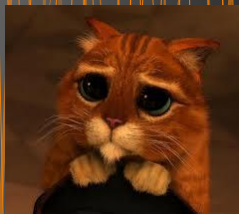
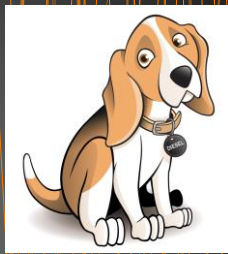


Treating the Treatables: saving lives though medical protocols, foster care, and proactive thinking  
Elizabeth Berliner, DVM, DABVP (Canine/Feline)  
Janet L. Swanson Director of Clinical Programs  
Maddie's Shelter Medicine Program



### Ambitious plan for tonight

- Discuss medical decision making, quality of life, and treatable conditions, especially with foster care in mind
- Review elements of state veterinary practice acts that impact foster treatment protocols and provision
- Outline how medical protocols can be used to expand treatment in foster homes
- Present several case examples of medical foster success
- Questions, maybe some answers

### Does your organization employ the use of foster homes to house animals?

| Response   | Percentage |
|------------|------------|
| Yes        | 95%        |
| No         | 4%         |
| Don't know | 1%         |

n = 137

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### Asilomar Accords (2004)



[www.asilomaraccords.org](http://www.asilomaraccords.org)

- Stated intention
  - to enable uniform and accurate data collection across animal sheltering organizations
- Other outcomes
  - Put shelter animal care at the level of owned animal care in the community
  - Promote organized decision making in organizations

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### Defining “treatable” for your organization

- “reasonable owner in your community”
  - Animal factors
  - People factors
  - Disease factors
- Good animal welfare
  - Quality of life
  - Amenable to treatment




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### Asilomar Accords (2004)

- Each community (shelter, staff, vets, public) may create a pet evaluation matrix to classify conditions
- IMPT!!: Not the last word in decision-making
- Incorporates both behavioral and medical health

|                                    |      |    |  |
|------------------------------------|------|----|--|
| Ringworm (mild, uncomplicated)     | F    | TR | Otherwise healthy cats amenable to topical and oral treatment and able to be isolated for 4-6 weeks. |
| Sarcoptic mange                    | C, F | TR |  |
| Seizures (regulated)               | C, F | TM | Came with history and well-regulated on medication   |
| Seizures (unregulated, refractory) | C, E | UU | Poor prognosis. Difficult management in shelter. Not adoptable in most cases.                        |

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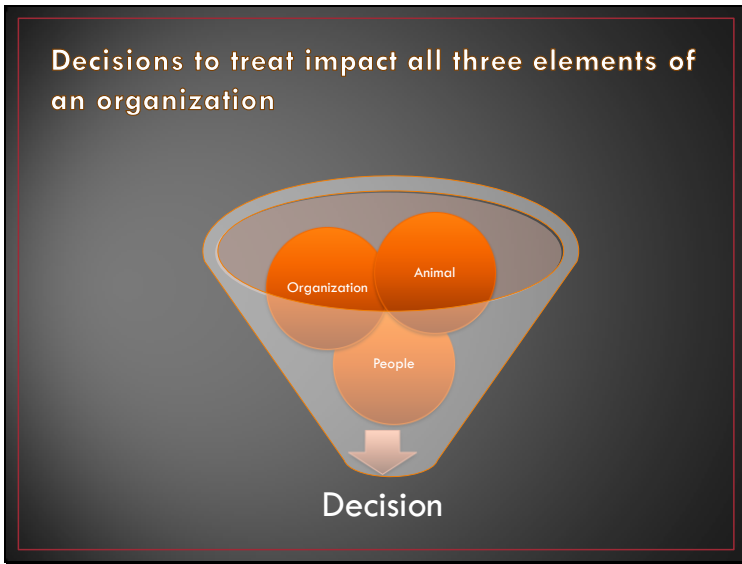
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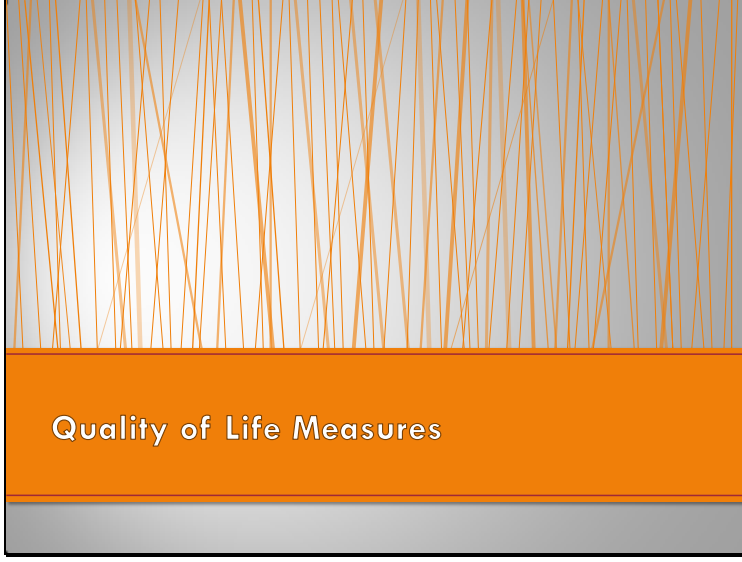
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**The Five Freedoms**

