

# Shelter Medicine 101



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# Presentation Outline

- Vaccinations
- Parasite Control
- Diagnostic Testing
- ASV Guidelines
- Resources



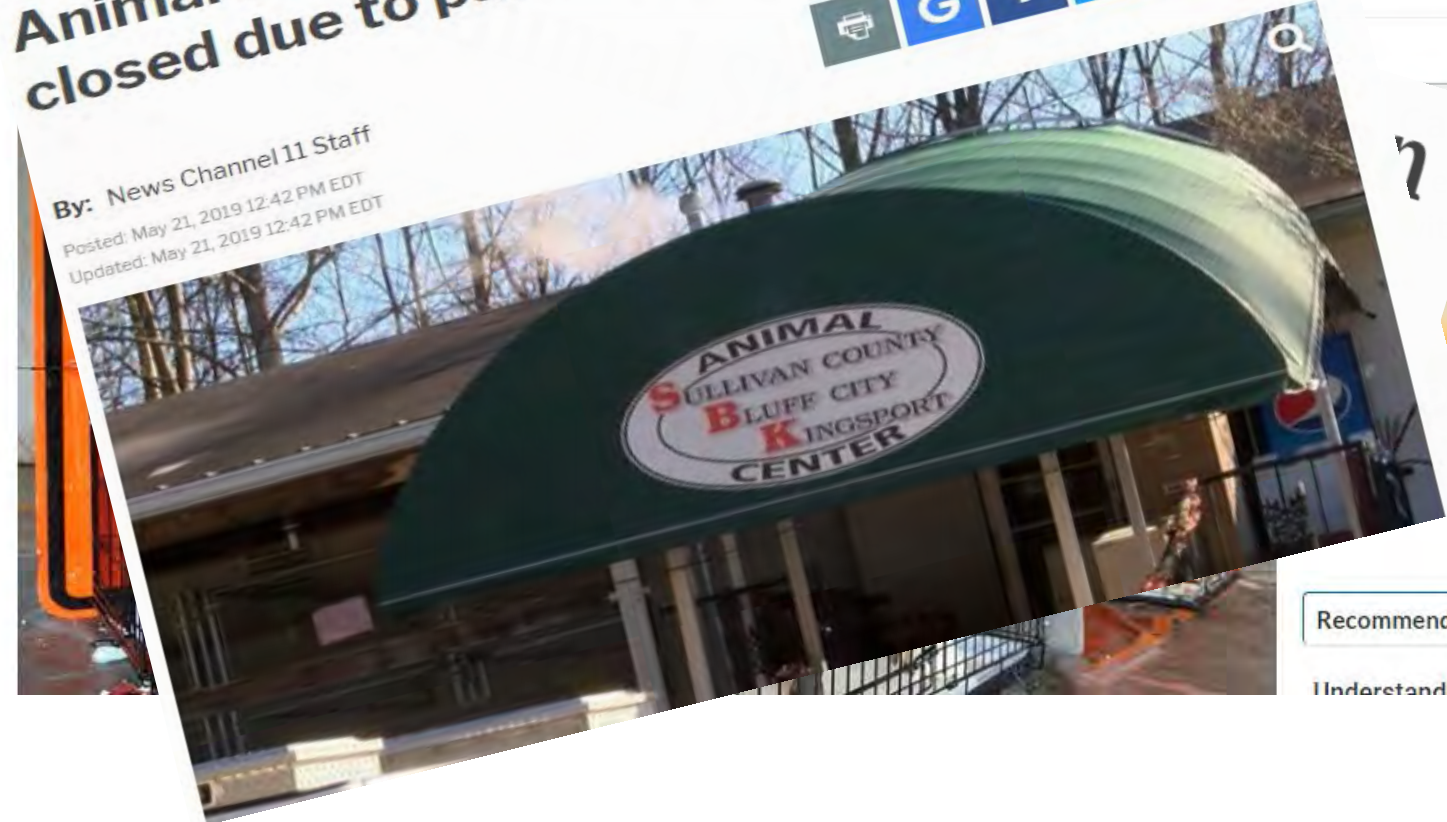


# Vaccination

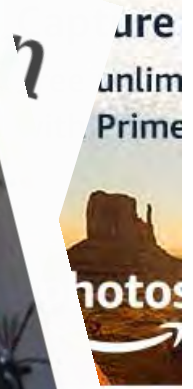
# Animal shelter in Blountville temporarily closed due to parvo outbreak

Anir  
by Laurind  
f t f

By: News Channel 11 Staff  
Posted: May 21, 2019 12:42 PM EDT  
Updated: May 21, 2019 12:42 PM EDT



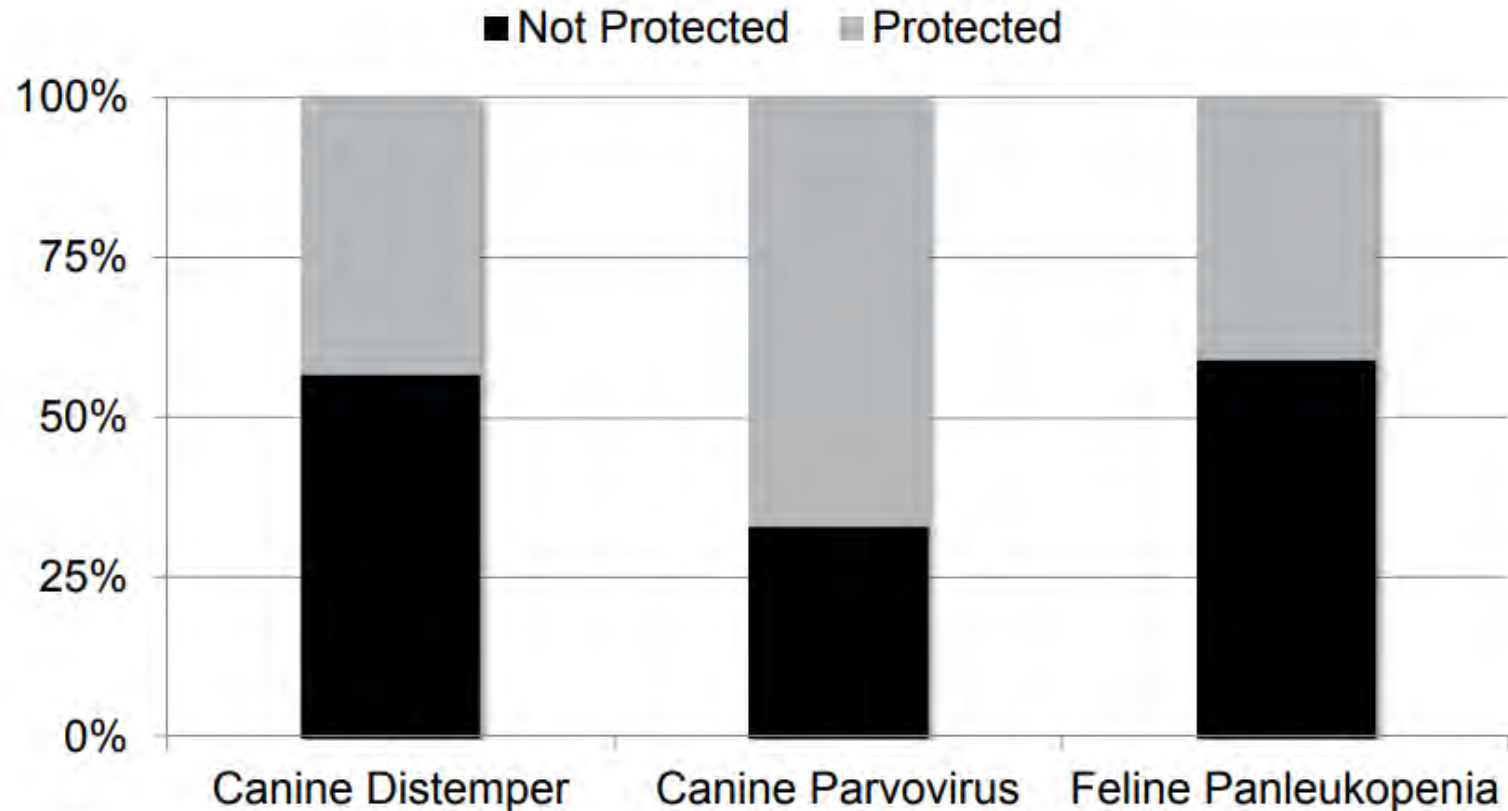
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Recommended for you  
Understanding the St



