## **Upcoming ASPCApro Webinars**

## aspcapro.org/webinars

- Private Practice Veterinarians and Animal Welfare Organizations
   July 25
- Daily Rounds: How to Decrease Length of Stay July 31
- Funding Your Spay/Neuter Program August 20
- ASPCA Spay/Neuter Grants: A More Targeted Approach August 27



## **Your Presenters**



Aimee Christian
Vice President, Spay/Neuter Operations
ASPCA



Carolyn R. Brown, DVM
Director of Surgery
ASPCA

**ASPCA National Spay/Neuter Project** 

snproject@aspca.org



# Spay/Neuter Programs: What You Need to Succeed





# Models of low-cost, high-quality, high volume spay/neuter (HQHVSN)



- Stationary
- Mobile
- MASH
- In-clinic
- Voucher



# Stationary Clinic

#### Good for:

Areas with large populations

Transport programs

#### Pros:

Can do highest volume Can be self-sustaining

#### Cons:

Expensive to open Hard to target without transport





## MASH clinics

#### Good for:

- Areas with smaller populations
- Specific populations
   (ie feral cat day, pit-bull-paloozas)
- Hard to reach areas

#### Pros:

- Very portable
- Flexible can be FT or PT; one surgeon or many
- Less expensive than stationary or mobile

#### Cons:

- Finding a location
- Compliance issues





## Mobile Clinics

#### Good for:

Densely populated urban areas

Sparsely populated rural areas

#### Pros:

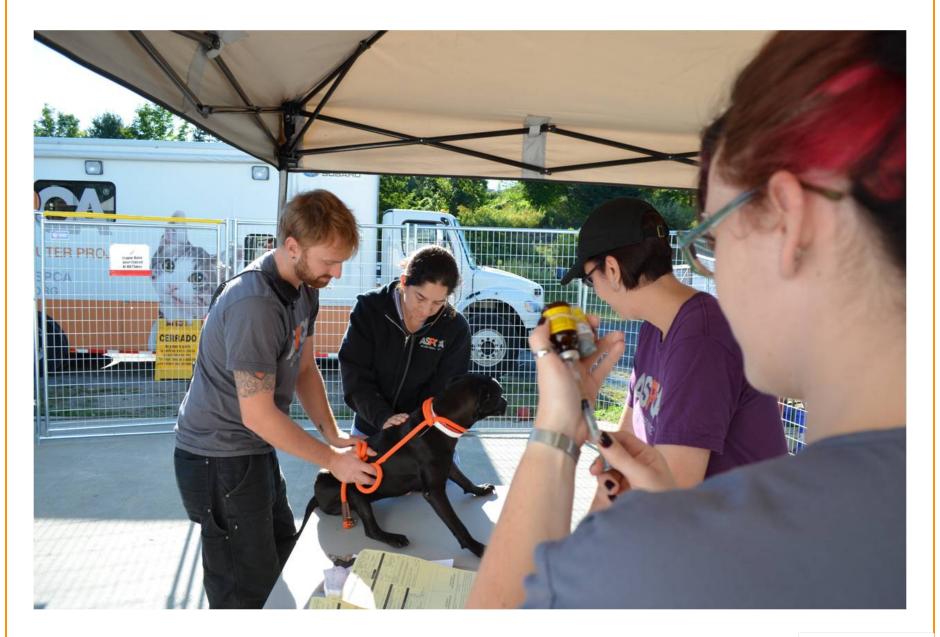
Very portable Versatile

#### Cons:

Expensive to operate You're managing remotely Limited capacity



MOBILE ANIMAL CLINIC





## In-clinic Clinics

#### Good for:

Small budgets
Small populations
Specific populations
(ie feral cat day,
pit-bull-paloozas)

#### Pros:

Least expensive Very portable

### Cons:

Need to have private vets who believe in your mission



WE'RE LOOKING FOR A FEW GOOD DOGS

#### THE MISSION:

To recruit worthy pit bulls for free wellness care\*

#### YOUR ASSIGNMENT:

CALL 1-877-900-PITS (1-877-900-7487) to sign up

#### WHO:

Healthy pit bulls and pit mixes\*\* between 6 months and 5 years old

- Free Spay, Neuter or Vasectomy
- · Free Vaccination with Surgery
- Free Microchip with Surgery
- . Free K9 Camo Gear and More

Awards and honorable discharge for all pit bulls completing the mission

\* Subject to availability and to the veterinarian's determination that the dog is fit for surger \*\*Determinations of breed are the sole discretion of the ASPCA.



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## Voucher Model

#### **Good for:**

PR for other programs (ie BAD RAP)

#### **Pros:**

Not your problem! (less work, less expense)

#### Cons:

Not your problem! (lack of control, hidden fees, no follow-up)