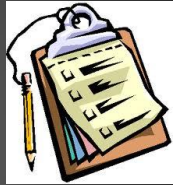
| The Five Freedoms                     |  |
|---------------------------------------|--|
| Freedom from hunger and thirst        | By ready access to fresh water and a diet to maintain full health and vigor              |
| Freedom from discomfort               | By providing an appropriate environment including shelter and a comfortable resting area |
| Freedom from pain, injury, or disease | By prevention or rapid diagnosis and treatment   |
| Freedom to express normal behavior    | By providing sufficient space, proper facilities and company of the animal's own kind    |
| Freedom from fear and distress        | By ensuring conditions and treatment which avoid mental suffering                        |

(Farm animal welfare council 2009; reprint ASV Shelter Standards 2010)



## Quality of Life (QOL) tools in Human Health Care

- General areas of assessment
  - Physical and mental health
  - Health risks and conditions
  - Functional status
  - Socioeconomic status
  - Social support
- Examples
  - WHOQOL-BREF tool – self reporting
  - CDC HRQOL (health related quality of life) – Healthy Days Core Model




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## Philosophical Frameworks for QOL assessment tools

- Objective list theory
  - Things that are objectively good for an individual
  - They may not know what is good for them
  - Objectively measurable physical or physiologic parameters
- Preference satisfaction
  - Personal desires and preferences
- Hedonism
  - Being in a positive state with absence of any negative feelings

(Wojciechowska 2005)

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## Methods of assessing QOL

- By proxy
- By observation and interpretation
  - Physiological parameters
  - Behaviors
- Direct reporting/ self assessment (humans)




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### General Concepts for Assessing QOL

- Comfort and Discomfort
  - Medical health
  - Emotional health
- Fulfillment of fundamental needs
- Control over one's environment
- Social relationships



“Quality of life in animals is a balance between pleasant and unpleasant feelings”  
(McMillan 2003)

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### Examples of Proxy Assessments for Animals

- 1. Hartmann and Kuffer (1998)
  - QOL for FIV cats
  - Owners answered questions about the cats mental and physical welfare
  - Vets answered questions about general medical condition
- 2. FETCH (functional evaluation of cardiac health) (2003)
  - Targeted for specific illness/population
  - Dogs with cardiac disease
- 3. Wiseman-Orr (2004)
  - Chronic pain in dogs
- No gold standard for QOL assessments

