but their identity may not be known to the shelter. In RTF, healthy unowned cats in good condition are sterilized, vaccinated, and returned to the location of origin as an alternative to euthanasia, even if their source of food is unknown.

In addition to reducing the dependency on euthanasia for managing the number of cats in shelters, RTF facilitates the reunification of outdoor cats with their owners. Some free-roaming cats are outdoor pets who are mistakenly “rescued” and brought to the shelter by Good Samaritans. However, being taken to a shelter may actually reduce a pet cat’s chances of being reunited with its family. Less than 2% of cats brought to shelters are returned to their owners (compared to 20% or more of dogs). Most missing cats are found within a few blocks of their home, and “returning home on their own” is the most common way cats are reunited. In fact, lost cats are 13 times more likely to find their way home on their own than they are to be reunited with their owners through the shelter. That means that RTF not only saves community cats, but it saves lost pet cats as well. The successful track record of RTF programs has led to their rapid expansion across the country.

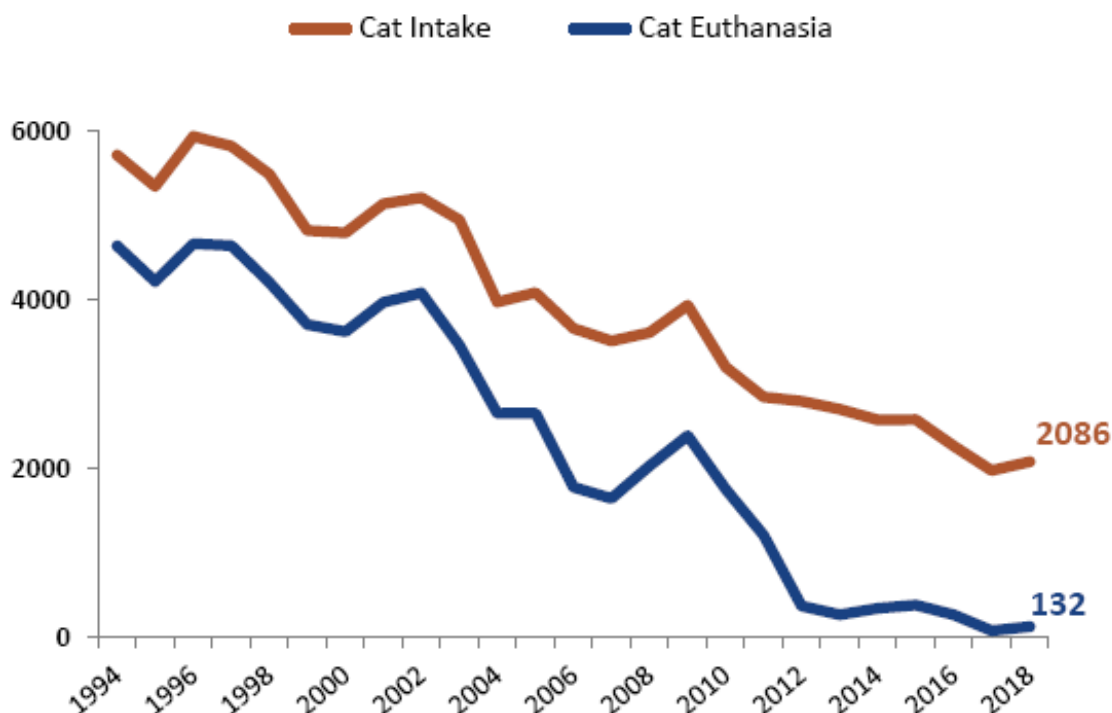


As of 2018, more than half of Florida counties reported shelter-based Return-to-Field programs for community cats that were thriving in their neighborhoods (orange icons). Approximately half were carried out in municipal animal shelters, indicating a shift in animal control paradigms from culling to more cat-friendly options.

TRAP-NEUTER-RETURN IMPACT ON SHELTER LIFESAVING AND COMMUNITY CAT POPULATIONS

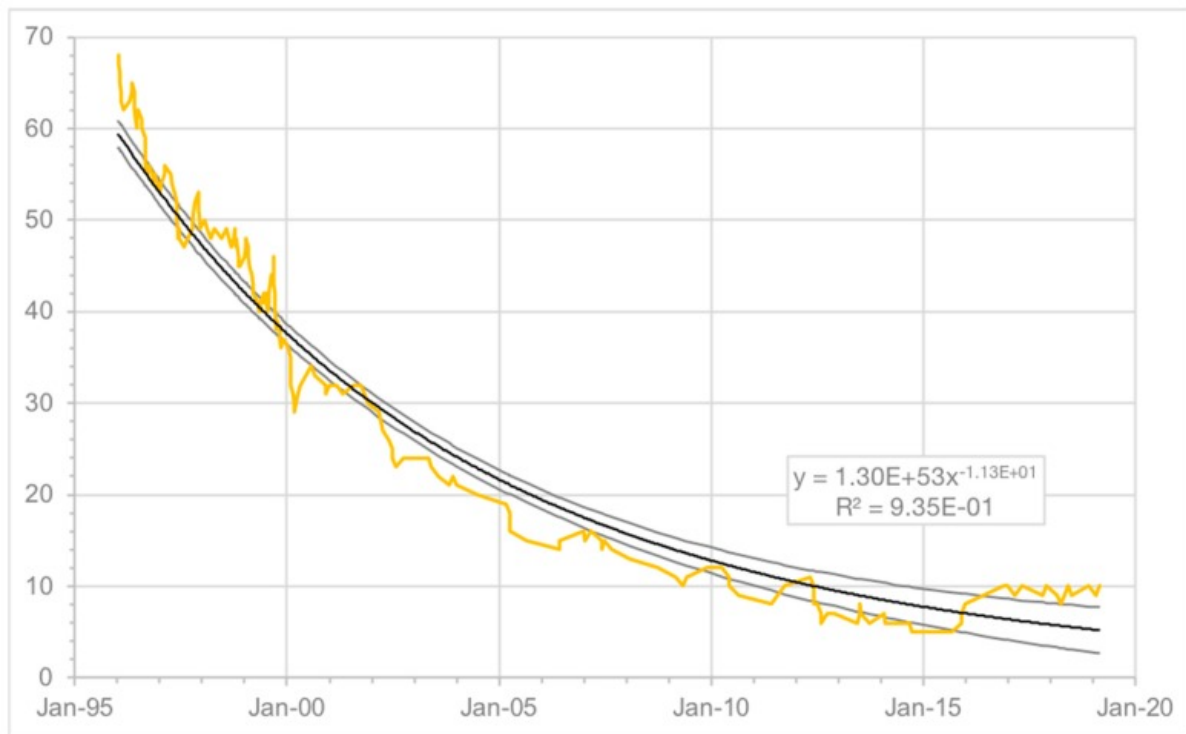
In Alachua County, Operation Catnip’s traditional TNR program contributed to a decrease in the euthanasia of cats at the local shelter from 81% to 42% in 13 years. When RTF was added to return stray shelter cats to their neighborhoods, the euthanasia rate fell even further, to 8% in 2018.

Alachua County Animal Services



Shelter cat intake decreased by 65% since spay-neuter programs for pets and community cats were introduced in Alachua County. A traditional TNR program founded in 1998 followed by a low-cost spay-neuter clinic for pets opening in 2008 were associated with a steady decrease in shelter cat intake and euthanasia. Implementation of an RTF program in 2011 led to a further dramatic decrease in euthanasia such that currently, only cats with hopeless medical conditions are euthanized.

One of the most immediate impacts of TNR programs is a reduction in the number of kittens born in the field, a population that suffers 50%-75% mortality. As a result of the high feline reproductive capacity, kitten deaths usually comprise a large majority of overall mortalities that can be influenced by management actions or inactions. However, TNR must be performed in high enough numbers over the shortest amount of time to achieve the most benefit. With [sufficient intensity](#), TNR offers significant advantages in terms of minimizing preventable deaths, while also substantially reducing population size. High-intensity TNR programs can be further improved by reducing abandonment, or by combining return-to-field for some cats with adoption for others. On the other hand, at lower sterilization intensities the longer-term lifesaving advantages of TNR become much less compelling because large numbers of kittens remain subjected to high mortality rates over time. But, comprehensive TNR programs are not just about saving cats and reducing shelter intake. They also improve neighborhoods, promote public health, and mitigate impacts on wildlife by [reducing the number of cats in the environment](#) over time.



A long-standing TNR and adoption program at the University of Central Florida resulted in a sustained 85% decrease in the cat population from 68 cats in 1996 to 10 in 2019. From [Back to School: An Updated Evaluation of the Effectiveness of a Long-Term Trap-Neuter-Return Program on a University's Free-Roaming Cat Population](#)

THE SHELTER VETERINARIAN'S PERSPECTIVE

At times, the roles and responsibilities of shelter veterinarians may differ from those of private practitioners. In very general terms, shelter veterinarians are responsible for the health of large populations of animals, both inside and outside of the shelter, whereas private practitioners are responsible for the health of individuals.

Euthanasia in animal shelters for population control is still the single largest cause of death for cats and dogs, more than any infectious disease or health condition. This preventable tragedy should be a call to action for the veterinary community. Delaying sterilization often results in unplanned pregnancies that populate shelters with unwanted offspring. On the other hand, a private practitioner with a known, responsible client, may have the luxury of time before spaying or neutering a pet. They can discuss the pros and cons of spay-neuter with their client, and together make an informed decision based upon current data. Watch for more developments as more research informs this rapidly changing topic.

After much research and consideration, Dr. Newgrad feels comfortable explaining her shelter's policy to sterilize all animals prior to adoption. She will begin her conversation with Ms. Rich by asking what her concerns are, diplomatically sharing with her the evidence-based research, and underscoring the importance of population control from a shelter medicine perspective. Expressing gratitude for Ms. Rich's years of support and her interest in providing a loving home for this little pup will also be key points for Dr. Newgrad to cover.



Whether it's a career in spay-neuter surgery, shelter practice, volunteerism in remote areas, or sterilization of pets in a private clinic, the principals of high-quality surgery as defined by the ASV Guidelines always apply. Few innovations have enhanced the welfare of cats and dogs as much as high-impact spay-neuter.

STERILIZATION IN THE SHELTER ENVIRONMENT

At what point during an animal's shelter stay should spay-neuter be performed? Remember that each individual animal benefits from the shortest possible length of stay (LOS). Additionally, a shorter LOS reduces shelter crowding and all of its negative consequences. Surgery should be timed so as to avoid extending any animal's stay in the shelter.

Historically, some shelters have waited until the animal was adopted before scheduling surgery. This was particularly true in shelters with low live-outcome rates, because investing in surgery for animals that would not be placed was not a good use of resources. However, delaying surgery in shelters with high live-outcome rates can contribute to bottlenecks that add unnecessary animal care days. For prompt placement, the optimal time to perform spay-neuter is as soon as possible after admission to the shelter so that animals can go home at the time of adoption.

Most shelters are required by law or internal policy to assure that all of its animals are sterilized. However, there are several ways to meet this obligation. If they have in-house surgery capacity, they can schedule spay-neuter for the first day the animal becomes the property of the shelter (often the day of intake for owner-surrendered animals or after a short holding period in the case of stray animals). Although not ideal, sterilization vouchers can be issued if the shelter cannot provide prompt surgery. These vouchers might be redeemed at a later time when the shelter has surgery appointments available or at a private veterinary clinic. Rigorous follow-up on animals released intact is required to assure that the surgery is not delayed. Shelters that do not have adequate in-house surgery services can develop agreements with local veterinary practitioners to assure that newly adopted pets are promptly sterilized. In one example, a rural shelter with no on-site veterinarian transports newly adopted pets to a private clinic for surgery. Then the adopter picks up their new family member from the clinic when the surgery has been completed. This is a great way for the new adopter to begin a relationship with a local practitioner to provide ongoing care.



Although it is ideal to sterilize animals prior to leaving the shelter, collaborations with other organizations or with private veterinary clinics can be developed when the shelter lacks a surgical facility or sufficient capacity to keep up with demand.

IDENTIFICATION OF STERILIZED CATS AND DOGS



A tipped ear identifies free-roaming community cats as sterilized from a distance (left), and a tattoo on the abdomen identifies cats that have already been spayed or neutered (right).

Reliable identification of previously sterilized animals can be challenging for many reasons, justifying the need for a single standard indicator of sterilization. Minimally invasive spay-neuter surgical techniques may result in negligible scarring, and observable scars may be indistinguishable from those

due to other procedures (e.g., cesarean-sections) or nonsurgical trauma. Males lacking scrotal testicles may be cryptorchid rather than castrated. Additionally, some animals such as feral cats cannot be safely examined prior to sedation. Approximately 2% of the cats and dogs presented to spay-neuter clinics have been previously sterilized, unbeknownst to their caregivers. At a minimum these needless veterinary visits waste professional time and valuable surgery slots. At worst, animals are harmed by enduring unnecessary anesthesia and/or exploratory surgery, with its attendant morbidity and mortality.