# Do we really need to vaccinate?

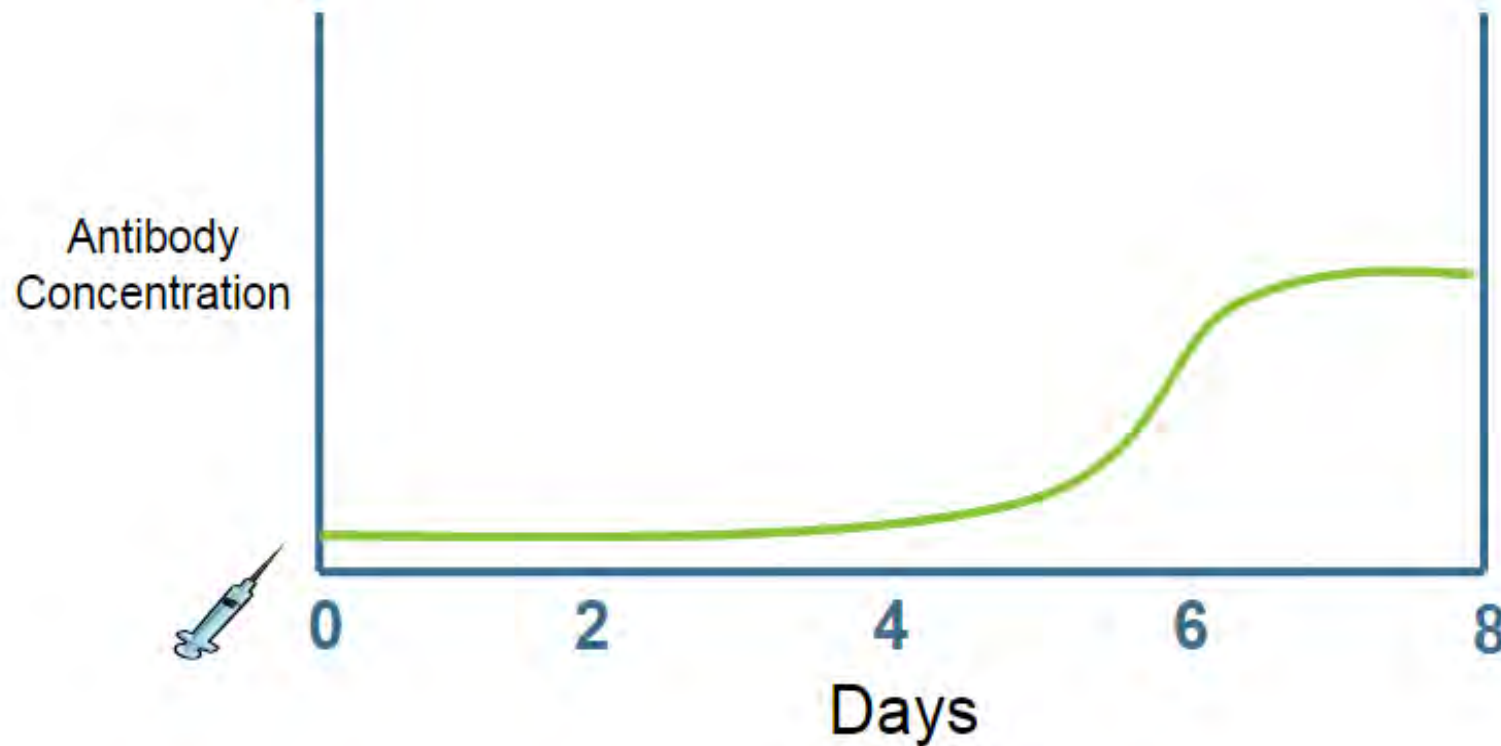


*Lechner ES, Crawford PC, Levy JK, et al. Prevalence of protective antibody titers for canine distemper virus and canine parvovirus in dogs entering a Florida animal shelter. JAVMA 236 (12), 2010.*

*DiGangi BA, Levy JK, Griffin B, et al. Prevalence of protective antibody titers for feline panleukopenia virus, feline herpesvirus-1, and feline calicivirus in cats entering Florida animal shelters. JAVMA 241(10), 2012.*

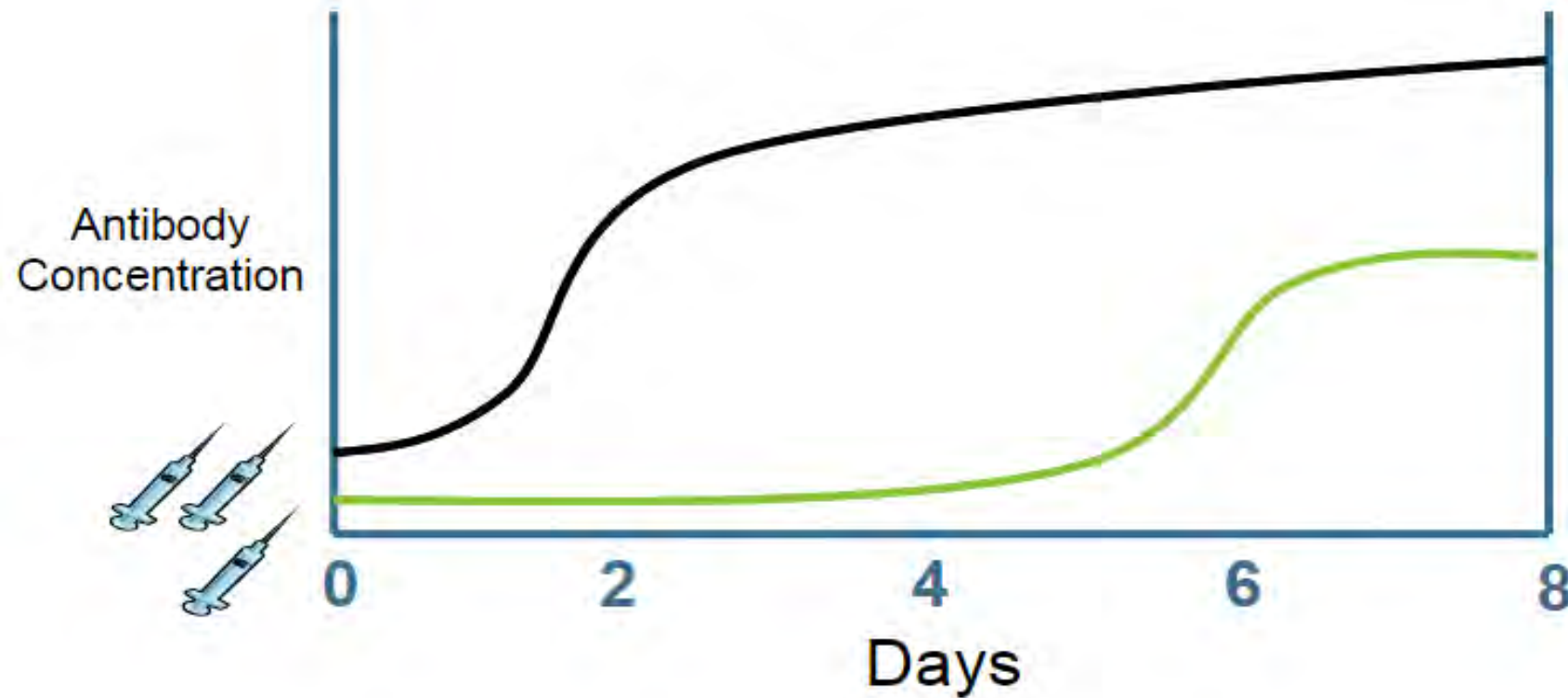
# Timing of vaccination

- How quickly do adults respond to vaccination?