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**Quality of Life assessment tool**  
Dr. Alice Villalobos  
Pawspice

| Quality of Life Scale<br>(The HHHHMM Scale)   |  |
|---|--|
| Pet caregivers can use this Quality of Life Scale to determine the success of Pawspice care. Score patients using a scale of: 0 to 10 (10 being ideal). |  |
| Score   | Criterion  |
| 0-10  | <b>HURT</b> - Adequate pain control & breathing ability is of top concern. Trouble breathing outweighs all concerns. Is the pet's pain well managed? Can the pet breathe properly? Is oxygen supplementation necessary?  |
| 0-10  | <b>HUNGER</b> - Is the pet eating enough? Does hand feeding help? Does the pet need a feeding tube?  |
| 0-10  | <b>HYDRATION</b> - Is the pet dehydrated? For patients not drinking enough water, use subcutaneous fluids daily or twice daily to supplement fluid intake.   |
| 0-10  | <b>HYGIENE</b> - The pet should be brushed and cleaned, particularly after eliminations. Avoid pressure sores with soft bedding and keep all wounds clean.   |
| 0-10  | <b>HAPPINESS</b> - Does the pet express joy and interest? Is the pet responsive to family, toys, etc.? Is the pet depressed, lonely, anxious, bored or afraid? Can the pet's bed be moved to be close to family activities?  |
| 0-10  | <b>MOBILITY</b> - Can the pet get up without assistance? Does the pet need human or mechanical help (e.g., a cart)? Does the pet feel like going for a walk? Is the pet having seizures or stumbling? (Some caregivers feel euthanasia is preferable to amputation, but an animal with limited mobility yet still alert, happy and responsive can have a good quality of life as long as caregivers are committed to helping their pet.) |
| 0-10  | <b>MORE GOOD DAYS THAN BAD</b> - When bad days outnumber good days, quality of life might be too compromised. When a healthy human-animal bond is no longer possible, the caregiver must be made aware that the end is near. The decision for euthanasia needs to be made if the pet is suffering. If death comes peacefully and painlessly at home, that is okay.   |
| <b>TOTAL</b>  | A total over 35 points represents acceptable life quality to continue with pet hospice (Pawspice).   |

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### Behavioral measures of QOL

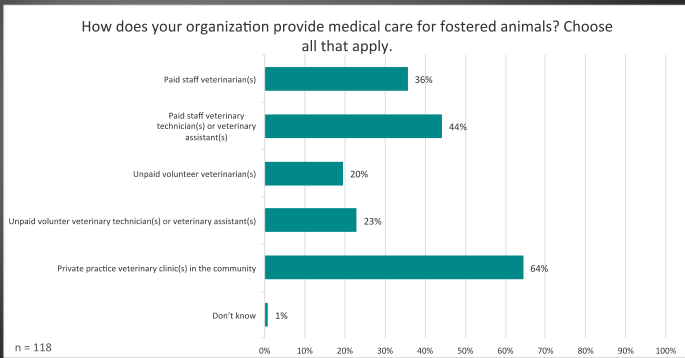
| Behavioral Measure                      | examples   |
|---|--|
| Normal, species- typical behavior       | Social interactions, grooming, foraging, exploring, play |
| Abnormal behaviors                      | Pacing, rocking, bizarre postures, self-mutilation       |
| Response to environmental manipulations | Enrichment   |
| Avoidance and aversion behavior         | Negative stimuli   |
| Preference studies                      | Animal selects environment, stimuli, or situation        |

McMillan F. (2013) *Quality of life, stress, and emotional pain in animals.*



### Protocol-based foster care

### Provision of medical care in animal shelters



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### The role of protocols in the shelter

- Standard practices
- Enable staff to enact care
  
- Specific to foster care
  - Training for foster parents on basic aspects of disease recognition, supportive care, housing and decontamination, outcomes, and adoption implications
  - 24/7 emergency care
  - Clear expectations of what treatment entails




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### Veterinary Practice Acts (state-level)