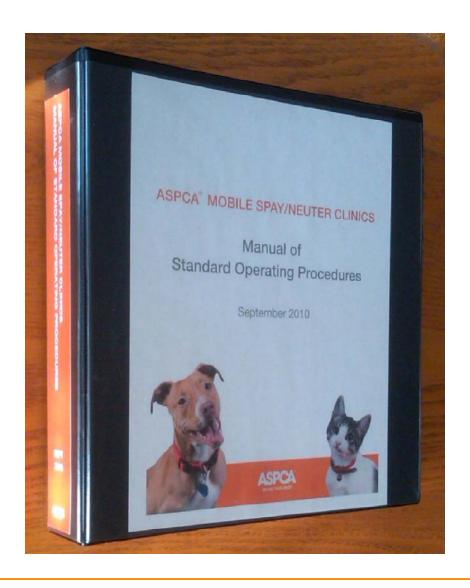


# What makes these models work?





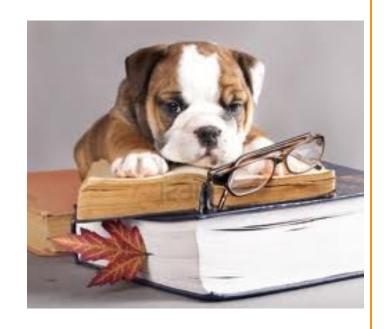
# The SOP Manual





## What's it for?

- Standardizes policies / procedures
- Defines expectations for:
- Your program
  - Your staff
  - Your clients
- Defines quality of care and service
- Acts as a training tool
- Enforces work standards and accountability via:
  - Staff acknowledgement of receipt of manual
  - Staff acknowledgement of changes to manual as they occur





# What goes in it?

Mission statement
Basic program parameters
Employment information
Operations protocols
Administrative/finance policies
Medical protocols
Data collection





## 1. Mission Statement



An effective mission statement must be a clear description of where an organization is headed in the future that distinctly sets it apart from other entities and makes a compelling case for the need it fills.



# Once again, in English?

## Whom do you serve, and why?

Mission statement must be short, memorable and appropriate for a variety of stakeholders:

- employees
- donors
- clients
- your board



## Creating Your Mission Statement

- What do you want to do?
- Why do you want to do it?
- How will you do it?
- Where will you do it?





l am a recovering people pleaser.



(Is that okay?)





# 2. Basic Program Parameters





## **Know Your Clients**

## Cat/dog households

74% have NONE spayed/neutered

## Dog-only households

 76% have NO dogs spayed/neutered



## **Cat-only households**

65% have NO cats spayed/neutered



## **Know Your Clients**

- Who
- What
- Where
- Why





## **Know Your Patients**

- Owned animals
- Rescue animals
  - Shelters
- Adoptions / Foster Groups
- Free Roaming Cats / TNR



## Spay/Neuter Guidelines

## Determining patient eligibility for surgery

- What species?
- Age restrictions?
  - In heat?
  - Pregnant?
- Size or weight restrictions?
  - Aggression?
- Medical conditions that increase anesthetic/surgical risk?



## Beyond Spay/Neuter

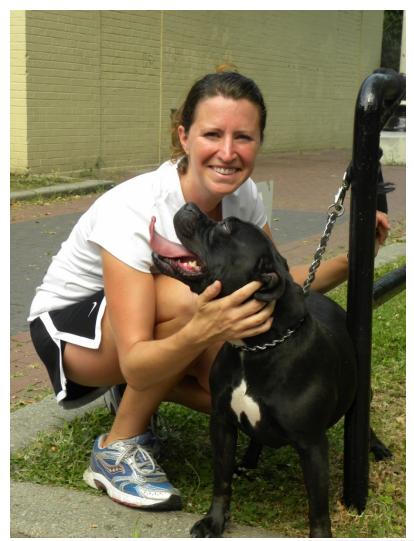


**Vaccines** Retro – Testing **Heartworm Testing Deworming** Flea Medications Ear Cleaning **Tattoo Eartip** Microchip **Nail Trim** 



## Considerations for Rescuers

- Terms of Use Agreement
- Special Pricing
- Rules for Participation
- Warning Letter
- Termination Letter





## 3. Human Resources Info

#### **Staffing** One Spay/Neuter Clinic

Program Manager

PT/FT Office Assistant

PT Surgeon

FT Licensed Veterinary Technician

FT Veterinary Assistant (s)

Additional duties to consider:

Outreach

**Fundraising** 

Greeting

Driving

Data entry



## Take your time! Interview



# Clearly Define Staff Roles

- Administrator
- Veterinary Technician
- Veterinary Assistant
- Surgeon





## Volunteers

What are the laws in your

area?

- What do you need?
- Where and when?
- Screening
- Training
- Developing relationships





## Volunteers

#### Volunteers should **not**:

Be responsible for performing medical tasks

#### Volunteers need:

- Their time to be respected
- To be FED
- To be THANKED

### Minimize flakiness!

- Outline roles and expectations in advance
- Overcommunicate!





# 4. Operations: Your Clinic Day

### **Sample 10-hour MSNC timeline**

7 AM Greet crowd /Set-up

7:30-9:00 AM Intake

10:00 AM Start surgery

2:30 PM Finish surgery

2:30-3:30 PM Paperwork and clean-up

3:30-4:30 PM Discharge (or 1 hour

after surgery completed)

4:30 PM Finish clean-up

5 PM Drive home



# Location, location, location

## Identify areas of focus.

Ask: Who are you trying to reach and why?

## Narrow your locations down.

Ask: Where do people go with their pets?

#### PS: Remember the details!

-One way streets
-Local vets
-Private homes
-OSHA compliance



# Start Spreadin' The News



- Grassroots! Word of mouth is cheap and effective.
- Wrap your mobile clinic!
- Keep it cheap: flyers are your friend.
- Local partnerships Get others to do your work for you!