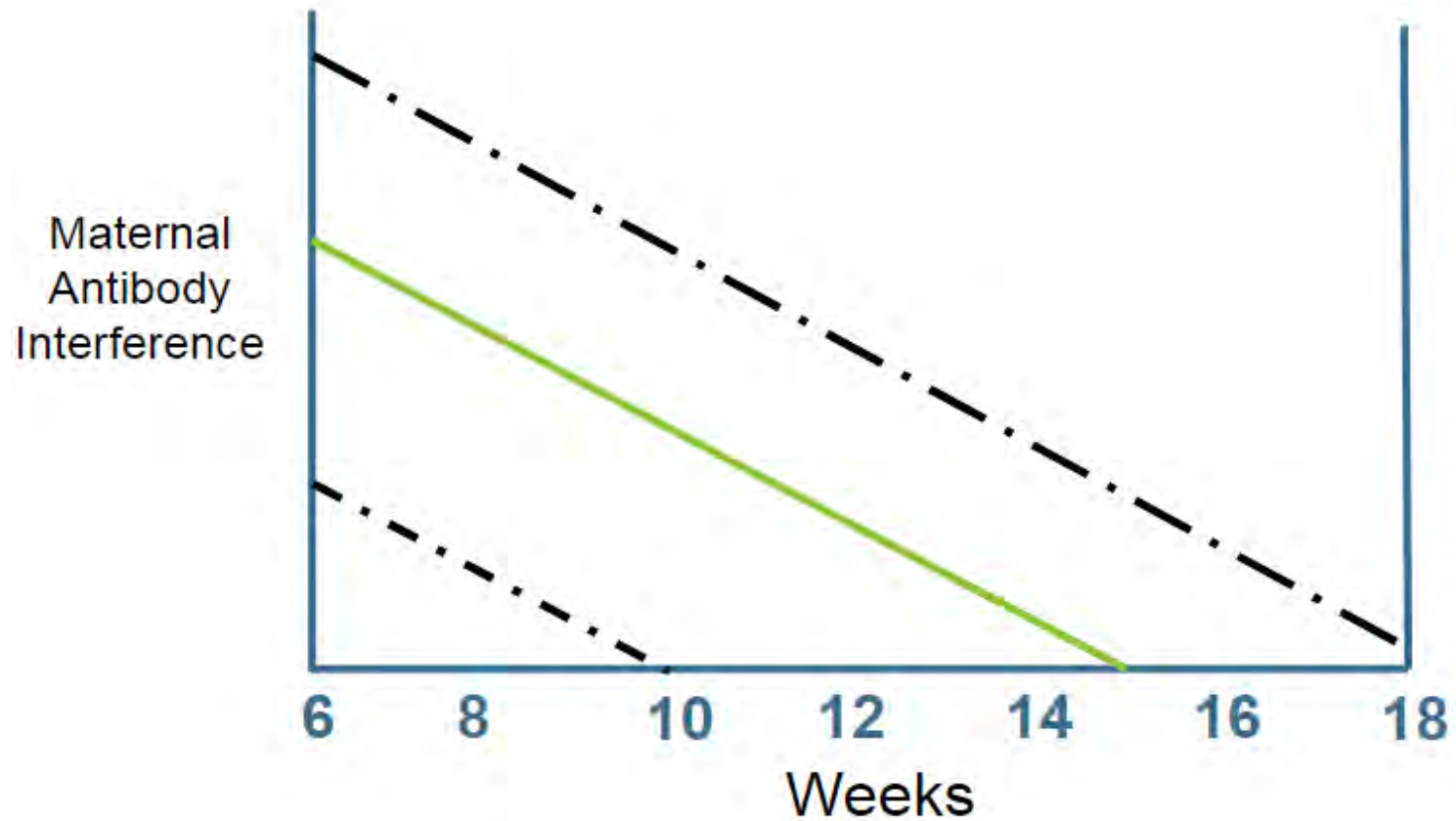
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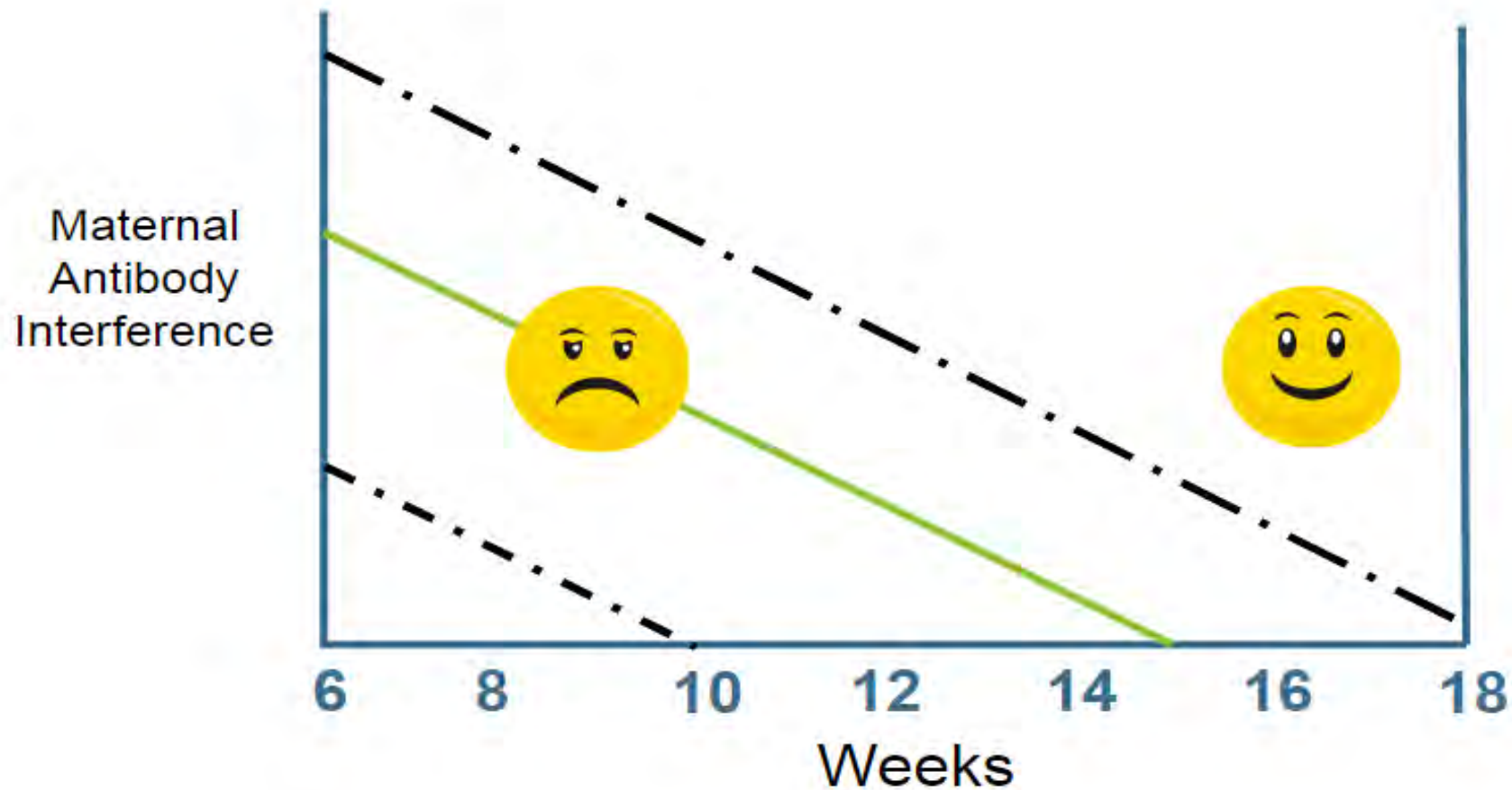
# Timing of vaccination

- What about puppies and kittens?



# Timing of vaccination

- What about puppies and kittens?