- Vary by state, but generally define the scope of veterinary practice limited to a licensed veterinarian
  - *Diagnosis and treatment of disease*
    - This is fairly consistent across states
- *Prescribing medications*
  - Antibiotics
  - Prescription diets
  - Nutraceuticals
- *Performing procedures* (surgical, alternative medicine, dental)
- Providing medical treatment **recommendations**




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### AVMA Model Practice Act (2013)

- “direct supervision”
  - licensed veterinarian is on the premises and assumes responsibility for the procedure
- “indirect supervision”
  - Vet does not need to be on the premises, but has given written or oral instructions, is readily available by phone, and assumes responsibility
- Includes a shelter-specific statement
  - Trained employees may provide treatment for shelter-owned animals in compliance with written standard protocols developed in consultation with a veterinarian

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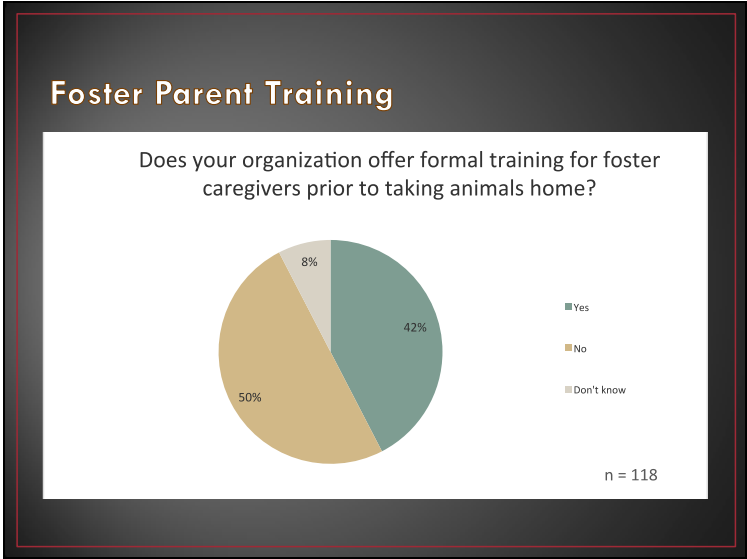
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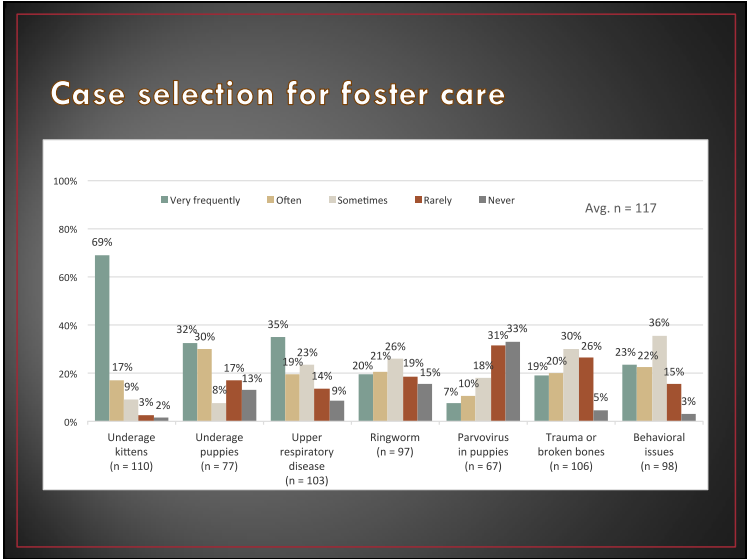
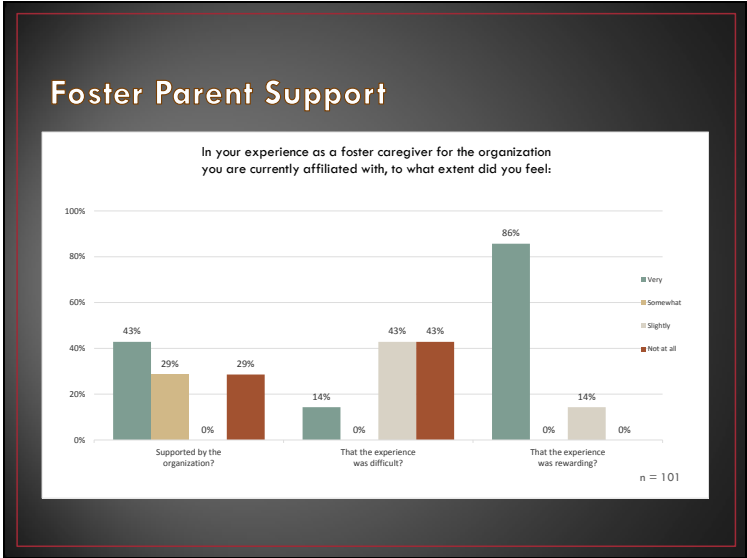
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### Foster parent support