#### Your mantra:

"safe, easily accessible, affordable"



# ASPCA CARES: Intensive Community Outreach



# Community **Events**

FREE SPAYING AND NEUTERING FOR YOUR PETS\*at the







MALCOLM X BLVD

CENTRAL PARK

LENOX AVE

#### **SATURDAY October 2nd**

9:00 am - 3:00 pm Central Park West at 110th Street & Lenox Avenue (Malcolm X Blvd.)

- FREE Spay / Neuter Surgery\*
- FREE Microchips\*\* for the first 100 pets
- · Ask-Our-Expert Booths
- Entertainment & Family Fun!





\*Free spay/neuter services are provided on a first come, first served, beginning at 7:30 am. If you and your pet arrive and the clinics are fully booked, you can schedule an appointment for free service in future clinics in a neighborhood near you. Only pets who arrive with their humans can schedule future appointn

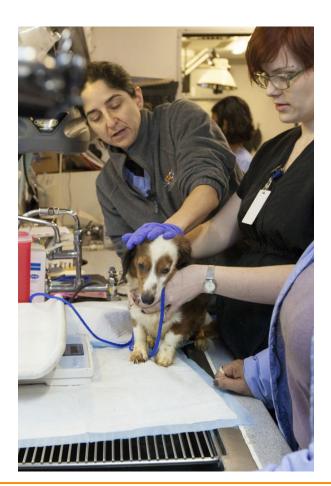
"Free microchipping at 9:00 amprovided by Major's Alliance







# Intensive Community Outreach







# 5. Money, Money, Money

- Know your capacity to fundraise
- Know what grants are out there
- Know this basic math:

Your Budget - Your Clients = You Have To Pluck The Rest Out Of Thin Air





### Fees

How much can you afford to charge without having to change your mission?

Subsidized vs. self-sustainable

See: Know Your Clients



# Technology Costs to Consider

- Medical records software
- Data collection needs
- Information / calendar on website
- 24-hour post-op line
- Online staff calendar





# 6. Medical Policies & Procedures: What's Important and Why?



It's not just rabbits who multiply like rabbits.

Spay or neuter your pets. Help stop pet overpopulation.



#### Special Report

#### The Association of Shelter Veterinarians veterinary medical care guidelines for spay-neuter programs

Association of Shelter Veterinarians' Spay-Neuter Task Force
Andrea L. Looney, Dvm, Dacva; Mark W. Bohling, Dvm, PhD, Dacvis; Philip A. Bushby, Dvm, Ms, Dacvis;
Lisa M. Howe, Dvm, PhD, Dacvis; Brenda Griffin, Dvm, Ms, Dacvim; Julie K. Levy, Dvm, PhD, Dacvim;
Susan M. Eddlestone, Dvm, Dacvim; James R. Weedon, Dvm, MPH, Dacvem; Leslie D. Appel, Dvm;
Y. Karla Rigdon-Brestle, Dvm; Nancy J. Ferguson, Dvm; David J. Sweeney, Dvm; Kathy A. Tyson, Dvm;
Adriana H. Voors, Dvm; Sara C. White, Dvm; Christine L. Wilford, Dvm; Kelly A. Farrell, Dvm;
Eller P. Jefferson, Dvm; Michael R. Moyer, VmD; Sandra P. Newbury, Dvm;
Melissa A. Saxton, Dvm; Janet M. Scarlett, Dvm, MPH, PhD

As efforts to reduce the overpopulation and euthanasia of unwanted and unowned dogs and cats have increased, greater attention has been focused on spay-neuter programs throughout the United States. Because of the wide range of geographic and demographic needs, a wide variety of programs have been developed to increase delivery of spay-neuter services to targeted populations of animals, including stationary and mobile clinics, MASH-style operations, shelter services, feral cat programs, and services provided through private practitioners. In an effort to ensure a consistent level of care, the Association of Shelter Veterinarians convened a task force of veterinarians to develop veterinary medical care guidelines for spay-neuter programs. The guidelines consist of recommendations for preoperative care (eg, patient transport and housing, patient selection, client communication, record keeping, and medical considerations) anesthetic management (eg., equipment, monitoring, perioperative considerations, anesthetic protocols, and emergency preparedness), surgical care (eg, operating area environment; surgical-pack preparation; patient preparation; surgeon preparation; surgical procedures for pediatric, juvenile, and adult patients; and identification of neutered animals), and postoperative care (eg. analgesia, recovery, and release). These guidelines are based on current principles of anesthesiology, critical care medicine, microbiology, and surgical practice, as determined from published evidence and expert opinion. They represent acceptable practices that are attainable in spay-neuter programs.