To avoid this, the Association of Shelter Veterinarians' 2016 Veterinary Medical Care Guidelines for Spay-Neuter Programs *"recommends the use of a simple green linear tattoo to identify all neutered pet animals and ear-tipping to identify all community cats."* Veterinarians with the highest spay-neuter caseload, and presumably the highest risk of encountering previously sterilized animals, are more likely to utilize sterilization indicators and to have higher levels of satisfaction with their use than veterinarians who performed fewer spay-neuter surgeries. For female cats, female dogs, and male cats, the recommended tattoo site is on the ventral abdomen just caudal to the umbilicus, even if a flank approach to ovariohysterectomy is used. For male dogs, the recommended tattoo location is parallel to the prepuce in the prescrotal region. Such placement can easily be seen during physical examination or when hair is clipped in preparation for surgery. It is in the interest of all cats and dogs to receive standardized sterilization indicators at the time of surgery, regardless of their ownership status or where the surgery is performed.

NON-SURGICAL STERILIZATION

Maybe one day, there will no longer be a need for mass surgical sterilization campaigns to prevent unwanted litters. While there are no approved contraceptive products currently in the US, research is ongoing for non-surgical options. At the forefront of this effort the Alliance for Contraception in Cats and Dogs. The Michelson Prize and Grants program has incentivized research into nonsurgical [alternatives](#) for population control with \$50 million in research grants and an as yet unclaimed \$25 million prize to the researcher who develops a permanent, single-dose contraceptive for female and male cats and dogs.

HQHVS^N: THE Q STANDS FOR QUALITY

The Association of Shelter Veterinarians' [2016 Veterinary Medical Care Guidelines for Spay-Neuter Programs](#) was created by a task force of experts in anesthesia, surgery, infection control, and emergency care to provide uniform recommendations for spay-neuter programs. These Guidelines represent best practices, regardless of the type of clinic in which spay-neuter is performed, including stationary, mobile, MASH, community cat, shelter, or private practice. Categories include Patient Care and Clinical Procedures, Preoperative Care, Anesthetic Procedures, Surgical Care, Postoperative Care, and Operations Management. These Guidelines are intended to be a resource for all settings in which spay-neuter surgery is performed, to improve the quality of care for each individual patient, reduce risks, and optimize patient outcomes.

Most spay-neuter clinics set a high-volume goal to fulfill their missions. A typical HQHVS^N veterinarian performs 30 or more surgeries daily. Note that the **Q** always comes before the **V**, but they are not mutually exclusive. At first it might seem that achieving high surgical numbers might come at a cost of patient safety, but [a recent report](#) found the opposite to be true. Peri-operative mortality in a HQHVS^N clinic was approximately one-tenth the mortality rate reported for private practices that perform a broader scope of services. This likely is due to the continuous refinement of techniques and protocols based on a high level of narrowly focused experience. In addition, teams that specialize in a limited spectrum of procedures develop higher proficiency levels in those tasks.

Surgeon and team experience is part of the explanation, but it has also been shown that the consecutive repetition of specific procedures, without interruption by other procedures, is an independent predictor of reduced mortality in human surgery.



HQHVSN teams specializing in a limited spectrum of sterilization procedures develop exceptional skills, efficiency, and teamwork resulting in reduced costs, morbidity, and mortality compared to teams performing a broader array of procedures typical of private practice.

KEEPING THE “Q” IN HQHVSN IN RESOURCE-SCARCE LOCATIONS

The global need for spay-neuter services is great, and not all locations have a dedicated surgery suite. Many shelter veterinarians practice in rural, pop-up, or international areas where meeting ASV Guidelines pose a greater challenge. However, resourceful veterinarians have developed ways to comply, even in locations that may lack such basics as electricity and running water.

CASE STUDY 1: SPAYATHON FOR PUERTO RICO

While the US mainland has made significant strides in improving companion animal welfare, the commonwealth island of Puerto Rico has been largely left behind. Puerto Rico suffers from crippling poverty, limited veterinary services, and a large stray dog population. Animal shelters in Puerto Rico are overcrowded and under-resourced, with euthanasia rates frequently exceeding 90%. In 2017, Hurricane Maria delivered a devastating blow to the island, causing increased emigration, pet abandonment, and stray animal suffering.

Spayathon for Puerto Rico was initiated to provide desperately needed sterilization services to address uncontrolled dog reproduction while simultaneously building local veterinary capacity and facilitating responsible pet ownership. In a collaborative effort led by the Humane Society of the United States, international organizations specializing in HQHVSN surgery paired with local animal welfare groups in simultaneous quarterly week-long, multi-site, high-volume surgical clinics for owned animals. Smaller clinic events held between the rounds target free-roaming and shelter animals. Initiated with a goal of 25,000 surgeries over one year, overwhelming demand led to an expansion to 85,000 surgeries planned over 3 years. Clinics are held in sports arenas that are temporarily converted into surgical facilities. Despite the nontraditional locations, the clinics go to great lengths to meet all standards of care, including separating the operating room from non-surgical activities, autoclaving packs, pain management, and after-hours emergency coverage.

Spayathon offers immediate impact in a region of extreme need, but long-term solutions require local capacity building. Partnerships providing hands-on surgical training for local veterinary teams and the donation of all equipment and supplies acquired for Spayathon to the Puerto Rican veterinary community at the conclusion of the campaign will support sustainability and the establishment of permanent HQHVSN clinics on the island. Field manuals developed and continuously refined for all sectors of operations including [organizing staff](#), [local ground teams](#), [surgical teams](#), and [general audiences](#) are shared with the international animal welfare community to facilitate replication and impact of the Spayathon model far beyond the borders of Puerto Rico.



A free Spayathon 4 Puerto Rico HQHVSN clinic established in a basketball arena and staffed by volunteers awaits patients. The clinic has capacity for 20 veterinary surgeons who can sterilize more than 700 patients in a day.

CASE STUDY 2: “SPAY-NEUTER TOURISM”

Unfortunately, not all charitable spay-neuter programs achieve appropriate standards of care and provide services communities need most. A recent issue of the [AMA Journal of Ethics](#) devoted to the topic in human medical education noted, “*Programs relying on short-term fixes to long-standing infrastructure and resource deficits can exploit some of the world’s most vulnerable, poor patients.*” Unethical programs often allow inadequately trained volunteers to represent themselves as skilled practitioners, to perform procedures they could not legally perform back home, abandon basic standards of care, and focus on what the volunteers want to do rather than what the greatest need is.

Find the Problems

These images were shared on the website of an organization that recruited undergraduate students and veterinary students to participate in international spay-neuter campaigns. Do you see any violations of the ASV spay-neuter guidelines in these images? Click on the hotspots for more information.



An interactive or media element has been excluded from this version of the text. You can view it online here:
<https://ufl.pb.unizin.org/integratingveterinarymedicinewithsheltersystems/?p=365>



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<https://ufl.pb.unizin.org/integratingveterinarymedicinewithsheltersystems/?p=365>

HQHVSIN IN REMOTE LOCATIONS - GETTING IT RIGHT

CASE STUDY 3: HQHVSIN IN A REMOTE TEMPLE

Ethical programs investigate the local community's needs and integrate in a way that assures cultural humility, continuity of care, sustainability, progressive development of local infrastructure, and measurable lasting impact. There are many excellent volunteer opportunities around the world. Some examples include [ViDAS](#), [Animal Balance](#), [World Vets](#), and [RAVS](#).

Getting it Right

This image is from a volunteer spay-neuter program in Cambodia. The team is working in a temporary open-air clinic set up in a temple in a very hot climate. What do you see that complies with ASV spay-neuter guidelines? Click on the hotspots for more information.



An interactive or media element has been excluded from this version of the text. You can view it online here:

<https://ufl.pb.unizin.org/integratingveterinarymedicinewithsheltersystems/?p=368>

Watch This



Listen to this presentation [Achieving Best Practices in a Non-Traditional Setting](#) by Dr. Katherine Polak, as she explains how to adapt essential standards of care to non-traditional international spay-neuter settings. (27 min)

Dr. Katherine Polak currently serves as the Head of Stray Animal Care – Southeast Asia for [Four Paws International](#), a global charity working to improve the conditions of free-roaming dogs and cats through sterilization programs and to combat the cruel dog and cat meat trade. Dr. Polak completed a residency in Shelter Medicine at the University of Florida Maddie's Shelter Medicine Program and an internship in Shelter Medicine at Colorado State University. She was one of the first veterinarians to become boarded in the new specialty of Shelter Medicine. Before joining Four Paws, she worked at Soi Dog Foundation in Thailand, where she launched a large-scale sterilization campaign aiming to sterilize 80% of Bangkok's estimated 640,000 free-roaming dogs and managed a large animal shelter in Phuket. Dr. Polak also helped to create the first ever dog meat-free city in South Korea, developed



strategies to combat the dog meat trade in Vietnam and Indonesia, and worked to end the mass poisoning of stray dogs in Yangon, Myanmar.

OPPORTUNITIES TO MASTER SPAY-NEUTER SKILLS

Ready to sharpen your spay-neuter skills? There are many opportunities for veterinary students to gain surgical experience necessary to be practice-ready for the spay-neuter suite on graduation day. Externships, clerkships, and service-learning travel provide hands-on opportunities in which students practice every step of the process from admission to surgery to discharge under the watchful eye of a skilled mentor. Additionally, volunteer opportunities may exist with your local humane society, HQHVSN clinic, or municipal shelter.

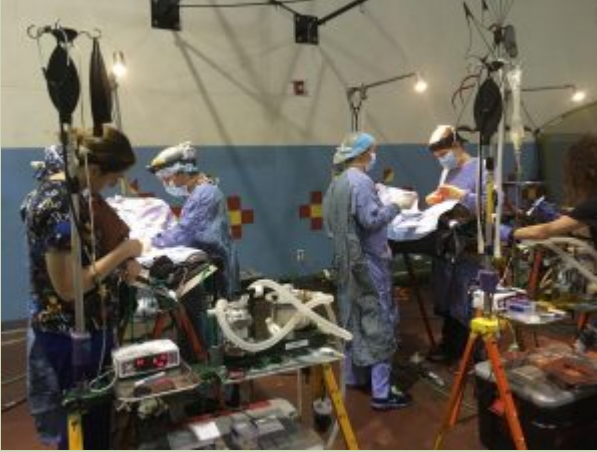
Training is also available for practicing veterinarians, surgical teams, and practice managers at the ASPCA Spay/Neuter Alliance in Asheville, North Carolina. The ASPCA also maintains a comprehensive [website](#) with time-tested medical protocols, training videos, and practice tips and offers support for opening new clinics and on-site consultations to refine operations.

Hands-On Training Programs for HQHVSN



ASPCA Spay/Neuter Alliance for Veterinary Students

ASPCA Spay/Neuter Alliance is a traditional favorite externship for students from across the country. Not only does it boast a world-renown training program designed specifically for junior/senior veterinary students, but it has on-site dorms and is located in beautiful Asheville NC. It's no surprise that spots in this coveted program fill up years in advance, so it's never too early to sign up. [Read more...](#)



HSUS Rural Animal Veterinary Services

RAVS has opportunities for students at all training levels depending on their skill. RAVS is a non-profit veterinary outreach program combining community service and veterinary education to bring free veterinary services to underserved rural communities where poverty and geographic isolation make regular veterinary care inaccessible, often on Native American reservations and international locations. BEWARE – RAVS trips are addictive and volunteer spots fill up quickly. [Read more...](#)



Operation Catnip of Gainesville

Operation Catnip is a free spay-neuter clinic for community cats in Alachua County. Each month, volunteers spay and neuter approximately 200 cats in a single day. There are valuable training opportunities for students of all skill levels, including performing anesthesia, surgical preparation, venipuncture, vaccination, recovery, and of course ... surgery. [Read more...](#)



Veterinary School Rotations, Clubs, and Social Networks

You don't have to travel far to find HQHVSN training opportunities. Veterinary students can check out their school's clinical rotations and clubs such as the Association of Shelter Veterinarians. Veterinarians can network through professional associations and social media groups devoted to HQHVSN.



Externships for Veterinary Students

A variety of spay-neuter externships at animal shelters and HQHVSN clinics provide hands-on experience in a mentored environment. [Read more...](#)



Veterinarian Training

Learn about the ASPCA Spay/Neuter Alliance Veterinarian Training program for graduated veterinarians.



Spay/Neuter Surgical Team Training

Learn about ASPCA Spay/Neuter Alliance Spay/Neuter Surgical Team Training for staff who currently work together in a mid- to high-volume environment.



Spay/Neuter Clinic Mentorships

Learn about opening or expanding a spay/neuter clinic with ASPCA Spay/Neuter Alliance's spay/neuter mentorship program.