# Type of vaccine

Modified Live Vaccines		Killed Vaccines	
<u>Pros</u>	<u>Cons</u>	<u>Pros</u>	<u>Cons</u>
Better at overcoming maternal antibody	May cause <i>mild</i> signs of disease	Does not cause signs of illness	Less able to overcome maternal antibody
More rapid onset	Can cause disease in developing fetuses	No risk to developing fetuses	Requires adjuvant which can increase reactions

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## 2013 AAFP Feline Vaccination Advisory Panel Report

### Feline herpesvirus, calicivirus, panleukopenia

- MLV
- Administer at or before intake
- Start at 4 weeks of age
- Kittens: repeat every 2 weeks until 16-20 weeks of age
- Adults: repeat once in 2-3 weeks

### *Feline leukemia*

- Only with group housing or long-term stay
- Start at 8 weeks of age
- Repeat once in 3-4 weeks





## Canine Distemper Virus, Adenovirus-2, Parvovirus

- MLV or recombinant +/- Parainfluenza
- Administer at or before intake
- Start at 4 weeks of age
- Puppies: repeat every 2-3 weeks until 18-20 weeks of age
- Adults: repeat once in 2-3 weeks

## *Bordetella bronchiseptica* + Parainfluenza

- Intranasal +/- Adenovirus 2
- Administer at intake
- Start as early as 3-4 weeks of age

[https://www.aaaha.org/guidelines/canine\\_vaccination\\_guidelines.aspx](https://www.aaaha.org/guidelines/canine_vaccination_guidelines.aspx)

# Who to vaccinate

Yes	No
Injured	< 4 weeks old
Mild illness (fever < 103.5)	Severe illness → Isolate!
Pregnant/nursing	

**When in doubt, vaccinate!**

## Vaccination Decision Table

Should I Vaccinate:		
On stray hold?	<b>YES</b>	<ul style="list-style-type: none"> <li>• Vaccination of all animals on intake to the shelter is an expected standard of care worldwide and is the best way to protect their health.</li> <li>• State boards of veterinary medicine and legal counsel can be consulted if ownership concerns arise.</li> </ul>
When injured?	<b>YES</b>	<ul style="list-style-type: none"> <li>• Vaccination in the face of injuries is not likely to have any impact on the course of recovery.</li> <li>• There is no evidence that vaccination in the face of injuries will not be effective.</li> <li>• Vaccination should not take priority over medical stabilization of patients with severe injuries.</li> </ul>
With mild illness?	<b>YES</b>	<ul style="list-style-type: none"> <li>• Vaccination of these animals is not likely to have any effect on the course of the current illness.</li> <li>• Vaccination may still be effective and protect from infectious diseases.</li> </ul>
With mild fever?	<b>YES</b>	<ul style="list-style-type: none"> <li>• Vaccination may still be effective and protect from infectious diseases in animals with mild fevers (up to 103.5°F).</li> </ul>
When one individual in a litter is larger or smaller than the others?	<b>YES</b>	<ul style="list-style-type: none"> <li>• If one member of a litter appears or is known to be at least 4 weeks of age, all members of the litter should be vaccinated regardless of size.</li> </ul>
When lactating or nursing?	<b>YES</b>	<ul style="list-style-type: none"> <li>• Vaccination will protect the mother from infectious diseases and is unlikely to harm her litter.</li> <li>• Nursing animals will not be protected when the mother is vaccinated; they should be vaccinated starting at 4 weeks.</li> </ul>
During pregnancy?	<b>YES</b>	<ul style="list-style-type: none"> <li>• Vaccination will protect the mother from serious, potentially fatal infectious diseases and may provide protection to offspring for the first few weeks of life.</li> <li>• There is a small risk to developing puppies and kittens whose mothers were vaccinated during pregnancy, but in most sheltering situations the benefits far outweigh the risks.</li> <li>• If vaccines are not administered, the animal should be kept in a protected environment outside of the shelter to minimize likelihood of disease exposure.</li> </ul>
<4 weeks of age?	<b>NO</b>	<ul style="list-style-type: none"> <li>• Animals &lt;4 weeks of age should be placed directly into a foster home or maintained in an area separate from the general population.</li> <li>• Use of modified live vaccines may cause developmental abnormalities in animals of this age.</li> </ul>

# Vaccine handling

## Maintain the cold train!

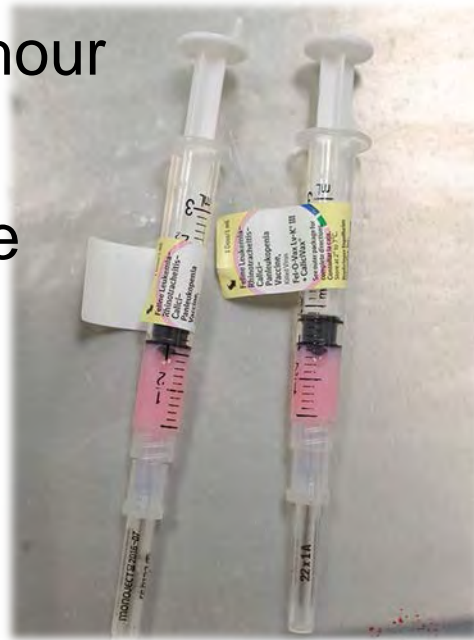
- Unpack within 1 hour of delivery
  - DO NOT use if ice packs are melted
- Store in refrigerator
- Monitor temperatures
- Transport in a cooler



# Vaccine administration

## YES!

- Administer within 1 hour
- Use correct route
- Protect from extreme temperatures
- Label syringes