As efforts to reduce the euthanasia of unwanted and unowned dogs and cats, including feral cats, have increased, greater attention has been focused on spay-neuter programs throughout the United States. Spay-neuter programs are designed to facilitate access to spay-neuter services among targeted populations of animals in an effort to prevent reproduction and reduce subsequent overpopulation. Current

From the Section of Pain Medicine (Looney) and Maddie's Shelter Medicine Program, Department of Population Medicine and Diagnostic Sciences (Griffin, Scarlett), College of Veterinary Medicine, Cornell University, Ithaca, NY 14833; the Department of Small Animal Clinical Sciences, College of Veterinary Medicine, University of Tennessee, Knoxville, TN 37996 (Bohling); the Department of Clinical Sciences, College of Veterinary Medicine, Mississippi State University, Starkville, MS 30750 (Bushby); the Department of Veterinary Small Animal Clinical Sciences, College of Veterinary Medicine and Biomedical Sciences, Texas A&M University, College Station, TX 17843 (Howe); the Department of Small Animal Clinical Sciences, College of Veterinary Medicine, University of Florida, Gainesville, FL 32610 (Levy); the Department of Veterinary Clinical Sciences, School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA 70803 (Eddlesione); Spay-Neuter Assistance Program Inc, 1001 W Loop S, Ste 110, Houston, TX 77027 (Weedon); American Society for the Prevention of Cruelty to Animals Shelter Outreach Services, 78 Dodge Rd, Ithaca, NY 14830 (Appel); National Spuy/Neuter Response Team, Humane Alltance, 231 Haywood St, Asheville, NC 28801 (Rigdon-Brestle); National Spay/Neuter Response Team, Humane Alltance, S.P.O.T. Spay/Neuter Clinic, 612 5 Main St, Cloverdale, IN 46120 (Ferguson); No More Homeless Pets in Utah, 324 South 400 W, Sie C, Salt Lake City, UT 84101 (Sweeney); City of San Jose Animal Care and Services, 27:90 Monterey Rd, San Jose, CA 95111 (Tyson); Shenandoah Valley Spay and Neuter Clinic, 910 N Liberty St, Harrtsonburg, VA 22802 (Voors); Spay ASAP Inc, 163 Clay Hill Rd, Hartland, VT 05048 (White); Cats Exclusive Veterinary Center, Feral Cat Spay/Neuter Project, 11331 Roosevelt Way NE, Seattle, WA 98125 (Wilford); Angels of Assist, 415 Campbell Ave, Roanoke, VA 24016 (Farrell); EmanciPET Spay/Neuter Clinic, 2729 Exposition Blvd, No. 124, Austin, TX 78703 (Jefferson); Rosenthal Director of Shelter Animal Medicine, School of Veierinary Medicine, University of Pennsylvania, Philadelphia, PA 19104 (Moyer); Koret Shelter Medicine Program, Center for Companion Animal Health, School of Veterinary Medicine, University of California, Davis, CA 93616 (Newbury); and Humane Alliance of Western North Carolina, 231 Haywood St, Asheville, NC 28801 (Saxton). Address correspondence to Dr. Griffin

Vet Med Today: Special Report

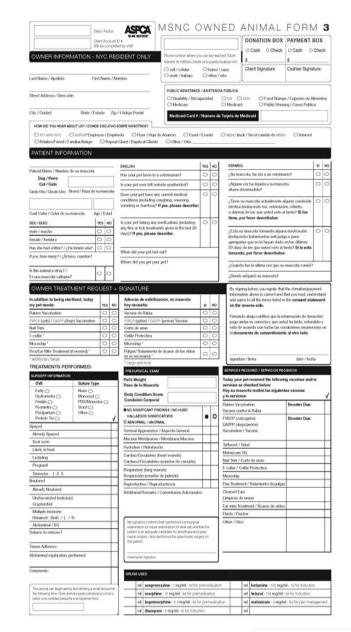
JAVMA, Vol 233, No. 1, July 1, 2008

## Medical SOPs JAVMA; July 1, 2008



#### Medical Records

- Owner's Information
- Patient Information
- Patient Medical History
- Treatment Request
- Consent Statement
- Signature
- Pre-Surgical Exam
- Surgery Information
- Other Services Received





#### Medical Records: Additional Forms

#### FeIV/FIV Test Release Form

- Instructs how to proceed if test is positive
- May also serve as a signature form for euthanasia
- Discourage testing of free roaming cats

#### **AMA**—Against Medical Advice

 Used when owner elects to proceed with surgery despite documented increased risk

#### **Addendum Form**

- Documents unusual occurrence/Adverse Reaction
- Provides additional detailed explanation
- Problem with anesthesia, surgery or recovery



# Controlled Drugs and DEA Regulations





# Inventory Controlled Drug Register

Page #:								Inspected by:			
	ASPCA Controlled Substance Register (Buprenorphine)										
Date Buprenorphine Bottle Added	Lot # Exp date	Bottle # Assigned	Staff Initials	Witness Initials	Date Buprenorphine Bottle Removed	Truck # Assigned	Staff Initials	Pacipient or Witness Initials	Daily Count: Total vials of Buprenorphine in safe (# and mls per bottle)	Empty Bottle Paturned	

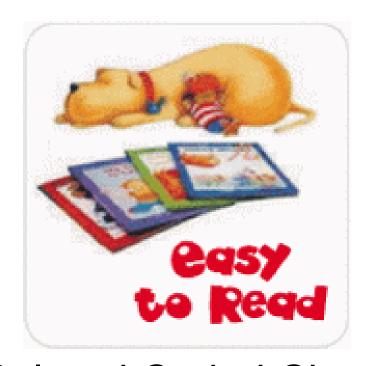
ASPCApro.org

Version: June 2010

# **ASPCA MSNC Daily Drug Log**

Date:	)	Dally Drug Log						Vet/LVT:			Page of			
Client ID Spec f Client name Pet name	Wit (fm)	Telezel Bot f Let f	Bugran Bot # Letif	Morphine Bot f Letf	Diazagam Bot # Let#	Katamine Bet if Letif		Telezei 100 mg/mi	Bugran 0.3 mg/mi	Morphine 15 mg/mi	Diazagam 5 mg/mi	Katamine 100 mg/mi	Aca 1.0 mg/mi	Malex 5 mg/ml
o KG o Fel							Start Diagense Balance							
e KG e Fei							Disperse Balance							
e KQ e Fei							Disperse Balance							
e KQ e Fei							Disperse Balance							
c KG c Fel							Diagense Balance							
e KG e Fei							Disperse Balance							
o KG o Fel							Diagense Balance							
c KG c Fel							Dispense Balance							
o KG o Fel							Diagense Balance							
e KG e Fei							Dispense Balance							
o KG o Fel							Diagense Balance							
Inapected by:						 						Date:		