Veterinarians, Surgical Teams, and Practice Managers

In addition to student externships, the ASPCA offers hands-on training for veterinarians and veterinary teams. The ASPCA also provides HQHVSN clinic start-up consultation and hosts training videos, protocols, and checklists on a website devoted exclusively to HQHVSN. [Read more...](#)

SPAY-NEUTER CONTROVERSIES

While the benefits of spay-neuter are well-documented, it is not without controversy. Disagreement persists on a number of issues: the age of the animal when sterilized, long-term health impacts, the quality of the procedure performed by HQHVSN clinics, and competition between HQHVSN clinics and private practitioners. As a shelter veterinarian, it is important to understand these issues, to be open to newly emerging information, and to communicate professionally with colleagues and policy makers.

CONCERN ABOUT AGE: PEDIATRIC SPAY-NEUTER

Decades ago, veterinary students were taught that the optimal age for spay-neuter was at least 6 months of age. Some even advocated that females should be allowed to experience at least estrous cycle or even a pregnancy before sterilization. Certainly, delaying surgery to this extent virtually assured that unplanned and unwanted pregnancies would occur, ultimately perpetuating shelter euthanasia.

Prior to widespread acceptance of pediatric spay-neuter, shelters commonly adopted out unaltered puppies and kittens with a contract for the adopter to have the pet sterilized by a certain age. With inconsistent compliance, this proved to be an ineffective means of population control.

The development of anesthesia and surgical techniques tailored to pediatric patients in the 1980s led to the recognition that pediatric surgeries are easier to perform than surgeries on adult animals and cause less discomfort for the patients. Anesthesia and surgery times are shorter, perioperative complications are lower, and rates of recovery and healing are faster.

LONG-TERM HEALTH IMPACTS OF SPAY-NEUTER: THE CAT

In 2016 the Veterinary Task Force on Feline Sterilization met to review existing research and to develop recommendations for **the optimal age to spay-neuter cats**. After reviewing the scientific literature, they released the following position statement:

Risks and Benefits of Spay-Neuter in the Cat: What the Data Tells Us

Veterinary Task Force on Feline Sterilization Recommendations for Age of Spay and Neuter Surgery

Current recommendations for the age to sterilize (spay/neuter) cats are arbitrary and inconsistent. Adoption of evidence-based guidelines is expected to limit confusion among cat owners, reduce the risk of unwanted litters, and maximize health and welfare benefits. A task force of veterinarians and experts selected from private and corporate veterinary practice, feline specialty practice, shelter practice, organized veterinary medicine, feline health research, behavior, and academia was convened to review the currently available evidence for the 'optimum age for spaying or neutering cats.' The Veterinary Task Force on Feline Sterilization task met on January 15, 2016 in Orlando, Florida. The following key findings and proposals emerged from a review of the currently available scientific literature and group discussion:

- Recommendations for the optimal age to sterilize cats may differ from the age to sterilize dogs. Current scientific evidence documents benefits of spaying kittens before the first estrous cycle, including the following:
 - Decreased risk for mammary carcinoma
 - Elimination of reproductive emergencies such as pyometra and dystocia
 - Avoidance of unintended pregnancies that may occur as early as 4 months of age
 - Potential decrease in behavioral problems linked with cat relinquishment.
- Current evidence does not support an increased risk for cats of complications or long-term adverse health effects with pediatric (6-14 weeks) or juvenile (>16 weeks) sterilization.
- More controlled prospective research specifically examining different ages of sterilization in cats is needed. As new information becomes available, the recommended age for sterilization of cats should be revisited.
- There is potential to increase the number of sterilized cats and reduce the unplanned/unwanted litters of kittens if veterinarians routinely schedule this surgery for client-owned cats at the end of the kitten vaccination series.

Given the known benefits of sterilization and the lack of evidence for harm related to age at which the procedure is performed, the Veterinary Task Force on Feline Sterilization calls for veterinary practitioners and professional associations to recommend sterilization of cats by five months of age. This provides veterinary practitioners with a consistent message that may increase veterinary visits and spay/neuter compliance while reducing the risk of pet relinquishment and unwanted offspring.



The Journal of the American Veterinary Medical Association reported that the call to sterilize cats before five months of age gained broad acceptance by the veterinary profession. These recommendations resulted in the [Feline Fix by Five](#) campaign and are supported by the American Veterinary Medical Association, the American Association of Feline Practitioners, the American Animal Hospital Association, and the Association of Shelter Veterinarians, among others.

LONG-TERM HEALTH IMPACTS OF SPAY-NEUTER: THE DOG

Unfortunately, **the optimal age to spay-neuter dogs** is not as clear-cut. A growing number of studies have been published on possible adverse health and behavior impacts of canine sterilization on such conditions as neoplasia, orthopedic and joint diseases, urinary incontinence, obesity, and other conditions, often with conflicting results. This places veterinarians in the difficult position of sifting through the data to make the right recommendation for each pet. One size does not fit all.

Fortunately, in June of 2017, this article was published, to help guide our decision-making as veterinarians: [Determining optimal age for gonadectomy in the dog: a critical review of the literature to guide decision making](#). There is also a webinar by Dr. Philip Bushby, [The Optimal Time for Spay/Neuter: An Analysis of Critical Spay/Neuter Literature](#).

Risks and Benefits of Spay-Neuter in the Dog: What the Data Tells Us

Some key points from these resources are as follows:

- Many current studies are weakened by the reliance on retrospective records involving a few select cancer-prone dog breeds from academic referral centers that may not represent the general dog population.
- Prospective controlled studies are preferred over retrospective, as one is less likely to be missing data points or having to rely upon memory. Retrospective studies cannot control for confounding variables such as the effect of genetics, environment, diet, frequency and quality of medical care, and lifestyle.
- Multiple studies have shown that sterilized animals have increased life-spans. It has also been demonstrated that certain health concerns, such as cancer, increase with age. Therefore, one might expect an increased prevalence of the condition being studied simply because the sterilized animal lived longer than its intact control.
- Even if a condition is seen twice as often in a sterilized animal, if the incidence is rare, it will still be rare when doubled. Look at the impact in terms of the frequency of occurrence and the seriousness of the condition.
- The high risk of mammary tumors and life-threatening pyometra in intact female dogs provides a strong argument for spaying female dogs prior to their first heat.
- Small dogs should be sterilized prior to five months of age as there is no evidence of orthopedic issues in small dogs.
- There is more concern about orthopedic conditions developing in large-breed dogs, especially if sterilized prior to maturity. Objective risk-benefit data is scarce, and this is an open topic of active research. While shelters often have blanket policies to sterilize all animals prior to adoption, private practitioners have an opportunity to tailor spay-neuter timing to the needs of individual animal

CONCERNS ABOUT COMPETITION

Local veterinary practices sometimes worry that when a low-cost clinic opens nearby it will affect their business by luring away paying clients. In some locations, low-cost spay-neuter clinics have been forced to close. Some states prohibit shelters or nonprofit clinics from providing veterinary services to the public. Acrimony peaked in Alabama with an attempt to ban all spay-neuter clinics from the state and to threaten the licenses of veterinarians who worked at nonprofit clinics.

Controversy Regarding Low-Cost Clinics

Comprehensive coverage of the battle over low-cost spay/neuter clinics in Alabama

The contentious debate on the role of the state's low-cost clinics continues.

Aug 27, 2014
By dvm360.com staff
DVM360 MAGAZINE



Ala. spay-neuter

Judge Recommends Alabama Spay-Neuter Veterinarian Be Found Not Guilty After Administrative Hearing

By Julie Scheidegger

Dr. Margaret Ferrell is touted as “one of the best surgeons he has seen in 42 years” by expert witness, while dissenters continue to claim non-profit, low cost clinics are unfair competition that provide substandard care.

[Dr. Bushby] contradicted the accusations of the board and its expert witnesses, saying Ferrell is well

within the standard of care in the time she spends on a surgery, physical exams and post-operative care. “What Dr. Ferrell does is extremely high quality and exceeds national standards,” he said, adding, “Dr. Ferrell’s methods are very safe and used all over the country. Dr. Ferrell is not dangerous.” [Read more...](#)

Despite these conflicts, there is growing recognition that a variety of factors, including fast-rising veterinary costs, are contributing to a widening gap in access to veterinary care. The University of Tennessee’s Veterinary Social Work program and the Access to Veterinary Care Coalition have stated:


“There are more than an estimated 23 million pets living with families that cannot financially provide for their veterinary care. When these pets become ill or get injured, their families have limited options to help them. Their unmet needs mean unnecessary morbidity and mortality, and an unacceptable threat to public health.”

The [Access to Veterinary Care Coalition](#), which describes itself as “a diverse group of for-profit and nonprofit veterinary services providers, animal welfare and social services professionals, and educators,” published a [national study](#) to “identify barriers that households face, as well as best practices among those delivering veterinary care to underserved pet owners.” [Learn more about this multi-disciplinary approach](#) to solving the needs of pets and the people who love them, as well as efforts to decrease conflict around the provision of veterinary care.

Practitioners offering low-cost services to the public should be prepared to explain the rationale for such services. A recently published national survey, [Characteristics of clients and animals served by high-volume, stationary, nonprofit spay-neuter clinics](#), confirmed what HQHVSNS staff and supporters have long suspected, that HQHVSNS clinics predominantly provide care to underserved populations and animals lacking even the most basic veterinary care, even when income restrictions were not used. The study found that most clients earned less than \$30,000 per year and that the vast majority of patients had never been to a veterinarian before or received a rabies vaccine. A quarter of female pets had already produced at least one litter.

Rather than serving as competition for private practices, HQHVSNS clinics are providing essential services that pets might not otherwise receive. In addition to the impact of spay-neuter on reducing pet overpopulation and shelter euthanasia, these HQHVSNS clinics meet a critical societal need and contribute to the advancement of One Health.

SPAY/NEUTER IN THE COVID ERA



OUR COVID-19 RESPONSE

We're here for you and your pets. We're taking extra precautions for everyone's safety, but we want you to know we're open and here to help.

For the most up-to-date information on clinic hours and closures please click below.

[Click for Clinic Updates](#)

Spay-neuter has been intricately woven into the fabric of animal lifesaving for more than 3 decades. And then suddenly, COVID-19 challenged every aspect of daily life and shelter operations, rewriting the book on what essential services are. The public was asked to stay #SaferAtHome to avoid overloading the healthcare system and that **every exception to physical distancing would decrease its efficacy.**

Essential procedures were defined as emergency treatment for conditions that are life-threatening, rapidly deteriorating, may cause permanent dysfunction, or for the relief of suffering. Conditions such as pyometra and dystocia are reproductive emergencies, but routine spay and neuter services for the public, shelter pets, and TNR are not. What did that mean for spay/neuter programs? Even if clinic personnel could distance themselves from the public with curbside intake and discharge, performing surgery would bring staff to work and into close proximity with each other.

Between mandated statewide stay-at-home orders and business decisions to close operations to protect staff, help slow the spread of infections, and preserve critically needed medical supplies, most spay-neuter clinics in the US and Canada shuttered their operations by mid-March, 2020.

Pausing spay-neuter was a blow to organizations across North America for whom HQHVSN was a critical component of population control and shelter lifesaving. It came at the beginning of kitten season, meaning that thousands of kittens would be born to community cats. In addition, staff were furloughed and business income plummeted, putting some clinics in jeopardy of bankruptcy. This clinic director explained how she came to the difficult decision to close her clinic:

"Our clinic is closing tomorrow. Today is the last day of surgery. I am the Executive Director and I agonized over this decision. I agree 100% that our surgeries are essential, especially this time of year. Initially, my goal was to stay open

unless given an order by the government to close. We enacted social distancing measures last Monday, March 16. I felt good at that time that we were doing everything we needed to do. As time has gone on and I have read more and more information from the CDC, AVMA, etc., I have come to the conclusion that there is no way that I can ensure my staff's safety. I realized that I would not be able to live with myself if one of my employees or their family members contracted this virus. I don't want to even think about if one lost their life. When you add into account that anyone who gets admitted into the hospital (for any reason) will not be allowed to have their loved ones visit, that makes it even worse. Then, on our HQHVSN Directors discussion group, someone made the comment that by keeping our clinics open we are encouraging people to break the quarantine and social distancing recommendations by coming to our clinic. That was the final tipping point for me. I know that this is going to cause an increase in puppies and kittens in the shelters, but I have to take care of my staff and community first."

Suspending spay-neuter had consequences for shelters too. In transitioning to essential services and reduction of sheltering capacity, they rapidly evacuated shelter animals to new adoptive and foster homes whether they were sterilized or not. This reversed decades of commitment to "neuter before adoption" and resurfaced the use of [spay-neuter agreements](#) to have surgery performed when routine procedures resumed.

National Animal Care and Control Association's Statement on Releasing Unaltered Pets from Animal Shelters During the COVID-19 Pandemic



In light of the request by the U.S. Surgeon General for human and animal organizations to suspend 'non-essential' surgeries to preserve critical medical supplies, the University of Wisconsin School of Veterinary Medicine, in collaboration with other leading schools of shelter medicine, issued a [recommendation for animal shelters](#). NACA supports and expands upon this initial statement.

