



# Launching and Operating a Successful Kitten Nursery

**A review of approaches and practices  
for animal shelters and rescue organizations**



**Prepared by  
The National Kitten Coalition  
*February 2017***



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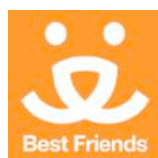




# Acknowledgements

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The National Kitten Coalition wishes to thank the staff and volunteers of the five kitten nurseries we visited for spending numerous hours showing us how they care for kittens; setting up meetings with everyone who had the information we sought; providing us with copies of their manuals, protocols and budgets, and answering many follow-up questions as we moved forward from interviews to manual preparation. Every one of these individuals has an extremely busy “day job;” yet, they all made time for this project. They, like us, care about saving kitten lives and believe in helping others to do it effectively. We hope this manual is a worthy contribution to that mission.



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# About The National Kitten Coalition

The National Kitten Coalition is a 501(c)(3) nonprofit organization dedicated to increasing survival rates of rescued kittens. We accomplish our mission by educating and training animal shelter staff, rescue groups, volunteers and fosters to provide high-quality, cost-effective care; providing outreach and educational materials to animal-welfare professionals and the public, and promoting cooperation and information sharing within the animal welfare community.

This manual was prepared by five National Kitten Coalition volunteers who each brought a different perspective to the project.

Laura Baughman is a kitten foster; a volunteer at the medical center of a Washington, DC animal shelter, and a donor to various “kitten causes.” She viewed the nurseries visited through her volunteer and donor lenses: How can volunteers best be used to run a kitten nursery? How much independence can they handle? How can staff and volunteers best communicate and work together as a team? What might a nursery cost and how could an organization raise money to pay for it? And how does an organization decide if the effort has been “successful” – what constitutes “success”? Laura also served as Project Leader for this manual.

Rosemarie Crawford is a Licensed Veterinary Technician with experience in both shelter medicine and private veterinary practice. She has considerable expertise on the latest methods for treating common illnesses, procedures for proper sanitation and ways to prevent the spread of disease among underage kittens. Rosemarie focused her attention on medical and other protocols nurseries use to treat neonatal and sick kittens successfully.

Rebecca Jewell has more than 10 years' experience in animal welfare, primarily at two public shelters in the Washington D.C. area. She has expertise in setting up and managing kitten foster programs. She believes that not only do foster programs save lives, they galvanize communities and inspire staff and volunteers. Her attention regarding this project centered on volunteer contributions, communication between staff and volunteers to ensure efficient operations and consistency of mission, and how to structure a successful kitten foster program.

Marnie Russ is a long-time neonatal kitten foster, caring for hundreds of these kittens annually for several animal shelters in the Washington, DC area. She has particular expertise in caring for the most vulnerable of this already-vulnerable population of kittens, including administering specialized medical protocols, tube feeding, nebulizing and other supportive care. Marnie's focus on this project included the special needs of neonatal kittens in a nursery environment.

Susan Spaulding has earned the moniker “Kitten Mom” from the shelter and rescue community for her expertise caring for kittens for more than three decades. Her perspective on this project is perhaps the most unique: she runs what amounts to a kitten nursery in her home. Susan devotes space in several rooms to the care of dozens of neonatal orphans and older kittens, many of which are ill. Her passion is keeping abreast of cutting edge protocols and working with vets to “treat the untreatable.” Susan viewed the recommendations in this manual from her very personal, hands-on work and experiences with kittens with varied illnesses and disabilities often considered not savable in the past.

For more information on The National Kitten Coalition, visit us at [www.kittencoalition.org](http://www.kittencoalition.org) or [www.Facebook.com/KittenCoalition](https://www.facebook.com/KittenCoalition). You may contact us at [info@kittencoalition.org](mailto:info@kittencoalition.org).

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# Chapter 1

## Introduction

**T**housands of neonatal and sick kittens flood into animal shelters and overwhelm rescue groups each kitten season – and often longer. The deluge frequently challenges the physical and emotional capacities of shelters, their staffs, fosters and volunteers. All too often, many of these kittens are euthanized because organizations lack the knowledge and resources to care for them. It is especially sad that this outcome is so common given that kittens are typically easy to adopt to loving homes and their adoption fees are potentially a source of revenue for some shelters and rescues. Moreover, many communities are attempting to move to “no kill” status, which has increased interest in addressing the high rates of kitten euthanasia.