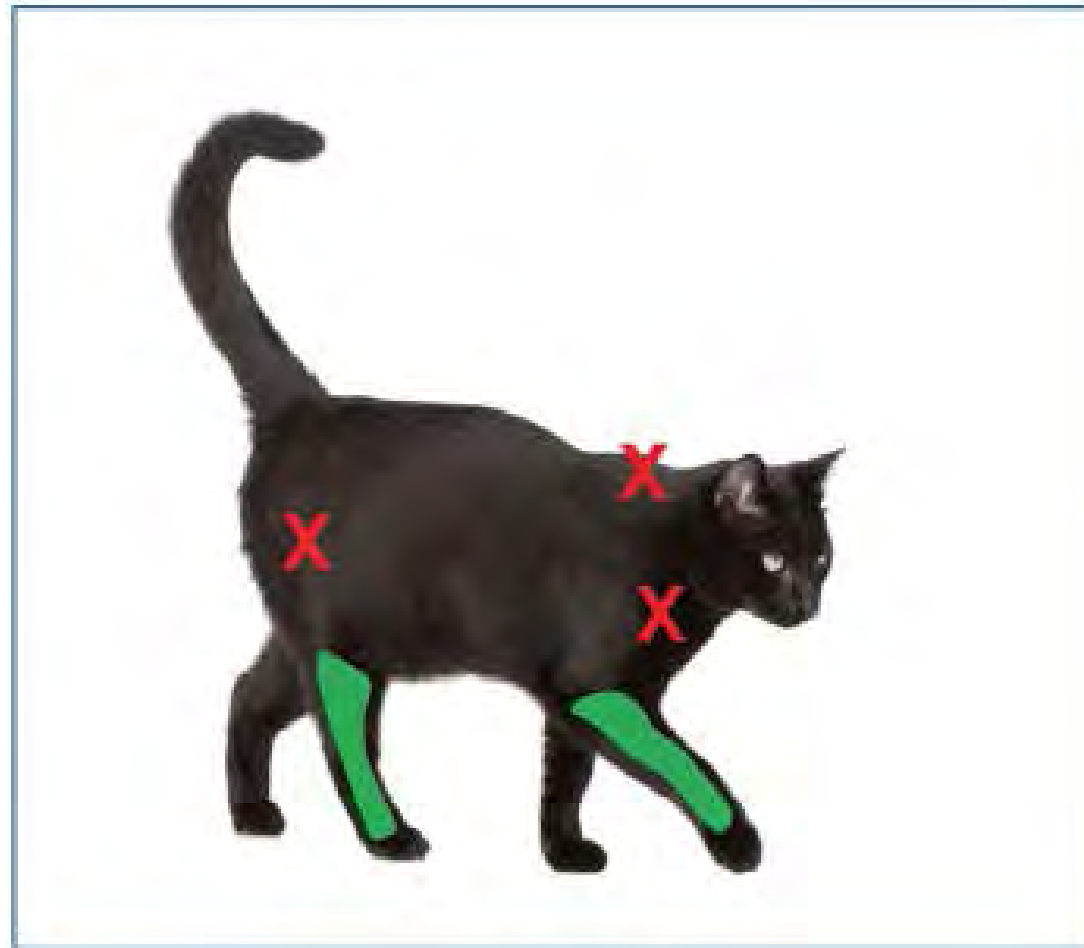


## NO!

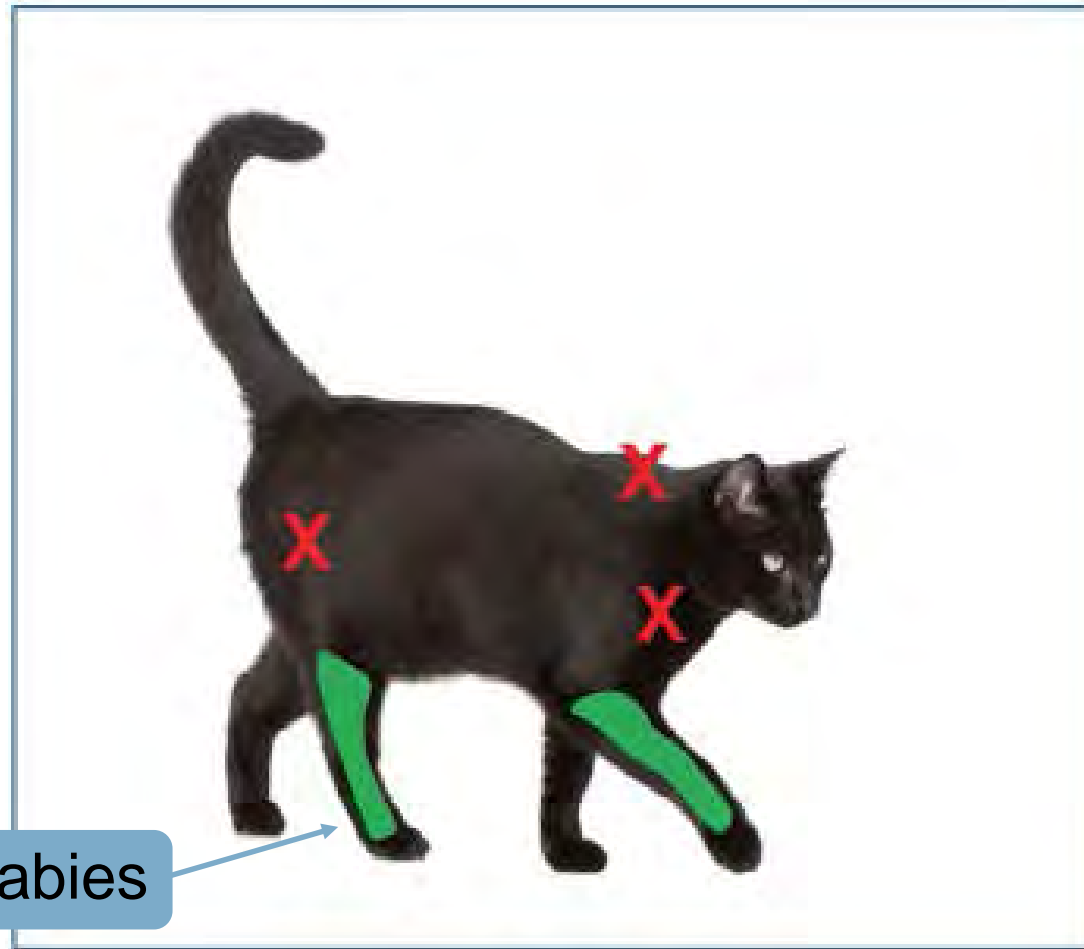
- Split doses
- Use expired vaccines
- Mix multiple products
- Interchange diluents