- Training
  - In person sessions
  - Specific to types of fostering
  - Videos: See Maddie's Institute training videos on orphaned kittens
  - Handbook : See SPCA SF for model
- Support/ Mentoring
  - Paired with a more experienced foster parent
  - Adequate supplies
- Communication
  - List-serv, google documents, emergency contacts
  - See Animal Sheltering article re: "on-deck" system

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### Foster care needs to be planned, not default

- Shelter's role
  - Case selection
  - Timeline
  - Prognosis
  - Exit plan
  - Matchmaking
- Foster's role
  - Know your limits
  - Ask for help
  - Don't burn out; we need you!



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### Veterinary Support

- After hours
  - Foster-parent mentors
  - On-call shelter medical staff
- Emergency
  - On-call veterinarian
  - Emergency clinic
- A foster parent is meant to take the role of an owner, NOT a veterinarian. Just like owners, with special training, they may provide more care. . . .



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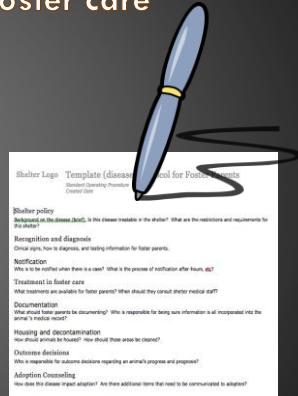
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## Protocols specific to foster care

- Shelter policy
- Recognition and diagnosis
- Notification
- Treatment in foster care
- Documentation
- Housing and decontamination
- Outcome decisions
- Adoption Counseling



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## Case Examples

### Orthopedic cases: case selection

- Already healing, stable fractures
  - Post-operative
  - Minimally displaced, young animals
  - Cats with pelvic fractures
- Able to urinate, defecate, ambulate
- Otherwise healthy
- Pain is well managed and monitored
- Behaviorally sound



### Orthopedic cases: role of the foster home

- Short term supportive care with a CLEAR diagnosis and prognosis
- Cage rest is usually critical
  - Behavioral enrichment
- Manage and assess pain, medicate as needed
- Physical therapy?




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### Parvovirus Outpatient Protocol (CSU)

- Colorado State Outpatient Protocol
  - Injectable antibiotic at hospital
  - Antiemetic and pain medications
  - Intravenous (hospital) and subcutaneous fluid administration (home)
- Bigger challenge is biohazard management
  - Special training
- Puppy socialization may be improved.
- Clear communication re: outcomes. These are critically ill patients.




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### Kittens, oh kittens

- Weight
- Ins and outs
  - Nutrition
  - Urine
  - Stool
- Common diseases and signs
  - URI
  - GI
  - Skin
- When to worry



Foster Kitten Data Form (KUMPLE)