Some shelters and rescue groups have attempted to address the problem by expanding their kitten foster programs. A strong foster program can be a highly effective way to increase the number of kittens that are rescued and moved ultimately into loving homes.

Others have taken the additional step of establishing kitten nurseries. These nurseries vary considerably in size, ages of kittens cared for, ways in which they are staffed and run, and budgets and funding sources. What is common, however, is that these nurseries are collectively saving the lives of tens of thousands of kittens.

All rescue groups or shelters interested in starting a kitten nursery face an information dilemma. The Internet offers some information about how a few of the major nurseries involved in these efforts went about approaching the project. However, accessing the mountain of information is tedious and haphazard. In addition, much of the information is incomplete, outdated or even conflicting. In no case is there sufficient information available from websites for an organization contemplating a nursery to get answers to the many questions its staff and board are likely to have to assess the viability of such a project.

Visits to multiple established kitten nurseries and extensive collection of information are needed to truly understand what is involved in starting and running a successful kitten nursery. The National Kitten Coalition has done just that. During the Fall of 2016, we spent several days on location at five leading kitten nurseries in the United States, touring their facilities, seeing them in action, reviewing their policies and procedures, and meeting with staff and volunteers to discuss their challenges and successes.

*Kitten nurseries are collectively saving the lives of tens of thousands of kittens.*

*According to the American Humane Association (AHA), “national euthanasia statistics are difficult to pinpoint because animal care and control agencies are not uniformly required to keep statistics on the number of animals taken in, adopted, euthanized or reclaimed. While many shelters know the value of keeping statistics, no national reporting structure exists to make compiling national statistics on these figures possible.” That said, one statistic widely attributed to AHA suggests that nearly three-quarters of kittens that end up at animal shelters are not adopted (presumably, they die of natural causes or are euthanized). See for example, “12.5 million...The estimated number of kittens born each year...only 26 percent are adopted,” Real Simple, June 2014, p. 12. How many of these are neonatal kittens is not known, but as they are the most vulnerable kitten population, it is likely a very high share of the number of kitten euthanasias.*

From the information gathered before, during and after those visits, we created this manual which reports a range of approaches and practices for

*We provide information organizations need to make educated decisions about setting up, operating and funding a nursery that is successful given their needs and level of community support.*

starting, operating and sustaining a successful kitten nursery. To that end, we provide information organizations need to make educated decisions about setting up, operating and funding a nursery that is successful given their needs and level of community support. On the basis of detailed interviews with staff and volunteers at the five nurseries, reviews of their procedural manuals, budgets and administrative

documents, and the expertise of The National Kitten Coalition on how to care for vulnerable kittens, this manual offers suggestions for the layout of nursery space, staffing, intake policies and procedures, fundamental cleaning and medical protocols, the potential costs of the nursery, some successful fundraising options, and approaches for measuring the impact of the nursery in achieving its primary goal: to save the lives of more kittens.

Of course, every shelter and rescue organization contemplating a nursery is different and, therefore, organizations are likely to approach the question of whether, and if so, how, to start and operate a nursery from a variety of perspectives. Although the nurseries we visited are relatively large and seemingly well-funded, it does not mean that at one time they did not struggle with the same questions smaller organizations must ask and answer. This



Lunchtime at Best Friends - Los Angeles nursery

This manual provides the information that smaller shelters and rescue organizations need to know even if they do not have access to the same level of resources -- be it space, staff or money -- that some of the profiled organizations have available. We paid particular attention during our visits to experiences that would be of relevance to all sizes of shelters and rescue groups: what could all organizations learn from the experiences of these profiled nurseries that have been caring for over a thousand kittens every year?