# Vaccine administration

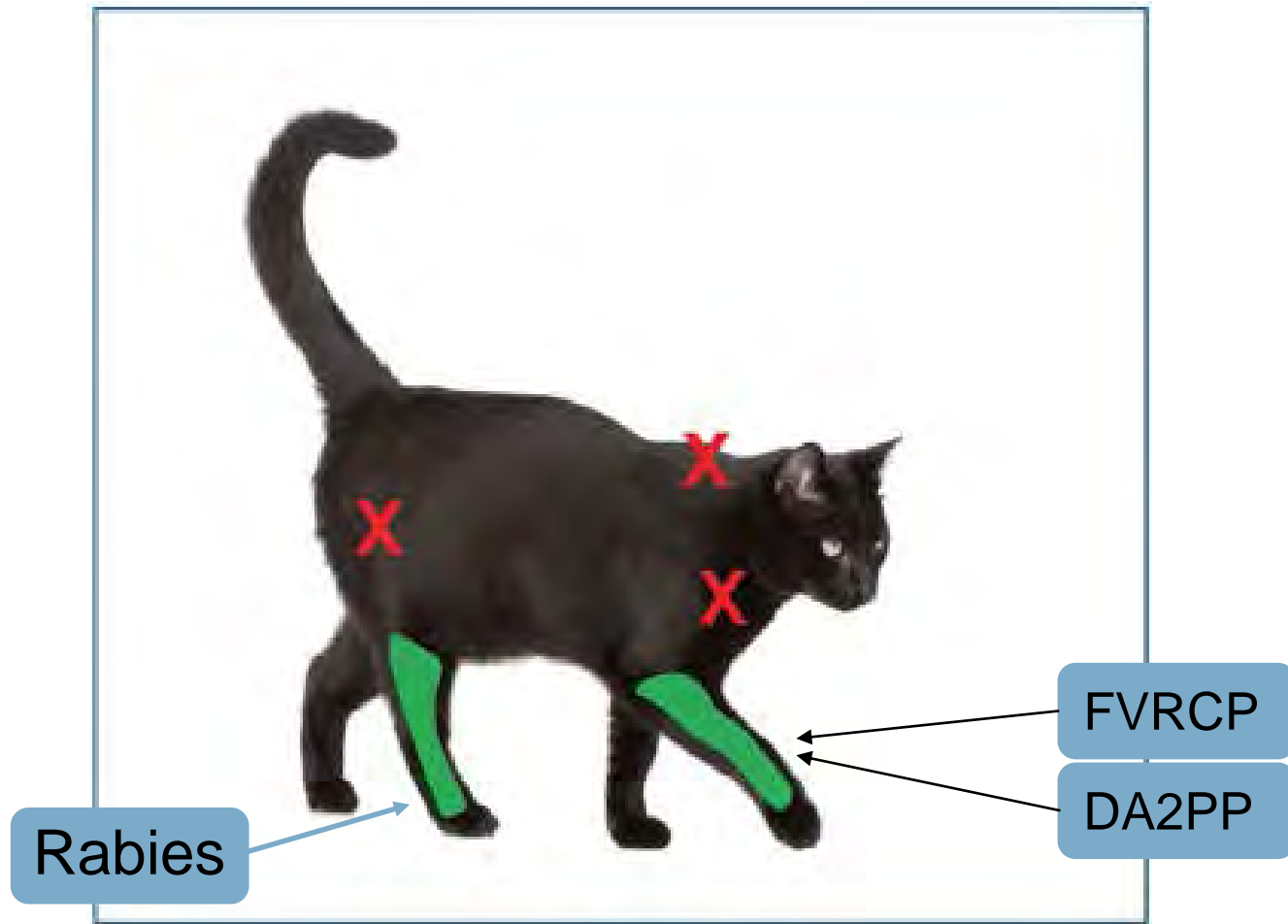


# Vaccine administration



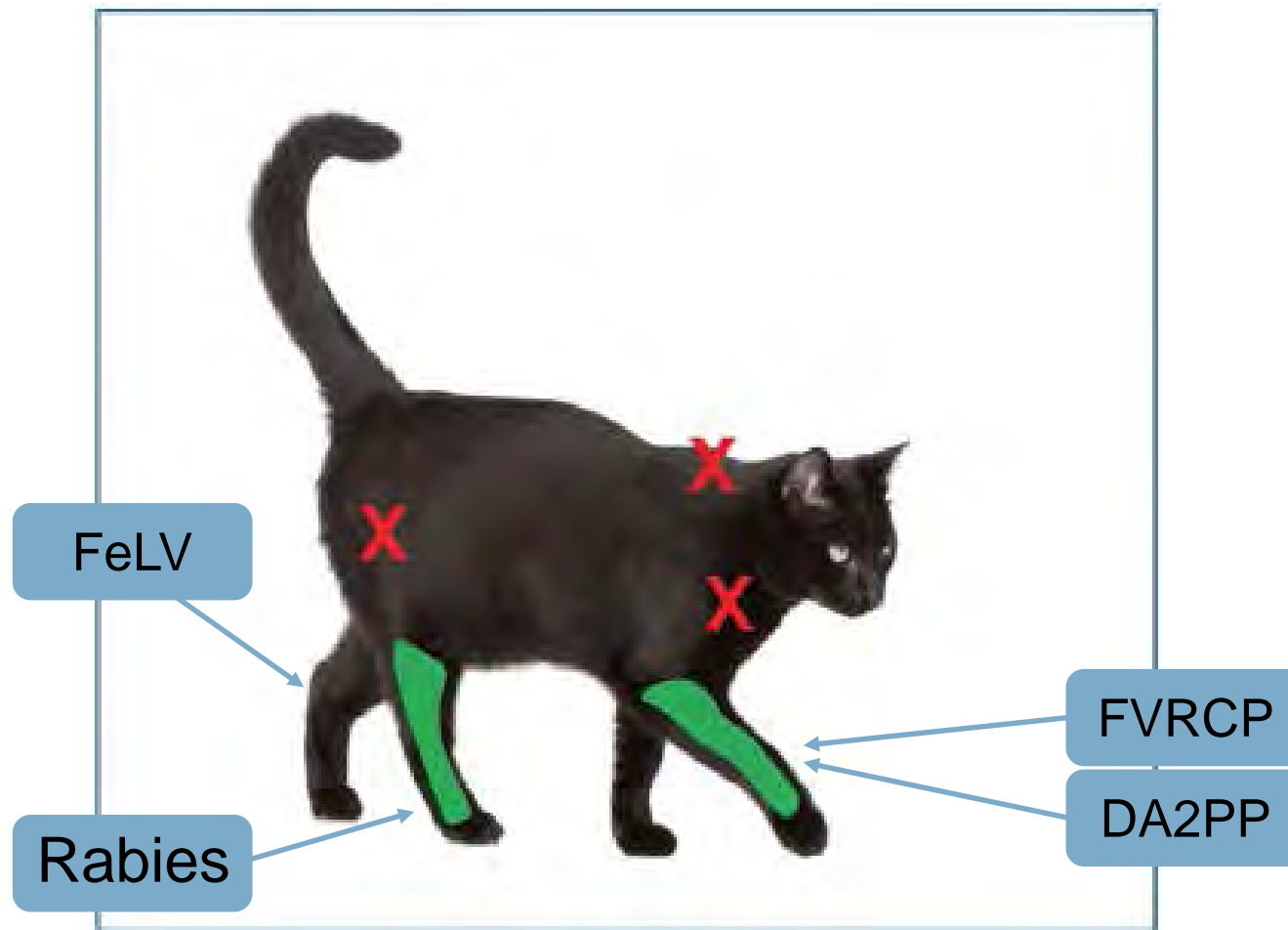
Rabies

# Vaccine administration





# Vaccine administration



# Possible complications

**Mis-  
injection**

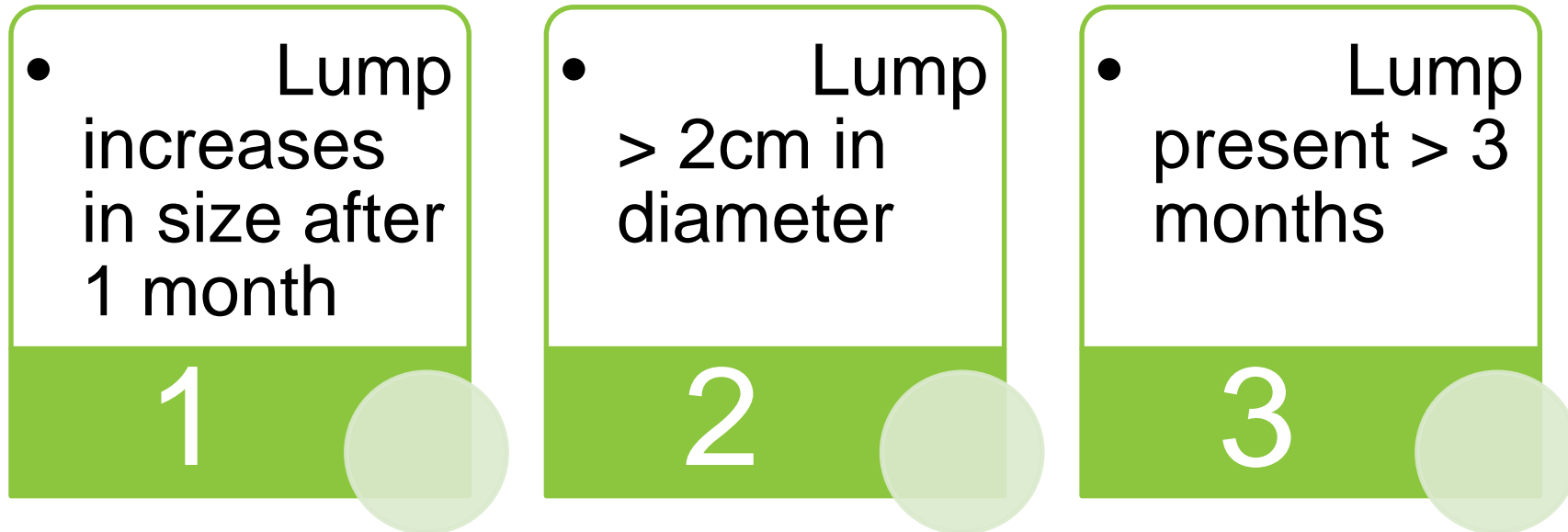
- Clean spilled product
- Re-administer full amount

**Injection  
Site  
Reaction**

- Lump, pain, swelling
- Appear within hours to days
- Typically self-limiting

# Possible complications

## 1-2-3 Rule for reactions



# Possible complications

## Systemic Reaction - Mild

- Soreness, lethargy, anorexia, fever
- Clinical signs of disease
- Self-limiting (1-3 days)

## Systemic reaction - Severe


- Anaphylaxis: vomiting, diarrhea, difficulty breathing, hives, facial swelling, collapse
- Minutes to days after vaccination
- **Immediate veterinary care required**

# Don't forget to document!


- Medical record
  - Legal proof – rabies
  - Communicates to veterinarians/adopters
  - Directs future treatment
  - Review in event of outbreaks
  - Record of complications
- Vital to animal's continued care

Kennel #:

## CHARO



**Animal ID#**  
A421180



**Breed**  
DOMESTIC LH

**Color**  
BLACK & WHITE

**Intake Date**  
1/15/15

**Age**  
1 YR 8 MOS

**Sex**  
SPAYED

**Intake Type**  
FOSTER

**Microchip Number**  
985112001244419

Adoption Fee: \$

MYM Color:  
MYM Description:

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### MEDICAL HISTORY FOR A421180

As of: 1/15/2015

<b>Condition:</b> NORMAL	<b>Temp:</b> 0.00	<b>Weight:</b> 1.33 kgs. 2.93 lbs.	<b>Treated by:</b> SJ
<b><u>Treatments</u></b>		<b><u>Medications</u></b>	
DEWORM - STRONGID			
RCP - INTRANASAL			

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HER	<b>Temp:</b> 0.00	<b>Weight:</b> 0.00 kgs. 0.00 lbs.	<b>Treated by:</b> CSU/EC
		<b><u>Medications</u></b>	

# Don't forget to document!

- Necessary info
  - Date
  - Initials of person administering
  - Product name
  - Expiration date
  - Manufacturer
  - Route & site of injection
  - Lot/serial number



# Vaccination take away

- Follow best practices
  - Vaccinate on intake
  - Vaccinate all animals
  - Use modified live virus products
- Take care of your vaccine investment
  - Maintain the cold train!
  - Don't mix products

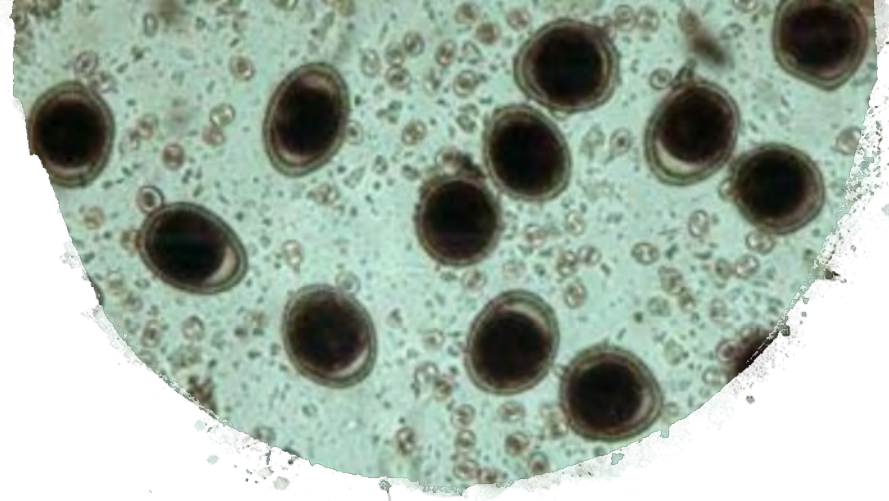
A close-up photograph of a person with long dark hair and a silver ring in their ear, holding a small black and white puppy. The person is wearing a grey t-shirt and a red rope leash. The background is a blurred outdoor setting with a white ASPCA van. The entire image has a warm, orange-toned overlay.