#### Medical Protocols at a Glance



Colored Coded Charts
Quick Reference Guides
Laminated Instructions



## Vaccination Guidelines

Vaccine	Puppies/Kittens-less-than-⊷ 16-weeks-of-age¤	Adolescent-or-adult-dogs/cats- greater-than-16-weeks-of-age¤	Vaccine is to be boostered a
Rabies-(Killed-virus) <b>-</b> - (3-year-product)¶ ALL-dogs-and-cats¤	Animal-must-be-at-least-12-weeks-of-age-to-receive-first-vaccineAnimals-between-12–16-weeks-of-age-receive-vaccine-if-owner-does-not-produce-certificate-signed-by-veterinarian-showing-that-animal-is-adequately-vaccinated.¤	Animal receives-vaccine-if-owner- does-not-produce-certificate-signed- by-a-veterinarian-showing-that- animal-is-adequately-vaccinated.¤	After first-vaccination, -second- vaccination is administered in 1-year A- 3-year-rabies-vaccine-product is then- administered-every-3-years.¤
DA2PPV-(Modified-live)¶ Dogs-from-public¤	Begin-vaccination-as-early-as¶ 6-weeks-of-ageAdminister-vaccine- at-intervals-of-3-4-weeks-until¶ 16-weeks-of-age.¤	Administer-2-vaccines,-3-4-weeks- apart.¤	A-booster-vaccination-is-given-1-year- after-completion-of-the-initial-vaccine- seriesFollowing-this-vaccination,- revaccination-is-recommended-every-3- years.¤
DA2PPV(Modified-live)¶ Dogs-from-shelter← or-rescue-groupa	Administer-vaccine-upon-admission- to-shelter-(may-be-as-early-as-4- weeks-of-age-in-some-shelters) Repeat-at-2-week-intervals-until¶ 16-weeks-of-age.¤	Administer-vaccine-upon-admission- to-shelterRepeat-in-2-weeks.¤	When-adopted,-follow-booster- recommendations-for-public-dogs.¤
FVRCP-(Modified-live)¶ Cats-from-public¤	Begin-vaccination-as-early-as- 6-weeks-of-ageAdminister-vaccine- at-intervals-of-3-4-weeks-until¶ 16-weeks-of-age.  □	Administer-2-vaccines,3-4-weeks- apart.¤	A-booster-vaccination-is-given-1-year- after-completion-of-the-initial-vaccine- seriesFollowing-this-vaccination,- revaccination-is-recommended-every-3- years.¤
FVRCP-(Modified-live)¶ Cats-from-shelter- or-rescue-group	Administer-vaccine-upon-admission- to-shelter-(may-be-as-early-as-4- weeks-of-age-in-some-shelters) Repeat-every-2-4-weeks-until¶ 16-weeks-of-age.¤	Administer-vaccine-upon-admission- to-shelterRepeat-in-3-4-weeks.¤	When-adopted,-follow-booster- recommendations-for-public-cats.¤
FVRCP-(Modified-live)¶ Feral-cats¤	Administer-vaccine-at-time-of- spay/neuter.¤	Administer-vaccine-at-time-of <b>-</b> ∪ spay/neuter.¤	IF-cat-is-trapped-for-purpose-other-than- vaccination-in-future, a-booster- vaccination-may-be-given-(if-greater- than-3-weeks-after-initial-vaccination).¤