If shelters are unable to or decide for any reason not to alter pets during the COVID-19 pandemic, they should continue providing live outcomes for sheltered cats and dogs. **The lack of immediately available spay and neuter services should not be a reason for shelter euthanasia.** Further, anticipated personnel and supply resource depletion in shelters dictate that essential services and lifesaving capacity be preserved by reducing the number of animals in custody as quickly as possible. This should be done by expediting the movement of animals to adoptive or foster homes and not extending the stay of animals in the shelter for spay or neuter surgery.

Depending on state and local laws, three possible ways to outcome unsterilized pets include:

- Adopt out pets unaltered and provide vouchers for future use to get the pet spayed or neutered. Staff and volunteers can provide follow-up after the COVID-19 pandemic to ensure pets get altered once surgeries can be performed.
- Outcome pets as 'foster-to-adopt.' This means they live with their new family but aren't officially

'adopted' until they can return for their spay/neuter appointment or provide documentation of sterilization by another provider.

- If the organization does not have the resources to provide spay and neuter in the future, they should consider releasing animals unaltered with a list of low-cost spay and neuter services in the community.

Find a complete set of guidance statements regarding animal control and animal sheltering in the COVID era on the [NACA website](#).

As stay-at-home orders began to lift in May, 2020, clinics started operating again with new procedures to promote physical distancing from the public. Clients were told to wait in their cars outside, to use waiting list apps to know their turn, and to use cashless payment methods. It is proving more difficult to maintain physical distancing inside the clinic where room layouts have traditionally crowded office staff together and surgical staff are used to working side by side. To varying degrees, clinics have implemented masks for all personnel, additional personal protective equipment (PPE such as face shields, gloves and outerwear), daily pre-shift health assessments, paperless operations, rearranging workspaces, splitting teams, revisiting protocols to facilitate increasing distance among the surgery suite team, and a general reduction in patient number and personnel on site.

COVID-19 Spay/Neuter and Wellness Clinic Preparedness Guide

This [COVID-19 Spay-Neuter and Wellness Clinic Preparedness Guide](#) is a collaborative effort led by shelter and spay-neuter professionals representing different aspects of veterinary clinic operations. The intention is advisory in nature, based on current knowledge. This guidance is not a standard or regulation and creates no legal obligation. It is intended to help clinic leadership formulate the safest and most reasonable approaches to operating spay/neuter and wellness clinics and maintain lifesaving functions. Communities vary greatly and what may be safe and feasible for one community may not be for another. Organizations should adhere to state and local laws and regulations at all times.

The following excerpt on patient priority is a sample of the useful information to assist in re-opening spay-neuter services contained in this detailed document:

Priority patients for spay/neuter services

- Pregnant
- High risk of pregnancy (mixed-sex households, outdoor cats)
- Intact animals causing behavior/housing issues (cats in heat, marking)
- Emergency procedures

Priority clients

- Housing insecurity with intact animals
- Managing community cats

- Recently adopted intact animals

[Read more...](#)

While many communities temporarily paused elective sterilization surgeries during the COVID pandemic, the placement of unsterilized animals in homes created some challenges. Spraying by male tom cats created a high risk for adoption/foster failure, so some programs considered castration to be a life-saving essential procedure and continued to neuter male cats. Fortunately, a cat can be anesthetized and castrated by a single veterinarian, so there was no need for personnel to come into close contact. Because COVID struck during the feline breeding season, many young female cats went into repeated estrous cycles, a risk factor for frustration and unintended pregnancy. [Estrous suppression with megestrol acetate](#) is an option for short-term contraception of female cats until spay/neuter services are restored. This drug is administered weekly in food and can be prescribed from compounding pharmacies. Megestrol acetate has also been fed to community cats pending trapping for TNR programs.

Want to Learn More?

- [Webinars and resources about spay-neuter in the COVID era](#)
- [COVID-19 Spay/Neuter and Wellness Clinic Preparedness Guide](#)
- [ASPCA Statement Concerning Spay and Neuter of Shelter Animals During the COVID-19 Crisis](#)
- [ASPCA Statement of Support for Veterinarians Considering Megestrol Acetate as a Temporary Contraceptive for Female Cats During COVID-19](#)
- [Alliance for Contraception in Cats and Dogs: COVID-19 Resource: Use of megestrol acetate in female cats while sterilization surgeries are being delayed](#)

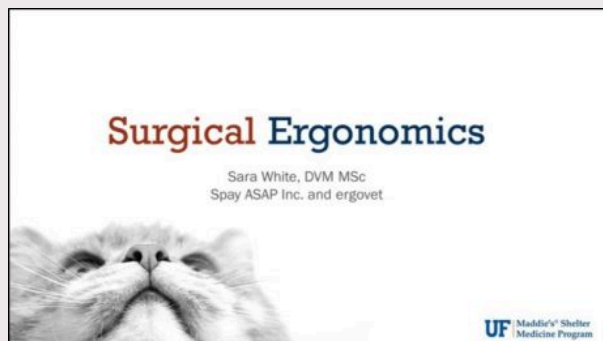
SELF-CARE OF THE SPAY/NEUTER SURGEON

HQHVSN is demanding work. In addition to an obligation to their patients, the spay-neuter surgeon is responsible for their own physical and emotional care, as well as the care of their team. For some shelter veterinarians, performing spay-neuter procedures occupies much of the day. As such, it is important to recognize how ergonomics and repetitive motions can impact the surgeon's physical well-being.

It is inevitable that adverse events will occur in the spay-neuter clinic, whether it be during anesthesia, the surgery itself, or post-operatively. How the surgeon copes with these stressful events may dramatically affect their career satisfaction.

Dr. Sara White has studied both the physical and emotional impact of spay-neuter practice. Her practical and evidence-based advice empowers veterinary surgeons to mitigate harm and build resilience, which can prolong their surgical careers.

Watch This



Learn about the physical and emotional risks of spay-neuter practice and steps to take to develop resilience and preserve a satisfying surgical career in these presentations:

[Surgical Ergonomics](#) (21 min, [download transcripts](#))

[Coping with Complications and Patient Death](#) (12 min, [download transcript](#))



Dr. Sara White has worked in shelter medicine and HQHVSN throughout most of her career. Since 2006, she has operated Spay ASAP Inc, a nonprofit MASH-style mobile spay-neuter clinic, where she has spayed or neutered over 40,000 animals. While working in spay-neuter, Dr. White noted the work strain many colleagues experienced, which led her to develop an interest in ergonomics, health, well-being, and injury in veterinarians and staff. This led her to compete a Masters of Science in Health Ergonomics from University of Derby (UK) and a [website addressing the well-being of spay-neuter surgeons](#). She has published research studies on this topic, including [Prevalence and Risk Factors Associated with Musculoskeletal Discomfort in Spay and Neuter Veterinarians](#), [Veterinarians' Emotional Reactions and Coping Strategies for Adverse Events in Spay-Neuter Surgical Practice](#), and a new spay/neuter textbook [High-Quality, High-Volume Spay and Neuter and Other Shelter Surgeries](#). Dr. White currently serves as President of the Vermont Veterinary Medical Association, and lives on a farm in Vermont with her wife Tina, 4 cats, a large fluffy dog, and two spoiled horses.



People, and the Environment

Think About It . . . One Health for Animals,



An interactive or media element has been excluded from this version of the text. You can view it online here: <https://ufl.pb.unizin.org/integratingveterinarymedicinewithsheltersystems/?p=387>

CONGRATULATIONS – YOU HAVE COMPLETED MODULE 8!



Want to Learn More?

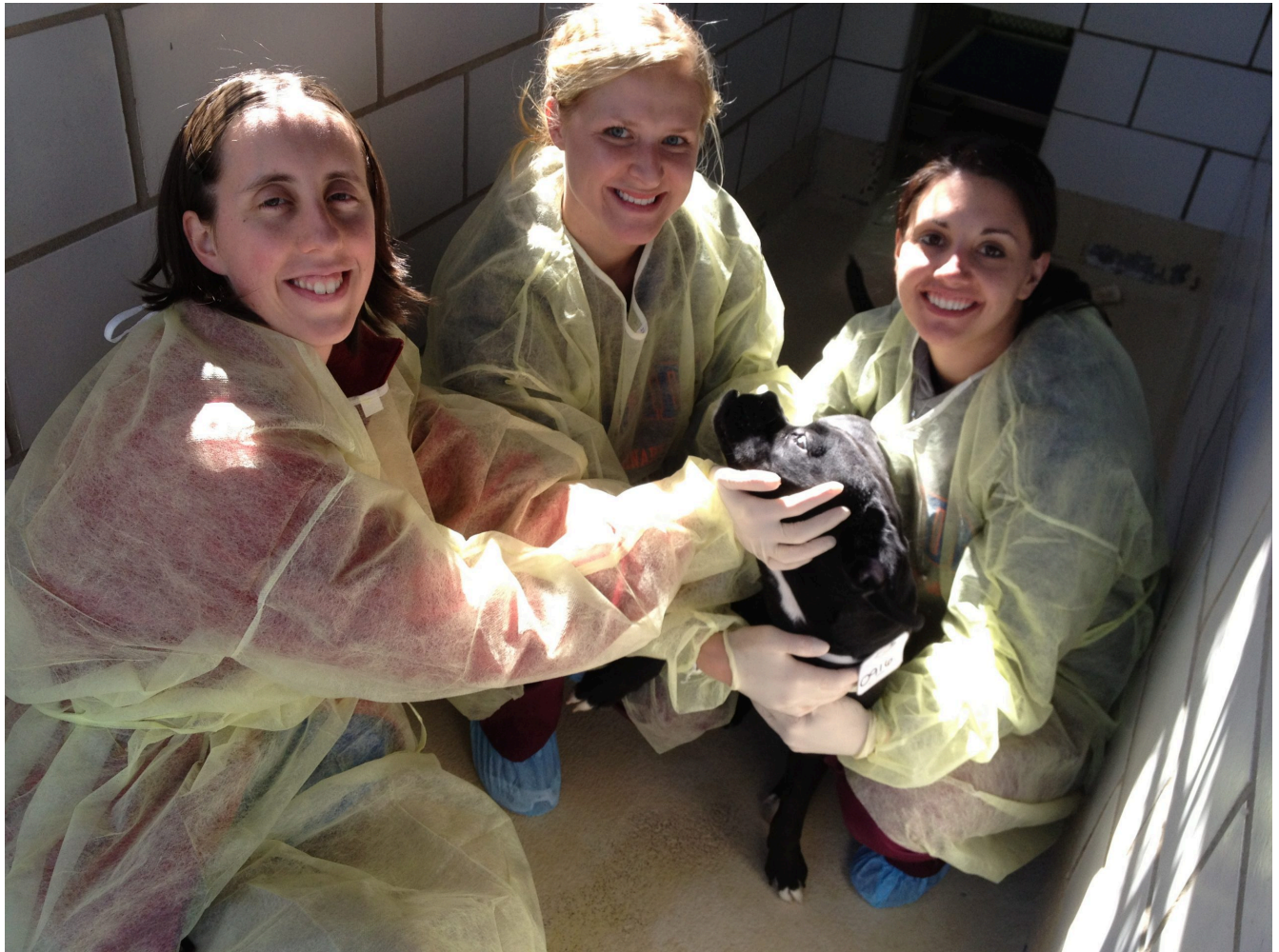
- [ASPCA spay-neuter webinars and training opportunities](#)
- [Access to Veterinary Care Report](#)
- [AlignCare Community Manual](#)
- [AlignCare Incremental Veterinary Care Guide](#)

FIND A BUG? TELL US ABOUT IT!

We are committed to keeping this e-book as pest-free as possible. You can help by [submitting a bug alert here](#). No problem is too small, including broken links, typos, or content errors.

MODULE 9: THE ROLE OF THE SHELTER VETERINARIAN

JULIE K. LEVY, DVM, PHD, DACVIM, DABVP



Module Learning Objectives

- Identify and describe the multidisciplinary roles of Shelter Medicine and challenges associated with meeting broad expectations.
- Analyze a working veterinarian's position for skills required, task distribution, effective communication with management and staff, physical and emotional wellness, and career satisfaction.
- Identify and describe strategies for selecting a compatible position, creating a positive work environment, maintaining work-life balance, and mitigating the risk of burnout and compassion fatigue.
- Describe how shelters without staff veterinarians can meet required standards of care.

A DAY IN THE LIFE OF A SHELTER VETERINARIAN

Animal shelters, spay-neuter clinics, and non-profit access to care clinics have varying missions and funding sources. With different missions come different expectations of the role of a veterinarian.

A DAY WITH TWO SHELTER VETERINARIANS

Some shelters focus most of the veterinarian's time on spay-neuter surgeries. Others prioritize population management, individual animal care, animal welfare, or public clinics. Organizations with multiple veterinarians often have a medical director who holds a leadership role in the organization and supervises the entire veterinary team.