# Parasite Control



# Parasite Control

- Animal and human health depend on it
- On intake and throughout shelter stay
- Treatment options vary
  - Parasite lifecycle
  - Prevalent parasites in region
  - Obvious infection in animal
  - Surveillance based
  - ***Minimum - rounds and hooks***



# Internal Parasites

## Adults

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- Treat on admission
- Repeat in 2 weeks, then monthly

## Puppies & Kittens

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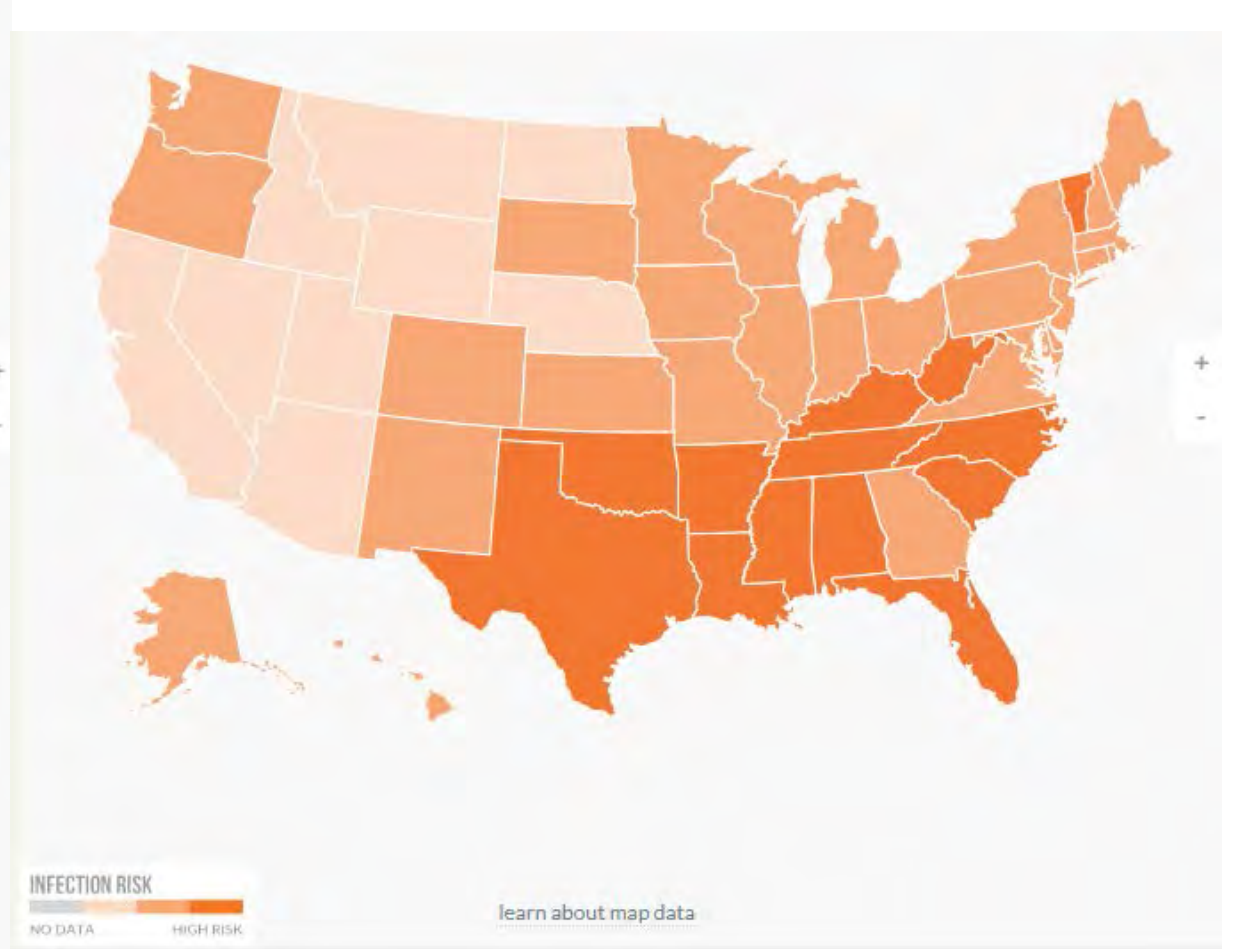
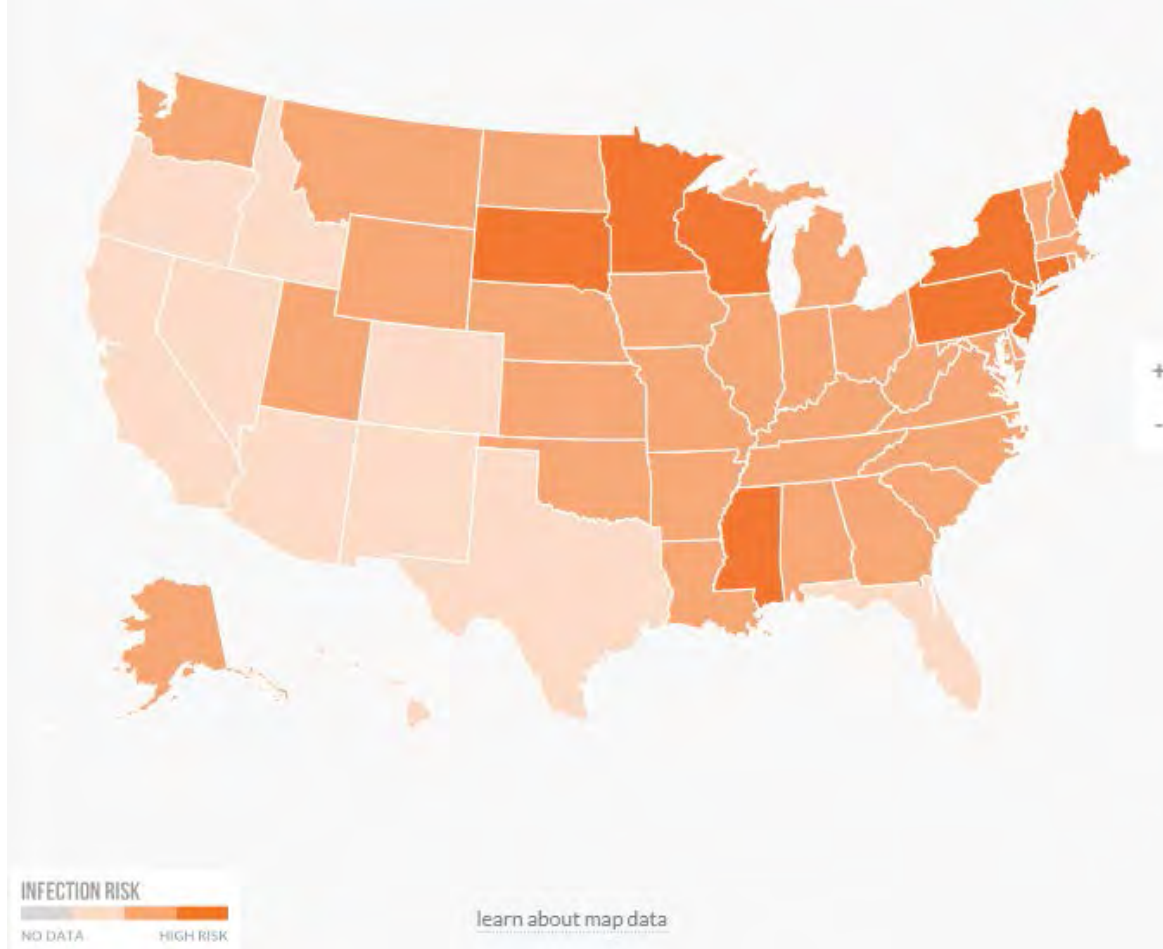
- Treat on admission, beginning at 2 weeks of age
- Repeat every 2 weeks until 16 weeks of age

## Options

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- Pyrantel pamoate (Strongid®)
- Fenbendazole (Panacur®)
- Ivermectin
- +/- Ponazuril for puppies & kittens