\_ **L** 

#### Canine Drug Protocol with Rimadyl

January 2012						_		
Weight	Acepromazine	Morphine	Diazepam	Ketamine	Rimadyl			
(pounds)	mL (IM)	mL (IM)	mL (IV)	ml (IV)	ml (SubQ)			
	10 mg/ml	15 mg/ml	6 mg/ml	100 mg/ml	50 mg/ml	I		
2 - 3	0.01	0.05	0.10	0.10	0.10			
4 - 5	0.02	0.10	0.15	0.15	0.20			
6 - 7	0.03	0.10	0.20	0.20	0.25			
8 - 9	0.04	0.15	0.25	0.25	0.35			
10 - 15	0.05	0.20	0.35	0.35	0.50	Ţ		
16 - 20	0.08	0.30	0.50	0.50	0.70	Ţ		
21 - 25	0.10	0.35	0.60	0.60	0.90	[		
26 - 30	0.12	0.45	0.70	0.70	1.10	Ţ		
31 - 35	0.15	0.50	0.85	0.85	1.30	Ţ		
36 - 40	0.17	0.60	1.00	1.00	1.50	Ţ		
41 - 50	0.20	0.70	1.20	1.20	1.80	Ţ		
51 - 60	0.20	0.90	1.40	1.40	2.20	Ţ		
61 - 70	0.20	1.00	1.60	1.60	2.60	Ţ		
71 - 80	0.20	1.20	1.70	1.70	3.00	Ţ		
81 - 90	0.20	1.30	1.80	1.80	3.40	Ţ		
91 - 100	0.20	1.40	1.90	1.90	3.80			
101 - 110	0.20	1.60	1.95	1.95	4.20	Ţ		
111 - 120	0.20	1.70	2.00	2.00	4.60	Ţ		
Drug		Concentration		Dose		Route		
Acepromazine		10 mg/ml		0.1 mg/kg		IM		
	omazine is used at - Maximum of 2 mg i				elve smaller aceptomaz	tra street		
Morphine	- maximum or 2 mg	15 mg/ml	agens.	0.5 mg/kg	THE REAL PROPERTY.	M		
Diazepam		5 mg/ml		0.25-0.50 mg/k)		IV IV		
Ketamine	Ketamine 100 mg/mi 5-10 mg/kg							
Pinnadul (campo	(Nite: Larger dags receive smaller instancies days)  Classical (consentant)  A A position  CO							
	Rimadyl (carprofen) 50 mg/ml 4.4 mg/kg SQ CANINE Drug Protocol							
Acepromatine and Morphine are combined in one syringe and given IM as a pre-med 15 minutes prior to induction								
Diazepam and Ketamine are combined in one syringe and given IV as induction agent								
	Female and male dogs are intuitieted and maintained on isoflurane and oxygen Rimadyl is given SubQ after surgery (at discretion of vel) in healthy dogs greater than 8 weeks of age							
					né dlessaile -			
NOTE: Protocol is intended for use in majority of animals but may be modified at discretion								

of attending veterinarian for partioular animals

# Anesthesia Chart

Multi-modal Pain Management



#### Twice Daily Dosing (BID)

Dog's Weight (Pounds)	25 mg Tablet Twice Daily	75 mg Tablet Twice Daily	100mg Tablet Twice Daily
10-15	1/2	Х	X
16-20	Х	1/4	Х
21-30	1	Х	х
31-45	Х	1/2	х
46-60	х	Х	1/2
61-75	2.5	х	х
76-90	Х	1	Х
91-110	Х	Х	1

#### Notes:

Carprofen (generic Rimadyl) is dispensed for dogs after spay/neuter. Decision to dispense is attending veterinarian's.

Ask client if dog is receiving any medication. Veterinarian decides if carprofen is contraindicated.

Dose carprofen is 2.2 mg/kg orally twice daily post operatively as needed.

Dispense up to 6 doses total.

Tell client to start medication at 8 am on day following surgery.

Medication is to be given in small amount of canned dog food meat ball.

Medication needs to be given with food.

Client is to call post-op help line if vomiting, diarrhea, or inappetance occurs.

Do NOT prescribe for dogs less than 6 WEEKS of age.

Non Steroidal Anti-Inflammatory Drugs (NSAIDS) are utilized as pain management for animals that present for spay/neuter at ASPCA Spay/Neuter Clinics and are prescribed at the discretion of the attending Veterinarian. Rimadyl doses listed above and all dosaging of NSAIDs in this manual are meant to serve as guidelines. Veterinarians may choose to adjust dosing or treatment interval based on the individual animal's clinical condition.

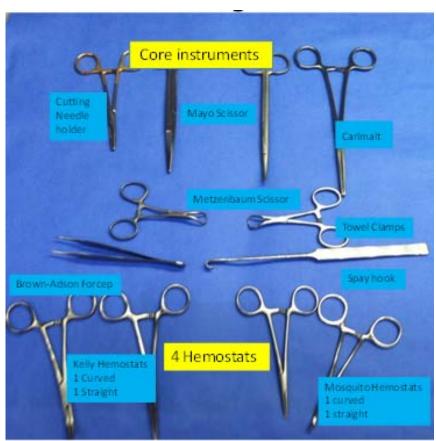
# Chart for Dispensing Oral Medication



# Surgery

- Instrument Packs
- Surgical Techniques
- Suture Material
- Closure







## Recovery

# Monitoring Patients Tasks and Treatments to be done during recovery





# **Emergency Procedures**

Have a fully stocked Crash Box available.

- Know the contents
- Check expiration dates
- Have it accessible
- Set up most commonly used drugs at start of each clinic

Know where drugs/equipment are kept outside the Crash Box that may be necessary during an emergency.

Train staff for Emergency Situations.

- Perform regular Emergency Drills
- Each team member must know his role in an emergency
- Review new CPR Guidelines