### ***A Note on Terminology***

*In this manual we use the terms “neonatal,” “neonate,” “bottle baby” and “unweaned” kittens interchangeably. In each case, we are referring to kittens younger than four-five weeks old who need to be hand fed (typically with a bottle).*

Before reading any further, we believe it is useful to report four recommendations we heard, some repeatedly, which should influence your decision to pursue research, creation and operation of a kitten nursery. These recommendations are detailed on the next page.

## Big Picture Recommendations

**1. Do not start a nursery without a well-functioning kitten foster program in place** – and,

ideally, one with fosters who can care for unweaned kittens (so-called “bottle babies”) and certain sick kittens. If at all possible, a nursery should be a brief (one to ten day) stopover for kittens headed to foster care, not a space for kittens to spend their entire developmental time in until they are ready to be spayed/neutered and put up for adoption. Keeping all kittens that come to the nursery *in* the nursery can quickly overrun most small facilities’ resources. So, a kitten foster program is an important and essential pre-condition for organizations that will be unable to afford caring for all kittens for an extended period of time (typically up to eight weeks of age). Furthermore, foster homes provide for the necessary social interaction and psychological development of the kittens that extended nursery stays would be unable to provide as effectively.



**2. Be flexible.** Expect to change many of your approaches every year. Nurseries are fluid



operations. You need to embrace what works and reject what does not. Reevaluate your procedures and policies at least once a year at the end of each kitten season, or even periodically throughout the year. More often than not, some things that worked one year may not work the next, and you need to be prepared to adjust your facility, staff, protocols and budgets accordingly. Every nursery we visited, even the ones that have been in operation for many years, told us that they constantly evaluate their programs and change many elements annually.

**3. Set the nursery’s capacity based on the number of fosters, volunteers and staff that you have available to care for kittens, not the size of your facility.** Then, appoint a “gatekeeper” who can

manage kitten intake numbers and is able to say “no more” even though she/he knows it means the turned-away kittens could die. It is easy to get overwhelmed by taking in too many kittens, which could lead to disease outbreaks that could threaten the lives of many kittens in the nursery. Everyone needs to know capacity limits and the chain of command so that no one picks up kittens before knowing whether there is space for them in the nursery or in foster care.



**4. Identify your “village.”** You will succeed only if you partner with a range of

organizations and individuals who are also intent on saving kitten lives. No one organization will have sufficient staff or money to do it all themselves. You will need to partner with animal control, volunteers, fosters, donors, grant-giving organizations, local veterinary practices, community groups – and likely many more.



With these initial recommendations in mind, if you are still interested in exploring a nursery, we hope you find the remaining information in this manual helpful.

The manual is organized as follows:

**Chapter 2, Facility**, suggests how to set up a dedicated space for the nursery. Some organizations may have nothing more than a spare closet within the building that can be devoted to a nursery. Others will have a larger room, still others no space in the shelter at all and therefore need to consider off-site options. What space to use is determined in part by what you need to put into the space: cages, tables, storage, sinks, and other basic “infrastructure” needs, which are detailed in Chapter 2.

**Chapter 3, Staffing the Nursery**, discusses what shelter staff (including fosters and volunteers) will be needed for the nursery. Access to a veterinarian will be important, of course, but how much time is likely to be needed? Can the nursery function with a heavy (even exclusive) reliance on volunteers? If not, how much and what kind of paid staff will be needed? Because a successful foster program is a key ingredient to the success of a nursery, this Chapter (and Appendix A) also offers suggestions for ways to grow your foster program.

**Chapter 4, Protocols**, reviews suggested intake protocols for each kitten, and some of the most

common feeding, cleaning and medical options used to care for neonatal and sick kittens.