Your Name: \_\_\_\_\_ Date: \_\_\_\_\_

Age: \_\_\_\_\_ Sex: \_\_\_\_\_ (Indicate if other than a known 'Breed' Name Please)

|        | 1 | 2 | 3 | 4 | 5 | 6 | Weight | Urine | Stool | URI | GI | Skin | Other |
|--------|---|---|---|---|---|---|--------|-------|-------|-----|----|------|-------|
| Day 1  |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 2  |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 3  |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 4  |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 5  |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 6  |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 7  |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 8  |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 9  |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 10 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 11 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 12 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 13 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 14 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 15 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 16 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 17 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 18 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 19 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 20 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 21 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 22 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 23 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 24 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 25 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 26 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 27 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 28 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 29 |   |   |   |   |   |   |        |       |       |     |    |      |       |
| Day 30 |   |   |   |   |   |   |        |       |       |     |    |      |       |

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### Lots of resources for kitten fostering

- Maddie's Institute Videos
  - [http://www.maddiesinstitute.org/Maddies\\_Institute/Videos/Orphaned\\_Kitten\\_Care\\_How\\_to.html](http://www.maddiesinstitute.org/Maddies_Institute/Videos/Orphaned_Kitten_Care_How_to.html)



Topics

- Examining Bottle Feeding, Bathing and Weaning an Orphaned Kitten
- Stimulating an Orphaned Kitten to Urinate and Defecate

Tube feeding demo

- [https://www.youtube.com/watch?v=E1\\_BZn\\_eX4M](https://www.youtube.com/watch?v=E1_BZn_eX4M)

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### Levels of Neonatal Care and Training

Basic (Level 1)

- healthy weaned kittens
- healthy moms and kittens



Advanced (Level 2)

- bottle feeders
- tube feeders
- ill moms and kittens
- ill kittens with diarrhea, URI, etc.

"We all do the best we can, and sometimes we all need a hand."

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### Skin Issues: ARGHHH



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### Skin issues: allergies

- Flea?
- Food?
- Environment?
- These become chronic management issues
  - Foster role to assess reasonable management
  - Measure response to treatment
- Timeline?
- Goals?
- Possible outcomes?



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### What about Mange?

- Sarcoptic
  - Zoonotic
  - Contagious
  - Highly treatable
    - 2-3 weeks, topicals
    - Secondary infections
- Demodex
  - Self-limiting in puppies
  - More serious in adults
  - Long-term, daily treatment



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### Is Ringworm appropriate for foster care?



- Long term (up to 4-6 weeks)
- Zoonotic
- Environmental contamination
- Strict isolation from other animals
- Advanced, specific fostering
- Special settings

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### Foster patient selection is key

- Reasonable
  - Timeline
  - Treatment
  - Biohazard management
- Clear communication
  - Expectations
  - Outcomes
- Support
  - Shelter staff
  - Veterinary




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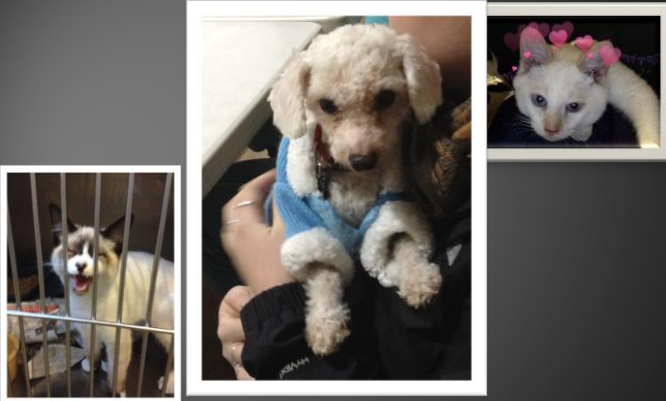
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### Foster patient selection is key




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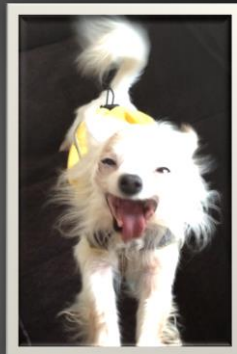
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### In Conclusion

- Protocols save time and lives
- Veterinarians are essential and central to protocol-based foster care
- Foster care is the pinnacle of community collaboration, and as such communication is essential
  - In person
  - Through tech and social media
  - Through ongoing training




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**Additional Notes:**