Watch This



Watch two different shelter veterinarians as they complete their busy days.

[A Day in the Life of Dr. Tiffany Bogart](#) (1:42 min, no relevant audio)

[A Day in the Life of Dr. Jennifer Broadhurst](#) (2:02 min, no relevant audio)

Did you notice a difference in how Dr. Bogart and Dr. Broadhurst divided their time? Did they spend more time in surgery or on other duties?



A WEIGHTY RESPONSIBILITY

No matter what the job duties, the shelter veterinarian is responsible for the medical and surgical care of all sheltered animals. This is a big responsibility. It includes establishing preventive health care protocols, diagnosing and treating health and welfare problems, containing disease outbreaks, managing populations, addressing cruelty, training staff, and keeping current on new developments in the field of Shelter Medicine.

The Association of Shelter Veterinarians has developed a list of FAQs about the unique training and competencies encompassed in the emerging discipline of Shelter Medicine.

Association of Shelter Veterinarians

WHAT IS SHELTER MEDICINE?

Shelter Medicine is a field of veterinary medicine dedicated to the care of homeless animals in shelters or other facilities dedicated to finding them new homes.

HOW DOES SHELTER MEDICINE DIFFER FROM PRIVATE PRACTICE?

Private Practice Veterinarians focus mainly on the health care of individual animals with owners. Shelter Veterinarians provide a unique blend of individual and population level care for homeless animals, including a strong focus on physical and behavioral wellness. Caring responsibly for a shelter population presents challenges rarely faced in private practice. Many of the animals entering shelters arrive with little to no medical history and may be stray, feral, or victims of cruelty. Arriving from many locations with different life experiences and exposure histories makes this a population at higher risk for infectious diseases and problem behavior. This is compounded by high-density housing and the stress associated with confinement, making proper behavioral care a crucial part of shelter animal health.

WHAT DOES HIGH QUALITY CARE MEAN IN A SHELTER SETTING?

Shelter Medicine has emerged as a specialty field in order to elevate and promote a better quality of life for shelter animals. All veterinary disciplines, whether managing livestock, pets or other species, make treatment and diagnostic decisions within the framework of resources available to the veterinarian and owner. Shelters, as temporary “owners”, must continually balance the needs of the individual animal, the shelter population, and

the sustainability of the organization. High quality care in a shelter combines individual and population health management to optimize wellness and prepare animals to enter the community for a lifetime of care.

WHAT AREAS OF LEARNING ARE EMPLOYED BY A SHELTER VETERINARIAN?

Although medicine and surgery play a large role in Shelter Medicine, Shelter Veterinarians must also have a thorough understanding of epidemiology, preventive medicine, infectious disease control, policy development, facility design, public health, animal behavior, and veterinary forensics. Shelter Veterinarians must be innovative and possess the knowledge and skills necessary to adapt traditional medical protocols to meet the special demands encountered in shelters.

DO VETERINARY MEDICAL GUIDELINES FOR ANIMAL SHELTERING EXIST?

Yes. Animal shelters are located in almost every community caring for millions of animals each year in unique and challenging environments, creating a need for appropriate veterinary care guidelines. Recognizing the differences between caring for a pet in a home setting and caring for a pet in an animal shelter setting, professional guidelines for the vaccination of cats (AAFP) and dogs (AAHA) address specific recommendations for sheltered animals. The Association of Shelter Veterinarians (ASV) has also released two professional documents providing medical guidelines for shelters: The Association of Shelter Veterinarian's Veterinary Medical Care Guidelines for Spay-Neuter Programs and The ASV Guidelines for Standards of Care in Animal Shelters.

WHY DO SHELTERS NEED A VETERINARIAN?

Veterinarians play an integral role in ensuring the health and wellness of all animals. Most modern shelters provide a variety of community programs as well as medical and surgical services to care for the thousands of animals passing through their doors each year. The proliferation and diversity of sheltering programs has created a growing need for veterinary guidance. And, recognizing the benefits that veterinarians bring to animal health and wellness, an increasing number of shelters are choosing to employ veterinarians. Some shelters employ veterinarians directly while others contract for care from private practitioners. Regardless of the relationship between the two parties, it is strongly recommended that veterinarians working with shelters have a thorough understanding of population medicine and the challenges of providing veterinary health care in a shelter setting.

WHAT ARE THE BENEFITS OF A SHELTER MEDICINE SPECIALTY?

Recognizing Veterinarians with additional training, skill, and experience in Shelter Medicine will create a pool of experts who can serve as practitioners, educators, researchers, and consultants. It will also promote research and excellence in the field, thus expanding the knowledge base, which will ultimately result in increased animal welfare and better service to sheltered animals.

WHAT DOES A SHELTER MEDICINE SPECIALIST DO?

A board certified shelter medicine specialist can serve in a number of capacities. There is a growing demand

for experts able to provide consultation services for animal shelters. Some may choose to work in animal shelters, while others will pursue an academic role performing research or educating veterinarians and other shelter professionals. Others may focus on a specific component of Shelter Medicine such as veterinary forensics and animal cruelty investigations, high quality, high volume spay neuter, or infectious disease outbreak investigation. Through a demonstrated commitment to excellence, all will help advance the field of Shelter Medicine.

WHERE CAN I LEARN MORE ABOUT SHELTER MEDICINE?

Although it is still a relatively young field, intense community and veterinary interest has led to several ways to learn more about shelter medicine. Two textbooks, *Shelter Medicine for Veterinarians and Staff* and *Infectious Disease Management in Animal Shelters*, are excellent resources for Shelter Medicine practice. *Veterinary Forensics: Animal Cruelty Investigations* is another excellent textbook that addresses a crucial area in the field. Most major veterinary conferences offer continuing education in Shelter Medicine, while most US veterinary colleges currently address it in their curricula. Veterinary student externships are available in many shelters across the country, and several post graduate internship, residency and fellowship programs are available for those wishing to continue their education beyond veterinary college. Some veterinary colleges also offer online educational resources, distance learning programs, and shelter consultations as well as a variety of other outreach services. In addition, the Veterinary Information Network (VIN) offers shelter medicine courses, webinars and consultation for veterinarians. Additional information about Shelter Medicine, including a listing of veterinary college programs, can be found by visiting the [Association of Shelter Veterinarians](#).

BREAKING OUT OF THE OR

High quality, high volume spay-neuter (HQHVSN) surgery has become an area of special expertise all its own. Just as the concept of spay-neuter took many years to become institutionalized as a component of preventive healthcare in shelters and in private practices, Shelter Medicine is also developing its own identity as an integral component of modern animal sheltering. Despite some old stereotypes, shelter veterinarians are increasingly valued for more than their surgical skills.

Ten years ago, then president of Maddie's Fund Rich Avanzino wrote an editorial in which he challenged shelter managers to include veterinary input throughout the management structure.

The Emerging Role of the Shelter Veterinarian



Rich Avanzino

The study of shelter medicine in veterinary colleges consists of small animal population health management with an emphasis on infectious disease control and prevention. Other aspects covered by shelter medicine courses include individual animal care, behavior assessment and environmental enrichment. Related areas include surgery, cruelty investigation, forensics, facility design, and shelter management.

As encompassing as shelter medicine is, however, veterinarians in many shelters are still tasked almost exclusively with spay/neuter surgeries, bringing us to a new watershed issue: What is the role of the veterinarian in today's animal shelter?

Veterinarians in animal shelters shouldn't be tucked away in surgery suites doing nothing but neutering. They should be writing policies and protocols for vet techs, kennel attendants, adoption counselors and volunteers. They should be providing wellness programs for the healthy, directing treatment or rehabilitation plans for the sick, and performing corrective surgery on animals in need. They should be out on the floor to see that animals are properly housed. They should make sure that cleaning, handling, vaccination and quarantine protocols are followed, and they should ensure that behavioral needs (rehabilitation, enrichment, exercise, companionship) are met.

A shelter veterinarian should constantly scrutinize the overall well-being of the shelter's animals. If a veterinarian spots deficiencies that put an animal's physical or mental health at risk, it is the veterinarian's responsibility to report that to the shelter administrator and to recommend changes. They may not have the authority to make the changes in all cases, but as the shelter's medical expert, the veterinarian's opinion should

be very carefully considered, just as one would listen to legal counsel or to the chief financial officer in corporate America.

To some, especially to the new breed of shelter veterinarians, this sounds obvious and so elementary it's barely worth mentioning. And yet, it's disappointing to hear that many shelter directors still don't give veterinarians adequate responsibility and authority to protect and provide for the health of the shelter animals. Periodically we hear horror stories about shelters where animals are suffering in terrible conditions even though a full-time veterinarian is on staff. Either the doctor can't or won't step in because they are relegated to spay/neuter surgery, or when they do try to advocate for the animals, their opinions and suggestions are ignored.

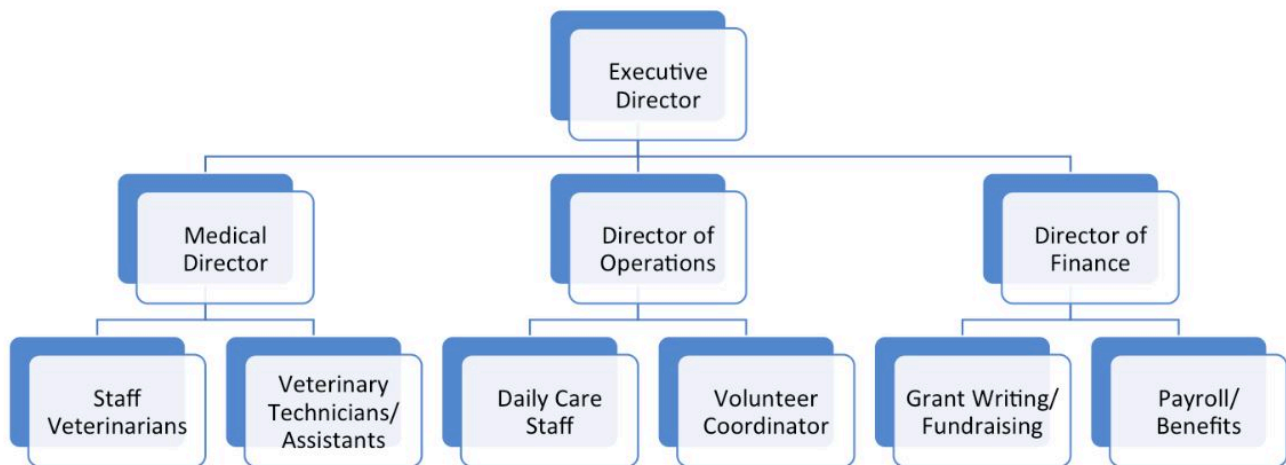
It is no longer acceptable or possible that the education, expertise and talent of veterinarians practicing in shelters be limited to the practice of spay/neuter surgeries. Today's shelter directors and veterinarians need to work together as a team, with shelter veterinarians being given a policy role consistent with their training and expertise. This is what the veterinary profession expects and what the animals deserve.

This not only should change, it must and will change.

— *Rich Avanzino*

MAKING THE MOST OF THE SHELTER VETERINARIAN

Have things changed much a decade after Mr. Avanzino's call to action? In many shelters, the answer is a resounding, 'Yes!' As you've heard in several of this course's recorded Conversations from the Field sessions, veterinarians sometimes occupy positions high in the organizational chart, either as the sole veterinarian or as the medical director over the veterinary care team. These veterinarians have an opportunity to influence every aspect of operations that impacts animal health and welfare, including traditional roles for individual animal treatment and spay-neuter, as well as emerging roles such as population management, disease surveillance, and capacity for care.



Ideally, the veterinary care team is supervised by a veterinarian, who reports directly to the top shelter executive, assuring that veterinarians have direct input on shelter management decisions.

However, a survey found that many shelter managers still held the outdated view that the primary role of their veterinarians was to “perform spay/neuter surgery.”

In the report [Survey of Animal Shelter Managers Regarding Shelter Veterinary Medical Services](#), the authors concluded:

“Shelter managers who responded to this survey tended to view the roles of veterinarians in shelters somewhat narrowly, with most prioritizing surgical and medical care to individual pets over prevention of disease and injury.”