# Internal Parasites



Feline roundworm: 2019 YTD



Canine hookworm: 2019 YTD





# External Parasites

- Depends on region
- Treatment
  - Treat on admission
  - Repeat monthly
- Options
  - Topicals if possible
    - Easy to administer
    - Broad spectrum

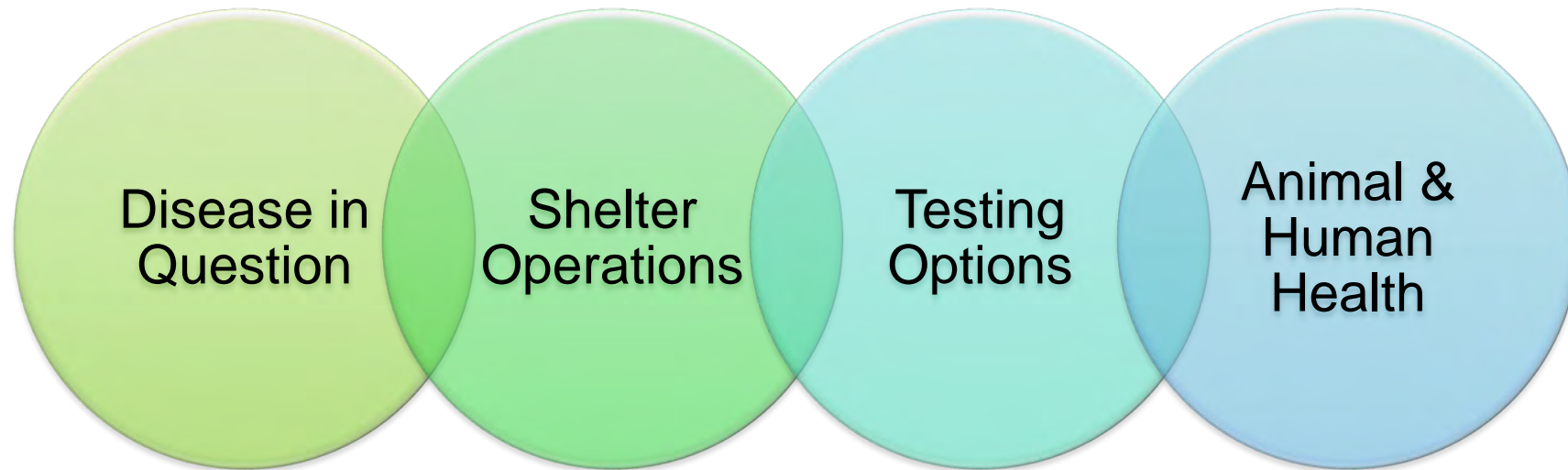
# Parasite control

Environmental Considerations	
Internal Parasites	External Parasites
Bathe animal after treatment	Consider flea lifecycle
Clean and disinfect environment	Trim tall grasses



# Diagnostic Testing

# When To Test?



# Disease

Is it life-threatening?

Is it common?

What treatment is required?

How contagious is it?

Is it zoonotic?



# Shelter Operations

Does it fit with organizational mission?

Are resources available?

Will it impact ability to provide other services?

Do results alter operations?

# Testing Options

Are resources available?

- Staff training, knowledge, skill?
- Staff time?
- Financial

Can you obtain appropriate samples?

Will disease prevalence affect accuracy?

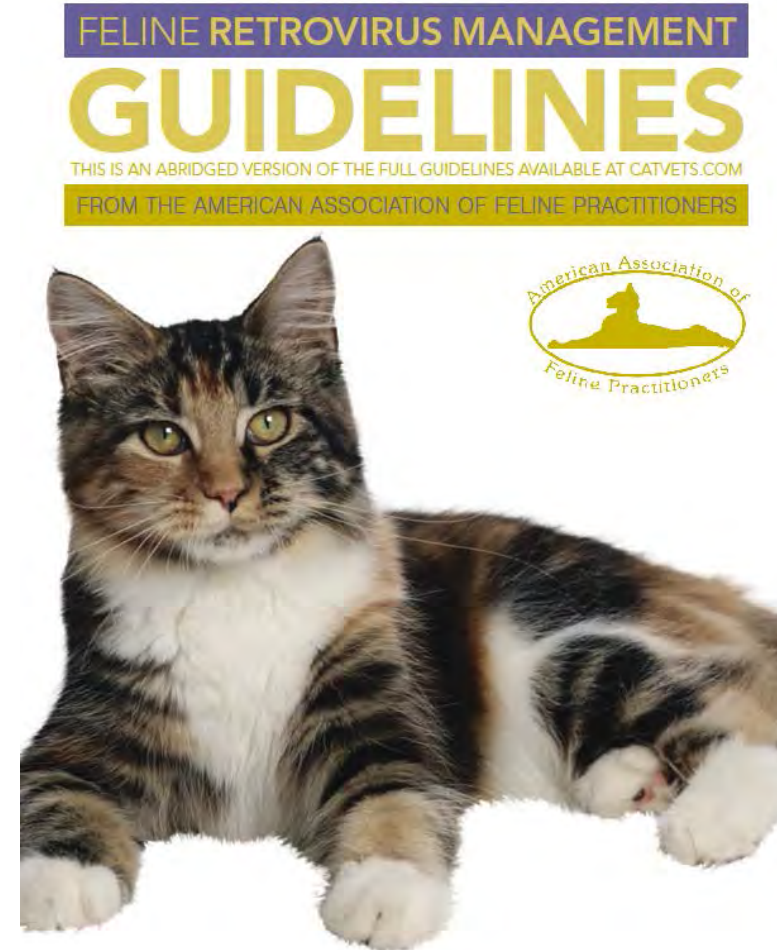
Can you obtain tests?

# Animal and Human Health

## Zoonotic Potential?

## Is it contagious to other animals?

# Diagnostic Testing





# Diagnostic Testing

- Key Points
  - Do you have the resources?
  - Will it alter your treatment?
  - How will it impact other animals/people?



# ASV GUIDELINES



## Guidelines for Standards of Care in Animal Shelters

*The Association of Shelter Veterinarians • 2010*

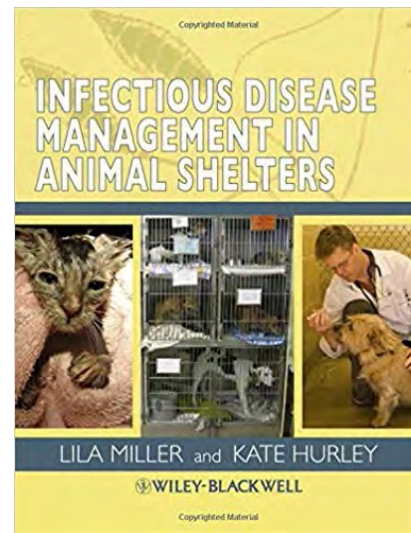
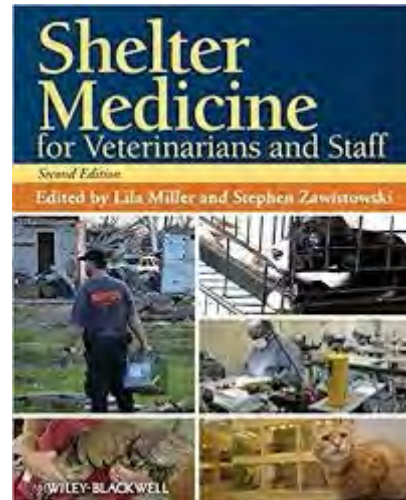
*Authors:*

Sandra Newbury, Mary K. Birt, Philip A. Ryshko, Cynthia Barker-Cox,  
Julie D. Dinwiddie, Brenda Griffin, Kate F. Harley, Nabela Lopez, Viki Jones, Jo Miller,  
Jeanette O'Grain, Gary J. Paterson, Marisa Smith-Markinson, Miranda Spindel

# Guidelines

- Need for standards of care in shelters
- Intent
  - Applicable and relevant to any/broad range shelters, regardless of mission
  - Animals' needs remain the same
  - Scientifically based
- Can be used by variety of shelter personnel: directors, managers, vets
- Emphasizes importance of shelter medicine in program

# Resources



**Maddie's Shelter  
Medicine Program  
Cornell University**

*Saving lives through leadership, science, and service.*

**UF**  
Maddie's® Shelter  
Medicine Program







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