# **Emergency Drug Chart**

DRUG	DOSE	<b>2</b> lbs	<b>5</b> lbs	<b>10</b> lbs	<b>15</b> lbs	<b>20</b> lbs	<b>25</b> lbs	<b>30</b> lbs	<b>40</b> lbs	<b>50</b> lbs	<b>60</b> lbs	<b>70</b> lbs
		(Amour	nt of dr	ug to be	given is	s listed i	n mls)					
Antisedan (5 mg/ml)		(An amo	unt equa	al to Dom	itor or De	exdomito	or used ca	n be give	en IM, us	e half do	se if give	n IV)
Atropine (0.54 mg/ml) *	0.04 mg/kg	0.10	0.20	0.30	0.50	0.70	0.80	1.00	1.30	1.70	2.00	2.40
Dexamethasone SP (4 mg/ml) *	1 mg/kg	0.25	0.60	1.10	1.70	2.30	2.80	3.40	4.50	5.70	6.80	8.00
Dextrose 50%	0.2 ml/kg	0.20	0.50	1.00	1.50	2.00	2.30	2.70	3.50	4.50	5.50	6.00
Diphenhydramine (50 mg/ml)	2 mg/kg	0.04	0.10	0.20	0.30	0.40	0.45	0.55	0.75	0.90	1.10	1.30
Doxapram (20 mg/ml)	2 mg/kg	0.10	0.25	0.45	0.70	0.90	1.10	1.40	1.80	2.30	2.70	3.20
Epinephrine 1:1000 (1 mg/ml) *												
For Cardiac Resuscitation *	0.1 mg/kg	0.10	0.20	0.50	0.70	0.90	1.10	1.40	1.80	2.30	2.70	3.20
For Anaphylaxis (IM)	0.02 mg/kg	0.02	0.05	0.10	0.15	0.20	0.25	0.30	0.40	0.50	0.60	0.70
Flumazenil (0.1 mg/ml)	0.01 mg/kg	0.10	0.25	0.45	0.70	0.90	1.15	1.35	1.80	2.25	2.75	3.20
Glycopyrrolate (0.2 mg/ml) *	0.004 mg/kg	0.02	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.45	0.55	0.65
IV Fluid Cat (LRS, Normosol R, Plasm	a lyte)	(Reasse	ss after	initial bo	olus is gi	iven)						
(For Cardiac Arrest)	20 ml/kg/20 min	20	50	90	140	180						
IV Fluid Dog(LRS, Normosol R, Plasm	alyte)	(Reasse	ss after	initial bo	olus is gi	iven)						
(For Cardiac Arrest)	40 ml/kg/20 min	30	75	180	250	300	400	500	700	900	1000	1200
Lidocaine 2% (20 mg/ml) *												
For Dogs *	1 mg/kg slowly	0.05	0.10	0.20	0.35	0.45	0.55	0.70	0.90	1.10	1.30	1.60
For Cats (Beware CNS effects) *	0.25 mg/kg slowly	0.01	0.03	0.05	0.08	0.10						
Naloxone (0.4 mg/ml) *	0.04 mg/kg	0.10	0.25	0.45	0.70	0.90	1.10	1.40	1.80	2.30	2.70	3.20
Solu-Delta-Cortef (100 mg/10 m	5.5 mg/kg	0.50	1.20	2.50	3.70	5.00						
Solu-Delta-Cortef (500 mg/10 m	5.5 mg/kg					1.00	1.30	1.50	2.00	2.50	3.00	3.50
Vasopressin (20 units/ml)*	0.5 units/kg	0.02	0.05	0.10	0.20	0.25	0.30	0.35	0.45	0.60	0.70	0.80
Yohimbine (2 mg/ml)	0.1 mg/kg	0.05	0.10	0.25	0.35	0.45	0.60	0.70	0.90	1.10	1.40	1.60
Drugs are given IV, except epinephrine when given for anaphylaxis and diphenhydramine to cats which are given IM.												
	•											
*Drugs can be given IT at double volume, consider adding small amount of saline to disperse agent, and follow with good ventilations												



# Epinephrine and Atropine: Dosages for Use During Cardiac Arrest

Drug	Epinephrine	Epinephrine	Atropine	Atropine
Concentration	1:1000 (1 mg/ml)	1:1000 (1 mg/ml)	0.54 mg/ml	0.54 mg/ml
Dose	0.1 mg/kg	0.2 mg/kg	0.04 mg/kg	0.08 mg/kg
Route	IV	*IT	IV	*IT
		(2-3x IV Dose)		(2-3x IV Dose)
Weight (lbs.)	ml	ml	ml	ml
2	0.1	0.2	0.1	0.2
5	0.2	0.4	0.2	0.4
10	0.5	1.0	0.3	0.6
15	0.7	1.4	0.5	1.0
20	0.9	1.8	0.7	1.4
25	1.1	2.2	0.8	1.6
30	1.4	2.8	1.0	2.0
35	1.6	3.2	1.2	2.4
40	1.8	3.6	1.3	2.6
45	2.0	4.0	1.5	3.0
50	2.3	4.6	1.7	3.4
60	2.7	5.4	2.0	4.0
70	3.2	6.4	2.4	4.8
80	3.6	7.2	2.7	5.4



# Discharge Procedures

Standard Discharge Time vs. Time after surgery is completed.

Patients must be ready for discharge:

- Cats must be sternal and alert.
- Dogs must be able to walk.

Standard Discharge Script.

Show owners incision and tattoo site.

Have paperwork ready:

- Discharge Note.
- Vaccine Certificate.
- Additional Handouts:
- Specific Medical Conditions or Special Surgeries.
- E Collar Instructions.

Contact information for post-op concerns and questions Procedure for Animals that are not Picked Up After Surgery.





# Surgical Complications

#### **Anesthesia Complications**

- Lethargy, Anorexia
- Vomiting, Diarrhea

#### **Surgery Complications**

- Hemoabdomen
  - Herniation

#### **Incisional Complications**

- Seromas
- Suture Reactions
  - Infections
  - Dehiscence

**Tattoo Complications Vaccine Reactions** 



## Post-Op Care

#### Will Your Organization Provide Post-Op Care?

#### Phone Availability?

- 24/7?
- Who?