Consider the following findings obtained through the survey:

- Every shelter that responded reported a problem in their facility with at least one infectious disease, ranging from parvo to ringworm

- Almost 77% of respondents said common shelter infectious diseases had a substantial negative effect on the shelter's success
- 86% said these diseases negatively impacted the shelter's finances
- And yet, veterinarians were reported to be responsible for infection control in only 6% of shelters, with shelter directors usually performing that role

The survey also found that *“Providing authorization for purchase and administration of drugs was also ranked as important, likely reflecting the importance of access to controlled substances in shelters. Developing preventive protocols, advising on infectious disease management, serving as witnesses in animal cruelty cases, participation in euthanasia decisions and providing behavioral expertise were given relatively lower priority by most respondents.”*

The study concluded, *“The expectations of shelter managers in this study seemed particularly divergent from those of the expanding veterinary field of shelter medicine regarding the role of veterinarians in providing animal behavior expertise. The petition for a specialty in Shelter Medicine Practice lists ‘optimization of shelter animal behavioral health’ as one of the major duties of shelter veterinarians. Previous studies have demonstrated links between physical and behavioral health in dogs and cats, and have suggested that an emphasis on behavioral health can help prevent animals from entering shelters, reduce stress and disease in shelter animals, and facilitate adoptions. However, in this study, among the 15 tasks listed in the survey, shelter managers perceived the provision of expertise on animal behavior as the least important task for veterinarians.”*

SETTING THE STAGE FOR SUCCESS: SHELTER MEDICINE BEHIND THE SCENES

Dr. Stephanie Janeczko speaks from experience when she says she has a firm belief that *“a holistic approach joining the medical and operational sides of sheltering is vital to our success.”*

Dr. Janeczko completed a Shelter Medicine residency, was in the first group to become a boarded specialist in shelter medicine, practiced as medical director at NY City Animal Care and Control, is a Certified Animal Welfare Administrator, and currently holds an executive position with the ASPCA as Senior Director of Shelter Medical Programs. In this blog, she explains how the relationship between managers and veterinarians can evolve to advance shelter operations.

The Emerging Role of the Shelter Veterinarian



Stephanie Janeczko

Traditionally, small animal veterinary practice has focused on the individual patient. Most of veterinary school does not prepare you to think about a ‘herd health’ approach to caring for dogs and cats. The focus is implicitly on that one cat or one dog, living in a home, maybe with another furry friend or two, or maybe even three... but certainly not two or three hundred! Yet it is that consideration of caring for animals in groups that is at the very core of shelter medicine. As shelter veterinarians we have been trained to take a different approach from traditional small animal practice—one that emphasizes the health of the population while still ensuring individual animal welfare and considering the needs of the larger community.

Despite having this broad frame of reference, some take a narrow view of the expertise shelter veterinarians can share with an organization, seeing their value only in terms of how many spay/neuter surgeries they can perform or cases they can treat. I have actually heard executive directors say they wish their veterinarians would stay in surgery and out of operations! And at the same time, I have heard shelter veterinarians say they don’t want to have to think about anything but treating the animal in front of them.

Now don’t get me wrong—the ability to provide humane, efficient and effective veterinary attention to the

animals in our care is a critical skill. It is absolutely integral to our ability to save lives and isn't one that can be delegated to others. But this is a pretty limited view of what shelter veterinarians can provide. And it often comes at the risk of focusing on reactive measures rather than proactive, preventive strategies. There are many, many aspects typically considered to be operational that are so intertwined with the health and well-being of animals where shelter veterinarians can lend assistance – including shelter facility design, population level housing, nutrition, sanitation and behavioral care, and resource management and risk analysis, just to name a few.

– Dr. Stephanie Janeczko

THE SHELTER VET WEARS MANY HATS

The veterinarian who works in an animal shelter must play many roles. He or she needs:

- Excellent physical exam and clinical skills to treat the health and behavioral problems of individual animals, often without access to a complete diagnostic database.
- Skills as an emergency clinician to stabilize and manage stray animals that have experienced trauma.
- Expertise in veterinary forensic medicine to gather evidence for the numerous cruelty and neglect cases presented to the animal shelter.
- Ability to deliver high-quality, high-volume spay-neuter for pediatrics to geriatrics.
- Ability to advise shelter management and train staff on policies and procedures important for maintaining health and welfare of sheltered pets.
- A focus on population management to increase positive outcomes for sheltered pets.

How does a shelter veterinarian manage all of this efficiently and effectively without burning out when the number of animals under care can number in the thousands? It helps to use good communication, time management, and self-care skills.

ARE THERE ENOUGH HOURS IN THE DAY?

How might you best schedule your day if you were the solo shelter veterinarian who worked from 8:00-5:00 Monday through Friday at this shelter?

- **4000** cats and dogs taken in each year
- **100** cats and **100** dogs in the shelter at a time
- **15** new intakes a day
- **10** surgeries each day

Think About It . . . Making It All Fit



An interactive or media element has been excluded from this version of the text. You can view it online here:

<https://ufl.pb.unizin.org/integratingveterinarymedicinewithsheltersystems/?p=409>

A COMPASSIONATE FIELD

Shelter veterinarians are probably as diverse as the shelters within which they work. Here are profiles about two veterinarians who work in shelters. As you read, look for evidence of their compassion toward pets and the people who care for them.

Compassionate Veterinarians



Dr. Brenda Griffin

I cried when my internship was over, but joined a small animal practice across town and continued to volunteer at the Boston shelter on my days off. The shelter staff embraced me and became my best friends—as well as my heroes for the brave work they did day after day. I wrote medical protocols for them and encouraged interns to come over from the hospital to help out in the shelter. I examined, vaccinated, and treated animals, and also assisted with euthanasia. There were more cats than I had ever seen—it was overwhelming, but the staff's caring and courage touched the very core of my soul, and I knew why I had become a veterinarian. I learned so much from my friends there. [Read more...](#)



Dr. Cate McManus

Dallas Animal Services (DAS) wasn't an obvious place for an idealist to land. Its live release percentage was in the 20s, and in 2011 the former shelter manager was indicted on felony animal cruelty charges amid public outcry over conditions at the agency. But that's just where Dr. Cate McManus, one of the first veterinarians to complete Maddie's Shelter Medicine Residency at the University of Florida's College of Veterinary Medicine, wanted to be: somewhere she could make a difference. "I knew I wanted to go to a municipal shelter," she said. "I knew there would be challenges, but I wanted to do something with all the things I'd learned. I wanted to put my boots on the ground and make a positive impact and save a lot of lives." [Read more...](#)

ARE COMPASSIONATE VETERINARIANS AT RISK?

"People who work in caring professions are often empathetic individuals and highly susceptible to compassion fatigue. In other words, the same qualities that make great veterinarians are the same qualities that can tank them. One's capacity for empathy and compassion increases the risk for compassion fatigue. Veterinarians deal with death at five times the rate of any other healthcare profession, but we don't offer five times the training to deal with death and morbidity."

—Jennifer Brandt, PhD Licensed Clinical Social Worker OSU-CVM

"Many people in the veterinary profession try to muscle through compassion fatigue, but the symptoms mount until it becomes overwhelming. Everybody thinks compassion fatigue is you're tired of giving—it's not. It's work-

related trauma every day. Oftentimes the ones affected by compassion fatigue are the kind of people who drive themselves into the ground trying to make things better."

—Patricia Smith, author of *To Weep for a Stranger: Compassion Fatigue in Caregiving*

COMPASSION FATIGUE

Euthanasia is sometimes the most humane option for particular animals in shelters. Not every animal can be saved with the resources available. Making decisions about which pets should be euthanized, and performing euthanasia, takes an emotional toll on shelter staff. Such distress is challenging to recognize, as well as to manage. Signs of emotional distress stemming from euthanasia duties include: anger, frustration, depression, guilt, sadness, grief, shame, and/or isolation, among others. Over time, the emotional burden may manifest in extreme reactions, including but not limited to: clinical depression, anxiety, substance abuse, sleeping disorders, significant changes in eating habits with weight gain or loss, emotional detachment/withdrawal, and even thoughts of suicide. In some cases, a strong sense of work dissatisfaction or alienation accompanies the distressed emotional state. In this case, a negative attitude, absenteeism, or careless or callous handling of animals may accompany the psychological state of fatigue.

Watch This



A decade ago, many shelters in the US were euthanizing far more animals than they saved. [Listen as a shelter staff member](#) describes what it was like work in such emotionally draining conditions (3:27 min). Often missing from the discussion about the merits of animal lifesaving and animal welfare in shelters is awareness of the impact of euthanasia and animal suffering on the staff and volunteers who care for the animals. Like veterinarians, they too are at high risk for compassion fatigue, burnout, and moral distress. An often overlooked benefit of improved shelter lifesaving and operating within capacity for care is the joy it brings to animal caregivers.

Compassion fatigue is not limited to personnel involved with euthanasia. Anyone who works in an animal shelter is a candidate for experiencing it. Veterinarians working in animal shelters must be prepared to recognize compassion fatigue in those around as well as in themselves. To succeed long term, they must be prepared to develop positive coping strategies that enable them to maintain a healthy emotional balance.

Like animal sheltering, the field of veterinary medicine is physically demanding and emotionally

challenging. These challenges can be especially overwhelming in the context of shelter medicine. This is because veterinarians working in shelters are often tasked with extremely difficult decisions on a daily basis. Nonetheless, they must maintain focus and continue moving forward, often in the face of both internal and external conflicts, as one decision is made and the next decision or task is undertaken.

Experience does not make shelter veterinarians or workers immune to the stresses involved in day-to-day animal sheltering. Compassionate caregiving requires sustained energy and resilience. Without effective coping skills and adequate support, the effects of compassion stress and fatigue over time can compromise employee health, wellbeing, productivity and animal welfare. Always remember: We owe it to ourselves—and to the animals—to take care of ourselves so that we can continue the vitally important work of animal sheltering.

Maddie's Shelter Medicine Program at the University of Florida offers a course specifically designed to support people who work with animals. [Compassion Fatigue Strategies](#) helps participants recognize signs and symptoms of compassion fatigue, learn to manage stress levels and increase self-care practices, connect with the rewards of the work, build resiliency, and commit to making successful changes in one's life and organization. This class is a personal exploration to help build the self-awareness necessary to manage the impact of compassion fatigue. By the end of class participants will have six strategies to help manage and transform their experience with compassion fatigue, a personal mission statement and goals to help make lasting changes, a better understanding of oneself and how to engage in self-care that works.

Watch This



Working in Shelter Medicine brings a lot of intrinsic rewards. Saving animals, especially those who have been homeless, neglected, or abused, is intensely satisfying. At times, however, the weight of this responsibility, combined with the seemingly endless need, can lead to distress. Have you or someone you know experienced compassion fatigue? Listen to this presentation [A Brief Tour of Compassion Fatigue](#) by Jessica Dolce about ways to prevent, recognize, and manage compassion fatigue in animal welfare work (15 min).



Jessica Dolce is a Certified Compassion Fatigue Educator via the Figley Institute and participates in ongoing training via Tend Academy and the International Association of Trauma Professionals. She teaches compassion fatigue classes online and around the country to help animal care and welfare professionals be well, while they do good work. Jessica brings fifteen years of experience working with and for companion animals to her classes. Her project, Dogs In Need Of Space, provides support to dog owners and animal care professionals around the world. Jessica received her Master of Science in Adult and Higher Education degree from the University of Southern Maine and holds certificates in mindfulness facilitation and positive psychology coaching. She can be found online at www.jessicadolce.com.

MANAGING COMPASSION FATIGUE THROUGHOUT THE ORGANIZATION

Trauma isn't limited to veterinarians or to those involved with life and death decisions. Thankfully, a new online program designed for total organizational health has recently launched to help animal welfare staff thrive in trauma-exposed work. A more resilient organization is absolutely possible.

"Animal welfare professionals are particularly susceptible to secondary traumatic stress because of the vulnerable nature of the animals they care for and the unpredictable nature of their jobs. When staff are suffering, this lessens the organization's ability to achieve their mission. Developing resilience through professional training can buffer workers from emotional exhaustion and improves their overall well-being, protecting them from the predictable risks of secondary traumatic stress on the job. The Compassion in Balance program is here to help."

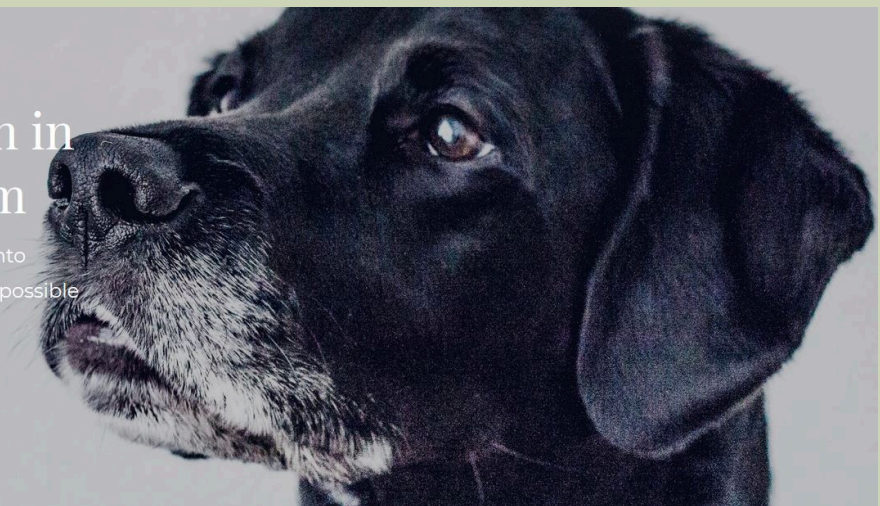
-Jessica Dolce

Jessica Dolce: Compassion in Balance

The Compassion in Balance Program

Transforming compassion fatigue into compassion resilience is absolutely possible for your organization.