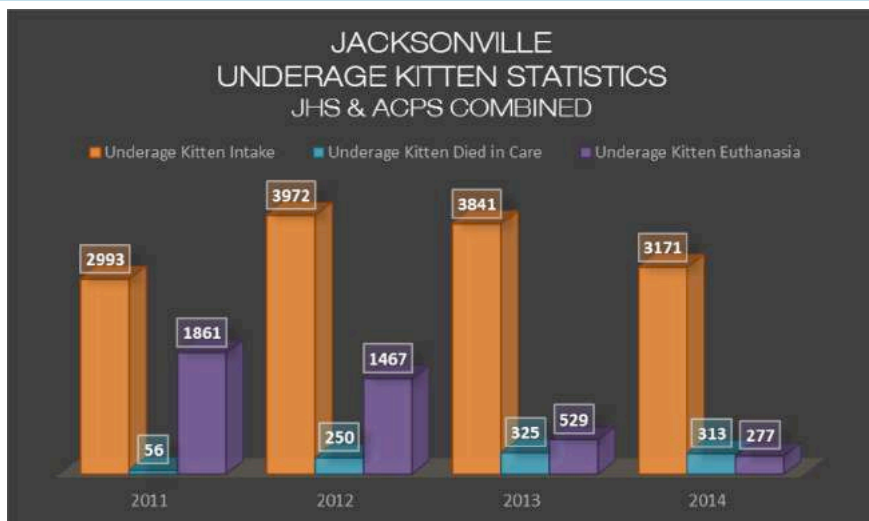
**Chapter 5, Costs and Fundraising**, details some of the costs of starting and running a nursery. Nurseries will need both donations of money and donations of in-kind supplies to be successful. The nurseries we visited provided a range of suggestions for successfully funding operations.

**Chapter 6, Measuring Impacts**, suggests metrics for measuring the success of the kitten nursery. These metrics are important for determining the nursery’s overall impact and whether it is financially feasible to continue the nursery.

**Appendices** provide more detailed information referenced in the various chapters. In addition, Appendix C reports the individual stories of each of the nurseries whose experiences underlie the manual’s recommendations detailed in Chapters 2-6 (reported alphabetically). Those nurseries are:



Entrance to Best Friends Los Angeles kitten nursery



Jacksonville Kitten Nursery Impacts



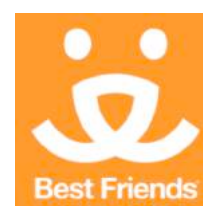
- **The American Society for the Prevention of Cruelty to Animals (ASPCA)**, in New York City, is a relatively large (in terms of space) off-site nursery with a significant budget run almost entirely by paid staff. It started recently, in mid-2014, and by 2016 in a nine-month season was caring for over 1,700 orphaned and weaned kittens up to eight weeks old, including nursing moms. It provides an example of a nursery that must function in an expensive city environment with tough labor and regulatory rules to follow, and a relatively small kitten-focused volunteer and foster base that, therefore, necessitates large numbers of paid staff.



- **Austin Pets Alive! (APA!)** in Austin, Texas, focuses on orphaned, unweaned kittens, and moms with kittens. It is run by a small number of paid staff, with a heavier reliance on volunteers and fosters. It started in 2009 in a donated trailer without even running water and was able to care for 250 kittens a year. Today, APA! cares for as many as 1,800 kittens annually in an off-site space. It provides an example of how to run a successful nursery on a “shoe string” budget.



- **Best Friends Animal Society - Los Angeles (BFLA)**, just north of Los Angeles, is a relatively small nursery facility within the main BFLA shelter. The nursery handles more than 2,000 kittens a year, both weaned and unweaned, using paid staff, volunteers and fosters. It started operations in 2013 caring for just over 1,600 kittens annually.



- **The Jacksonville Humane Society's Kitten University** in Jacksonville, Florida is an example of a nursery that focuses only on weaned kittens cared for by paid staff and volunteers, relying heavily on fosters to care for neonatal and other kittens. It is also in the midst of building a new nursery facility and modifying infrastructure to support caring for weaned kittens.



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- **The San Diego Humane Society (SDHS)** in San Diego is a facility in a large warehouse space that has had to adapt each year to significant “curve balls” that came its way – disease outbreaks, growth, and downsizing. Since it started in 2009, the number of kittens cared for has fluctuated considerably. Today, its paid staff, volunteers and fosters care for about 1,000 kittens annually.