#### Referral to local veterinarians?

- As a courtesy or at a reduced cost?
- Will each patient go to their own veterinarian?
- Is there a local emergency clinic willing to help?
  - Any reimbursement for care?

#### Rechecks at one of your clinics?

- Arranged in advance?
- Not an option for emergency situations.

Necropsies.



#### Waste Anesthesia Gas

All anesthetic procedures release some WAG (Waste Anesthesia Gas) into the environment.

#### Specific Concerns for S/N Clinics:

- Large Number of Patients
- Passive Scavenger Systems
- Poor Ventilation/Small Spaces

**Quarterly WAG Testing** 

- Assay Technology, Inc.
- http://www.assaytech.us/





# **Autoclave Spore Testing**

Periodically check the functioning of all autoclaves.

Check autoclave function in response to a spike in post-op complications involving infection.



Laboratory contact information:

Enviro-Tech Laboratories, Inc.

PO Box 60650

San Angelo, Texas 76906

Tel: (800) 944-1302

Fax: (325) 942-9693

www.sporestriptesting.com



# 7. Collecting Data



#### Measuring Impact

- Client Information
- Patient Subsets
- History Questions
- Shelter Intake

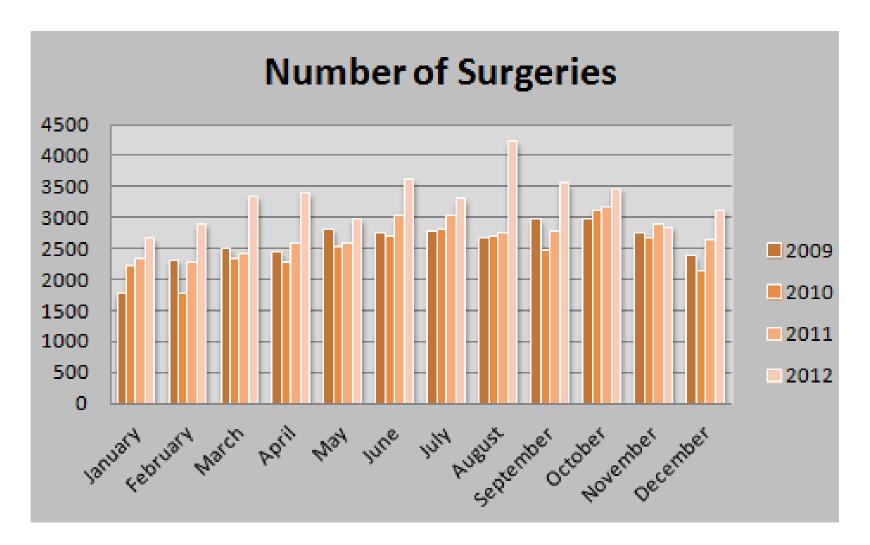


# **Surgery Information**

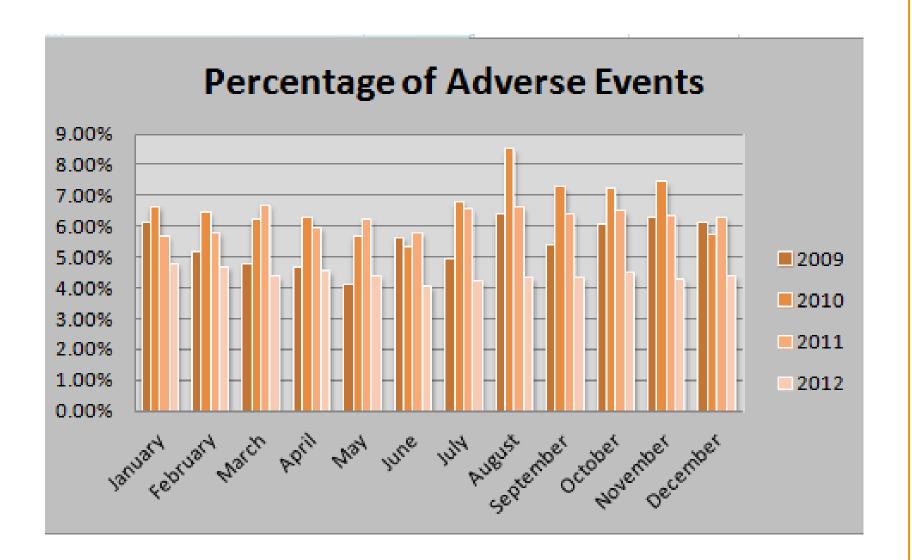
- Number of Surgeries
- Morbidity: Complications
- Mortality: Deaths
- Counted Versus Not Counted



#### **Evaluation of Data**









# ASPCA Mobile Spay/Neuter Clinic

	2011	2012
<ul> <li>Total Surgeries</li> </ul>	25,316	25,915
<ul> <li>% Adverse Events</li> </ul>	7.33%	5.97%
<ul><li>Deaths:</li></ul>		
Total Number	33	21
Total Incidence	0.13%	0.08%
<ul> <li>Counted</li> </ul>		
Counted Number	21	16
Counted Incidence	0.08%	0.06%



#### **SOP Manuals Live and Breathe!**

#### Be ready to:

- Revise Protocols
- Add Protocols
- Remove Protocols

Constantly!!!!