[Learn More](#)



Is your organization experiencing one or more of the following scenarios?

Reactivity and Negativity: You have employees who are having a hard time managing their stress and emotions. You're seeing lots of inappropriate outbursts, complaining, gossip, and negativity between coworkers.

Turnover, Absenteeism, and Apathy: You have a high turnover rate, workers' compensation claims are increasing, staff call out sick often, and when they do come into work they're apathetic and not completing their work tasks.

Exhaustion and Overwhelm: Your staff is struggling to stay engaged and energized. They feel like they're not making a difference, despite how hard they're working. You can see they're feeling worn out physically, emotionally, and mentally.

Imagine this: Front line employees are energized and optimistic about their work. They're less reactive now that they understand how their work affects them and how to regulate their stress, so they respond more calmly to difficult situations. Your staff understands why and how to take care of themselves. Your organization supports their efforts by incorporating staff wellness into policies and practices. Lunch breaks and vacations are taken (without guilt!) and people feel restored. Conversations between coworkers are more constructive. People know they are appreciated for their contributions and feel safe talking with their supervisors about their challenges. Your retention rate keeps increasing and morale is high. Your staff knows how to monitor themselves for compassion fatigue and when to access professional mental health help. Your managers feel more competent talking with their staff when they see them struggling and stressed. Leadership is clear on the organizational efforts needed to support staff and, through ongoing efforts, continues to become a more trauma-informed, resilient, and effective organization.

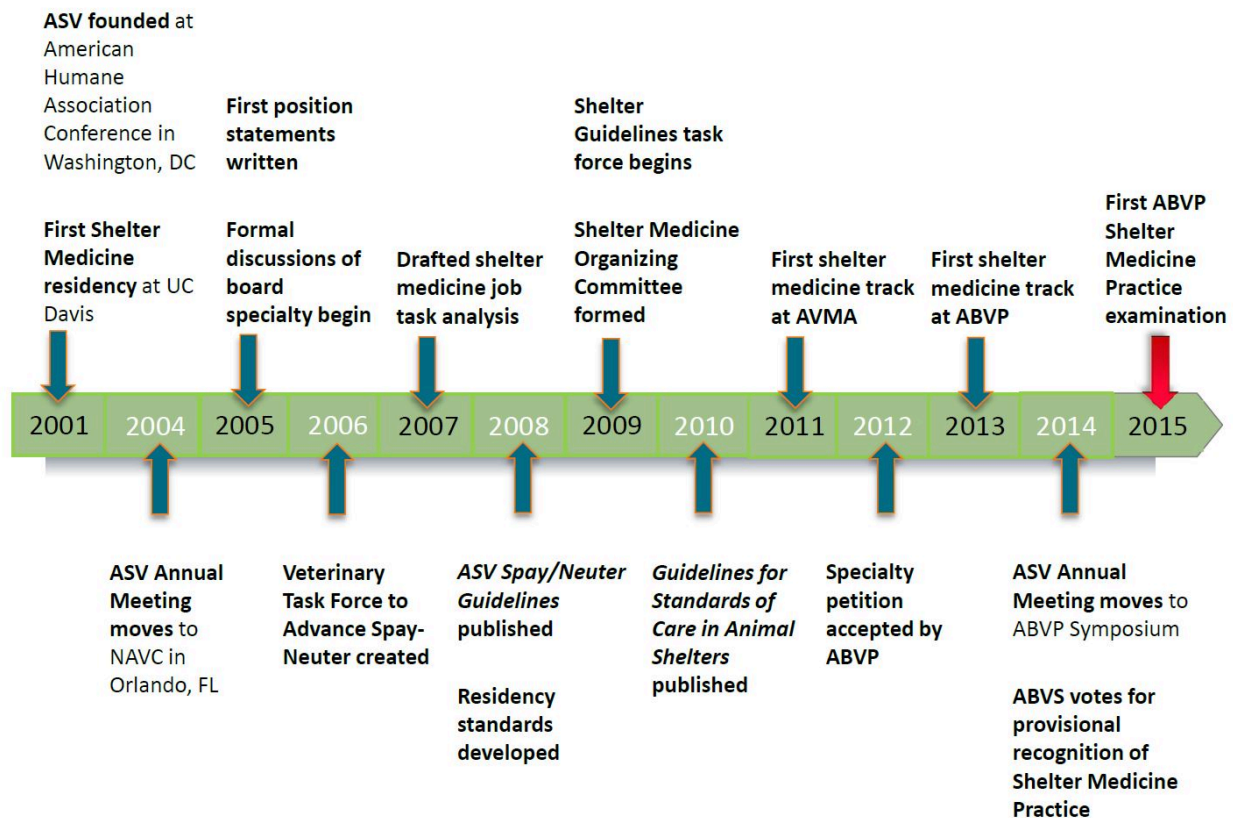
THIS PROGRAM IS FOR YOU IF:

- You have buy-in from the top down. This program can only succeed with the commitment of supervisors and on-the-ground leadership in charge of implementation.
- You're open to looking at your policies and procedures to make changes, over time, if necessary.
- You're willing to have transparent conversations with your staff as a way to move forward.
- You have a point-person(s) willing to step up and facilitate the implementation of the program's multiple live and pre-recorded components.

THIS PROGRAM IS NOT FOR YOU IF:

- You expect a quick fix. Addressing stress/trauma-exposure and building resilience takes an investment of resources, commitment, and time.
- Your leadership is not on board and expects staff to manage this issue on their own.
- You are not able to set aside one hour a month for team trainings and discussions.
- You are looking for professional mental health help for your staff. This is an educational program, not a substitute for professional mental health care.

SHELTER MEDICINE: A RISING TIDE



Since its founding in 2001, the Association of Shelter Veterinarians has developed continuing education conferences, compiled a job task analysis, developed criteria for residency training in Shelter Medicine, prepared guidelines for standards of care in animal shelters and spay-neuter clinics, and launched a 10-year process leading to the establishment of specialty board certification.

In 2001, a small group of passionate veterinarians came together to found the Association of Veterinarians (ASV) and to develop the first continuing education meetings for this unique discipline. That was also the year the first residency in Shelter Medicine started at UC Davis. Five years later, a decade-long process to establish a formal specialty recognized by the American Veterinary Medical Association was undertaken.

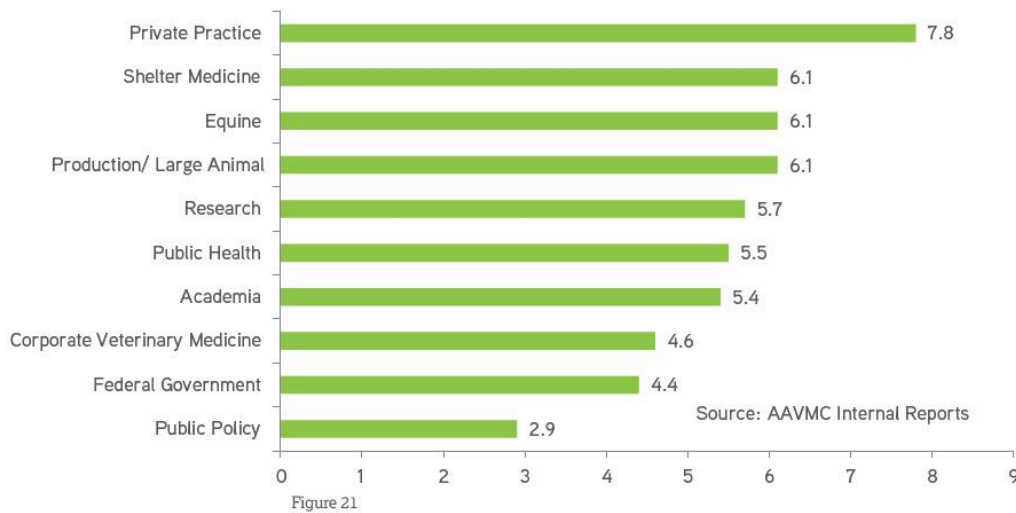
Less than two decades later, the AVMA's most recent market report indicated that Shelter Medicine has vaulted to one of the top career interests in the national pool of veterinary school applicants for the Class of 2020 in the VMCAS system.

Although companion animal private practice is the most frequently cited number-one goal, the interests of the applicants is diverse. Large animal, equine and shelter medicine all share the second spot for the most common career interest at the time of application.

As in previous years, roughly 75 percent of the applicants attended a public university; 21 percent are first-generation college students; and 27 percent are Pell grant eligible (financial need and no bachelor or professional degree). The largest proportion of applicants grew up in the suburbs and wish to return there to work. More than 80 percent are working and one-third of the applicants are working full time.

CAREER INTERESTS AT THE TIME OF APPLICATION FOR CLASS OF 2020 VETERINARY SCHOOL APPLICANTS

Ranked 1 - 10



Shelter Medicine was tied for second most popular career interest in a national survey of incoming veterinary students in the Class of 2020.

The ASV is a vibrant international member-driven professional association dedicated to enhancing best practices in shelters, spay/neuter clinics, and other animal welfare organizations through continuing education, professional development, discussion groups, research, board specialization, position statements, and practice guidelines that define standards of care.

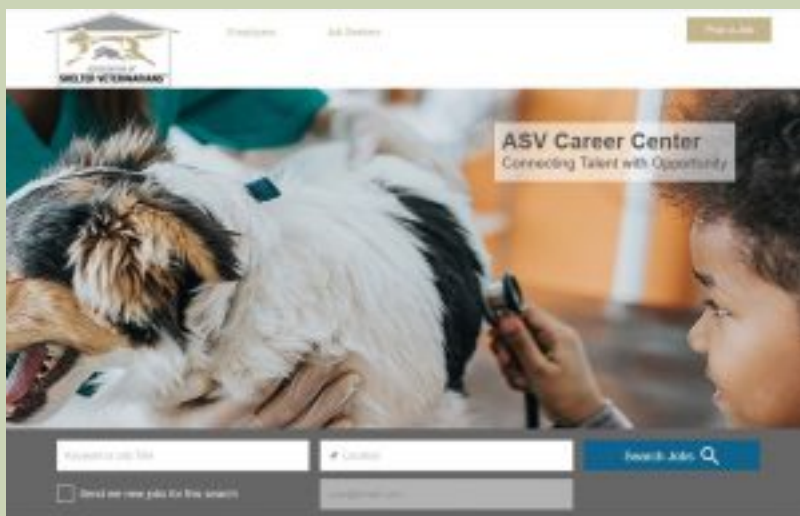
The Association of Shelter Veterinarians



[Guidelines for Standards of Care in Animal Shelters](#) has become the bedrock guidance for best practices in animal shelters. In addition to its original English version, it has also been translated into Spanish, French, and Portuguese.



[Association of Shelter Veterinarians' 2016 Veterinary Medical Care Guidelines for Spay-Neuter Programs](#) established the standard of care for high quality, high volume spay-neuter (HQHVSN). It has also been translated into Spanish.



The [ASV Career Center](#) is a service for members and non-members where qualified shelter veterinarians can connect with great organizations who seek their talents and skills. Candidates can browse current vacancies, post an anonymous resume and create new job alerts. Employers can post a job or browse the resume bank to find the right candidate.



The [ASV Member Discussion](#) private Facebook group has more than 800 veterinarian and veterinary student members who share case challenges, protocols, and how-to surgical videos.

BECOMING A BOARDED SPECIALIST IN SHELTER MEDICINE

SHELTER MEDICINE SPECIALTY

In 2005, four years after the founding of ASV, a decade-long process to establish a formal specialty recognized by the American Veterinary Medical Association was undertaken.

The skills and knowledge needed by a specialist in Shelter Medicine are documented in a daunting inventory of expertise called the [DACUM Research Chart for Shelter Medicine Specialist](#). These include detailed knowledge of the following areas:

- Optimize shelter animal physical health
- Optimize shelter animal behavioral health
- Protect community and public health
- Alleviate companion animal homelessness
- Address animal cruelty/abuse/neglect
- Facilitate animal shelter management
- Serve as a resource on animals and public policy
- Advance animal shelter medicine

The Road to Board Certification



In April 2014, the AVMA approved Shelter Medicine Practice as a new specialty within the [American Board of Veterinary Practitioners](#). As in other specialties such as internal medicine, ophthalmology, and surgery, the path toward board certification is long and rigorous. In Shelter Medicine, practitioners can earn their credentials to quality for the certifying examination via either a residency or experience in shelter practice.