*NOTE: Throughout this manual, we periodically reference products and medications by brand name. The National Kitten Coalition does not endorse one brand of product or medication over another. In this manual, our intent is to report some examples of the specific products and medications used by the nurseries and others to care for kittens. You may have other brands of products you prefer that will accomplish the same end.*

*In addition, the content of this manual is for informational purposes only. It is not intended to provide or replace veterinary consult or care. Medical treatments and supportive therapies for animals should be under the direction of a veterinarian.*



## Chapter 2

# Facility

**A**s noted in the Introduction, the facility housing a nursery can be as small as a closet or as large as a warehouse. The physical space should be large enough to house the number of kittens your staff and volunteers are capable of caring for *until they are transferred out of the facility and into foster care*. So, in some cases that will be bottle babies only; in others, weaned kittens only; and in still others, both. In some cases you can take on a 2,000 square foot space; in other cases, you must think smaller.

### *The Space*

Organizations find space for nurseries in a variety of ways. Some clean out storage rooms or piece together disparate parcels of space within their existing building. Others start with donated trailers located away from the main shelter. Some rent warehouse space offsite. Still others have space, including whole houses, donated to them for nurseries. Others are fortunate enough to be able to build nursery space from scratch as part of a plan for a new facility.

This means that some of you will be presented with basics: walls, floors, ventilation systems, lighting (natural, artificial or both), running water (or not!), and convenient parking. You may not be able to make any changes. But what we learned is that even the most spartan of spaces can work, on some level, as a kitten nursery. You will need to adapt your staffing and various protocols accordingly, but you *can* make it work. Some of the most successful kitten nurseries -- caring for thousands of kittens -- make do with only one sink, for example.

One lesson learned from our visits to the five nurseries is that flexibility is key. One nursery started with no running water or dedicated electricity. To function, they brought in bottled water and ran a long extension cord to a supportive neighboring business for power. Another had no heat or air conditioning in a warehouse that got cold in the (relatively temperate) winter and hot in the summer. It did not disturb the kittens; the staff and volunteers learned to dress accordingly.

Others of you will be fortunate enough to build a nursery in a new facility, so you can, of course, ensure that water, power, light, proper ventilation and

*The physical space should be large enough to house the number of kittens your staff and volunteers are capable of caring for until they are transferred out of the facility and into foster care.*



The Austin Pets Alive! nursery began in a trailer

other features are incorporated from the start, including the location and quality of these items. You can also ensure that the materials used on counters and floors are easy to clean, you have sufficient sinks (with garbage disposals) located in all the right places, and there are drains in the floor to make washing the floors easier. You can plan for adequate storage space as well as proper power in the correct outlets for refrigerators, microwaves and industrial washers and dryers.



Notice outside Best Friends - Los Angeles panleuk Quarantine Room

Your nursery space will need to be large enough so that you can separate some kittens from others. For example, you will need to be able to keep kittens that have tested positive for ringworm or panleukopenia (“panleuk”) isolated (ideally in a separate room, but at a minimum in an area away from other kittens). You likely will want to keep nursing queens with kittens in a separate area from orphaned kittens. You will need a quarantine area to house kittens who just

arrived at the nursery for as long as 10-14 days while you monitor their health to ensure they did not bring anything contagious with them. In addition, it would be best – if possible -- to ensure that each separate space has enough room to be self-contained: it should have within it all the equipment (see below: a sink, refrigerator, desks/chairs for feeding, etc.) and supplies (bedding, bottles, food, litter, etc.) needed to care for that group of kittens.

Finally, we recommend that you set aside a space that can be used as an office for nursery staff. Offices typically house computers, a printer – and lots of paper and other typical office supplies. These items are extremely hard - if not impossible - to clean in the event of a disease outbreak. Thus, it would be best if offices are located away from the kittens or have doors that can be closed. In any event, staff and volunteers must still be aware of what they may be bringing into the office environment, and sanitation protocols should be followed.

### General Equipment

All nurseries use some basic operating equipment. Sometimes it is donated, sometimes it must be purchased. As we will discuss in Chapter 5, large expenses can be funded with a capital campaign. When selecting equipment, keep in mind that much of it will need to be frequently cleaned (Chapter 4 addresses cleaning protocols).