[Shelter Medicine Practitioner Portfolio Checklist](#)

[Shelter Medicine Residency Checklist](#)

The first Shelter Medicine Specialists took their certifying examination in 2015. These are definitely exciting times for the career of Shelter Medicine! It is an important step forward for setting higher standards of care for animals in shelters and for spurring additional scientific research into the clinical practice of Shelter Medicine.

To learn more about board certification in the Shelter Medicine Specialty, visit the [American Board of Veterinary Practitioners](#) and review the [ABVP Applicant Handbook](#).

CAREERS IN SHELTER MEDICINE

As interests in careers in Shelter Medicine increase, so have positions in animal shelters, spay-neuter programs, and non-profit clinics. In fact, a current shortage of veterinarians with practice-ready skills for these positions is keeping pay and opportunities highly competitive, and employers are rolling out the red carpet to recruit the best talent. At any one time, there are hundreds of open veterinary positions, and dozens of these are in animal shelters, nonprofit organizations, spay-neuter clinics, and low-cost veterinary care providers.

Recruitment promotions are designed to give an overview of the position, a flavor of the organizational culture, and the veterinarian's role in the organization, while tempting qualified candidates to learn more and to apply. As you read these two recruitment ads, one for a veterinarian in a low-cost spay-neuter and wellness clinic, and one for a shelter veterinarian in a large city shelter, think about how well they sell their organization as being a good place to work. Do they sound like places you would like to work?

Is It You?



Spay-Neuter & Preventive Care Veterinarians: Emancipet, Austin, Texas

There's a chance you may be our ideal veterinarian if:

- Even though you often find yourself teaching others, you live to learn more and geek out on JAVMA

articles

- After a long day of helping 50+ families and their pets, you still have the energy to hit the town with your friends
- You have a bunch of gross pictures on your phone (of surgeries!) that you can only share with other veterinarians
- You don't take life (or yourself) too seriously and are quick to laugh
- You would love to be part of a team that has fun every day, and considers medical excellence as a bottom line

[Read more...](#)



Shelter Veterinarian: Animal Care Centers of NYC, New York

Animal Care Centers of NYC is on the prowl for a multi-tasking, big-picture-thinking, problem solving, puppy kissing, cat cuddling, veterinarian with super-hero medical and surgical skills to embrace the multitude of challenging cases facing our NYC homeless pet population. Must be a social butterfly, as every shelter animal has a person (likely whole departments) attached to the end of their leash. It takes a village to raise a shelter animal and put them on the path to success.

At ACC we treat our colleagues with the same compassion as we do our animals. Therefore, a successful candidate inspires the team to want to come to work every day and shows them how they make a difference in the lives of every animal that enters through our doors. You motivate, collaborate, initiate, stimulate, communicate, appreciate, and sometimes commiserate with your team and colleagues. And you do doctor things . . . the variety of our case load pales in comparison to everyday practice. You won't be bored, you will be stimulated, challenged and you will have a stellar support team to assist you in making sometimes difficult decisions. Ones you can live with.

Your input and perspective is encouraged in strategic development as the organizations evolves to meet the mission. This job will never be just another "day at the office". You will go home each day, tired, dirty and challenged by what you see every day. It will be your best job ever. Ready to find out more?

[Read more...](#)

Watch This



[Shelter Veterinarian: Lee County Domestic Animal Services, Fort Myers, Florida \(3:05 min, no relevant audio\)](#)

When LCDAS needed to recruit a second veterinarian, they decided to show off their shelter with a video that described the work they do, their progressive operations, typical duties of the veterinarians, their community partnerships, a robust county benefits plan, and their beautiful community in Southwest Florida.



[Low-Cost Public Clinic Veterinarian: West Palm Beach, Florida \(2:34 min\)](#)

Peggy Adams Animal Rescue League didn't hold back on showing off its well-appointed clinic in this

recruitment video for a veterinarian to work in their low-cost public clinic. Dispelling stereotypes about the quality of nonprofit services was part of the recruitment strategy.

In contrast to recruitment promotions, **job descriptions** are the legal description of the position that the employer and employee are agreeing to. Although there is no standard format for job descriptions, the best ones clearly describe the spirit and details expected for the position, including compensation, schedule, chain of supervision, leadership expectations, authority, and accountability. Knowing what you know now about the variety of skills that a veterinarian can bring to the practice of Shelter Medicine, what would you look for if you were hiring a shelter veterinarian? Would you prefer a candidate with a few years of solid clinical experience or one who has pursued additional studies in Shelter Medicine, such as a certificate, MS degree, or internship/residency? What salary range and benefits would make the job description competitive, but affordable? Here are examples of job descriptions for nonprofit and municipal shelters.

Official Job Descriptions



Shelter Veterinarian: San Diego Humane Society, San Diego, California

San Diego Humane Society is looking for candidates who will support our goal to end animal suffering with our mission to Inspire Compassion. It is through our approach to reducing systematic reasons for animal homelessness that we are making the greatest impact in our community. San Diego Humane Society thrives on

a Culture of Care, offering competitive pay and benefits. We have a generous paid time-off plan, paid holidays, medical insurance, long-term disability insurance, life-insurance, a retirement savings plan with 5% match, flexible spending accounts, wellness program, and employee discounts. [Read more...](#)



Shelter Veterinarian: Jacksonville Animal Care & Protective Services, Jacksonville, Florida

This position reports to the Chief of Animal Care & Protective Services. The primary purposes of this position are to examine and triage animals entering the facility, develop and over see appropriate treatment plans for animals requiring emergency or ongoing medical care, perform surgeries, monitor the health and care of animals housed at the shelter, and act in the capacity of an expert witness in court cases. [Read more...](#)

MAKING THE RIGHT MATCH

THE BEST JOB

Investigate some of the shelter veterinarian, non-profit clinic, and spay-neuter positions currently available on the following sites. As you review job opportunities, think about what characteristics you would be looking for in a job. Are the salaries competitive? Do the working conditions look attractive? Can you get a feel for the personality of the environment? Are the job duties clearly defined? Does the position appear to include progressive policies about the role of veterinarians as thought leaders in the organization? Are the pay and benefits competitive?

Finding the Right Shelter Medicine Position



[The American Veterinary Medical Association Veterinary Career Center](#) is the largest veterinary job posting site, with thousands of openings listed at any one time. While there is no specific category for Shelter Medicine, job-seekers can search under the Non-Profit Association and Government/Military categories for private and municipal Shelter Medicine positions.



[The ASPCApro Spay/Neuter Job Board](#) posts about a hundred spay/neuter and Shelter Medicine veterinarian and staff positions at a time.



[The Association of Shelter Veterinarians Career Center](#) posts dozens of open Shelter Medicine positions at a time.



[The Animal Shelter site](#) posts dozens of open Shelter Medicine veterinarian, technician, and practice manager positions.



[The University of Florida College of Veterinary Medicine Career Services](#) page is a great place to find Shelter Medicine job postings and to connect with UF students who have completed Shelter Medicine training.

THE BEST VETERINARIAN

While new graduates and experienced practitioners are searching for the perfect fit, employers are also hunting for veterinarians with the right skill set and culture match to get the job done. The current shortage of skilled shelter and spay-neuter veterinarians favors the job-seeker, so successful organizations are rolling out the red carpet to find and recruit veterinarians. Nonprofit and governmental organizations sometimes have difficulty competing with the for-profit sector on the basis of salary and signing bonuses, but often have superior benefits, working hours, and on-call duties. In addition, veterinarians working in these sectors may be eligible for loan forgiveness, which can equate to a higher lifetime earning capacity.

Recruiting the Right Veterinarian for Your Organization

Vetting Your Vets

Finding an animal doctor for your shelter means asking all the right questions—of the potential hire, and your own organization

BY JIM BAKER



Having a vet on staff can help a shelter save more lives and adopt out more healthy animals. At the Washington Animal Rescue League, veterinarian Jan Rosen and her staff examine a dog seized from a hoarding case.

Looking to hire a shelter veterinarian? Get in line. It's a tough market, and competition among shelters is especially steep. [Read more...](#)

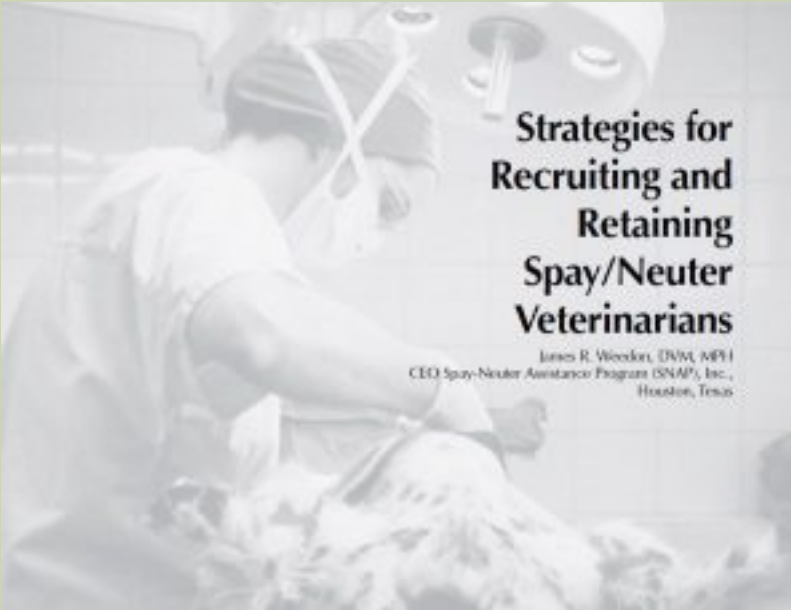
ASPCA Spay/Neuter Alliance

ASPCApro
ASPCA.org

Find the Right Veterinarian for Your Spay/Neuter Clinic



Overcoming old perceptions, crafting great job ads, seeing beyond the resume to the unique individual—all these are crucial components to finding just the right veterinarian for your spay/neuter clinic. [Read more...](#)



If you're struggling to find the right veterinarian for your spay/neuter clinic, you're not alone. In fact, there is a growing sense that staffing may be the single biggest challenge spay/neuter programs face as they try to end pet overpopulation with all its tragic consequences. [Read more...](#)

THE CULTURE FIT

There is no question that shelter medicine can be both incredibly rewarding and challenging, all at the same time. Besides a great work environment, what does it take to find happiness as a shelter veterinarian? These veterinarians have cracked the code – see what’s brought them the greatest joy, how they found work-life balance, and the pearls they think every veterinary student should know.



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<https://ufl.pb.unizin.org/integratingveterinarymedicinewithsheltersystems/?p=461>

Teamwork makes the dreamwork . . . or so say shelter directors who’ve established highly effective management teams with their veterinarians. The key to a great director-vet relationship relies on a true partnership, mutual respect, trust, and open communication. The wise veterinarian includes the director in major veterinary decisions, and the wise director includes the veterinarian in all aspects of shelter operations, because everything impacts animal health and welfare. These directors know what it takes to run a smooth ship and have sage advice for veterinary students.



An interactive or media element has been excluded from this version of the text. You can view it online here:

<https://ufl.pb.unizin.org/integratingveterinarymedicinewithsheltersystems/?p=461>

CONGRATULATIONS – YOU HAVE COMPLETED MODULE 9!



Want to Learn More?

Shelter Medicine Textbooks

- [Animal Behavior for Shelter Veterinarians and Staff](#)
- [BSAVA Manual of Canine and Feline Shelter Medicine: Principles of Health and Welfare in a Multi-animal Environment](#)
- [Every Nose Counts: Using Metrics in Animal Shelters](#)
- [Field Manual for Small Animal Medicine](#)
- [High-Quality, High-Volume Spay and Neuter and Other Shelter Surgeries](#)
- [Infectious Disease Management in Animal Shelters](#)
- [Shelter Medicine for Veterinarians and Staff](#)
- [The Best Practice Playbook for Animal Shelters](#)

Shelter Medicine Continuing Education Courses

- [Animal Shelter Management Certificate](#)
- [Compassion Fatigue Strategies](#)
- [Fear Free Shelters](#)
- [Maddie's University](#)
- [Million Cat Challenge Shelter Assessment Mentorship Program](#)
- [University of Florida Maddie's Shelter Medicine Program Workshops and Presentations](#)

- [University of Florida Online Shelter Medicine Graduate Program](#)

Shelter Medicine Guidelines

- [Shelter Care Checklists: Putting ASV Guidelines Into Action](#)
- [The Association of Shelter Veterinarians' 2016 Veterinary Medical Care Guidelines for Spay-Neuter Programs](#)
- [The Association of Shelter Veterinarians Guidelines for Standards of Care in Animal Shelters](#)

Shelter Medicine Tools

- [Adopters Welcome](#)
- [Compassion in Balance Program](#)
- [Maddie's Shelter Compass Self-Assessment Tool](#)
- [Million Cat Challenge](#)

Shelter Medicine Networking Sites

- [ASPCapro Newsletter and Blog](#)
- [Association of Shelter Veterinarians Private Facebook Group](#)
- [HSUS Animal Sheltering Blog](#)
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