### Cages

The cages used to house the kittens are perhaps the most significant single piece of general equipment a nursery will need. They can be expensive as well, so they are an investment all nurseries should give a lot of thought to. Fortunately, there are options for every budget.<sup>1</sup>

**NOTE:** Check your local and state laws to understand requirements for inspections of your nursery by animal control agencies, particularly if your nursery is not part of an animal shelter that is already set up to pass such inspections.

<sup>1</sup> A wealth of options can be found by simply doing a “Google image” search for “cat condo options.”



At the low end, collapsible one- or two-story condo cages can be purchased for approximately \$100 or less per cage, some even come on rollers. One advantage to these is that they can be submerged in a hard “kiddie pool” with disinfectant to clean. These are also great for lending out to foster homes and for using in adoption rooms. A disadvantage, however, is that they are open on four sides, so they must be spaced far enough apart from each other or artificial barriers created in order to prevent disease transmission between litters in different cages. Additionally, the spacing between the bars or wires must be appropriate so that small kittens can be safely contained.

Many nurseries, therefore, favor stainless steel bank cages, solid on three sides (plus the ceiling and floor of course), with open bars on the front. They are easily cleaned and relatively inexpensive (compared to custom-built cage banks). But they are noisy and relatively inflexible: they can be adjusted in size, but it may prove to be bigger project than some shelters care to take on.<sup>2</sup>

This is why some nurseries favor “splurging” to get cages that are already sized and configured to work the way the staff thinks best for their nursery. These include cages that are pre-fit with sliders or portholes that can be added or removed, breaking down or opening up the cage space into smaller or larger areas.

Bank cages on wheels can be easily moved around, so you can experiment with placing them into groupings that work best for your needs and the kittens in your care.

Whatever you decide, the nurseries we visited advised that you should be sure that the cages you select have surfaces that can be cleaned with strong disinfectants (and water-based soaps) without damaging them. For example, laminate on wood sometimes buckles when exposed to liquids. Cages with many connection points or crevices are difficult to clean.

### *Tables and Chairs*

A nursery will need work surfaces that can be used to feed or examine kittens. Nurseries typically use small tables or desks. As with cages, their surfaces must be of a material that is easily cleaned and sanitized; if not, an option is to cover the work surface with a sheet of Plexiglas. In addition, each table will need a chair that is also easily cleaned. Most nurseries favored office-style computer swivel chairs on rollers. Do not choose chairs that have cloth seats or backs and remember that simple structures are easier to clean and disinfect than those with lots of grooves and moving parts.



**Cages at San Diego Humane Society nursery can be expanded as needed**

*Be sure that the cages you select have surfaces that can be cleaned with strong disinfectants (and water-based soaps) without damaging them.*

<sup>2</sup> See, for example, The Portal Project: <http://www.sheltermedicine.com/library/resources/cat-cage-modifications-making-double-compartment-cat-cages-using-a-pvc-portal>. You can also order portal doors: <http://www.sheltermedicine.com/library/resources/cat-portals-order-information-and-instruction-for-installation>

### Laundry Machines

Key pieces of equipment nurseries use constantly are washers and dryers. If possible, at least one industrial washer and dryer will be needed. Some nurseries we interviewed (handling 1,000-2,000 kittens) wished they had two

of each. But if the budget -- or space -- do not permit these huge machines, you can get by with household washers and dryers. Staff and volunteers using non-commercial washers and dryers need to know they are not built to meet the demands of constant use as needed in the nursery, so the machines will need to be treated with a little more care. Also, it is difficult or impossible for the machines to effectively clean oversized loads or extremely soiled laundry. Items must be able to move freely and agitate properly to become clean. Sometimes two washings of the same load may be required. In addition, you will likely need to replace residential washers and dryers more often than commercial ones (e.g., every two years depending on the shape they were in if they were donated).



Austin Pets Alive! uses donated household washers and dryers

### Dishwasher

Some nurseries use dishwashers; others do not. One nursery profiled cited the need to supplement the washing with a sanitizer. If you have the space and the resources, a dishwasher can certainly be useful. Be sure to have cleaning protocols in place so each person uses it properly.

### Refrigerator

You will need at least one refrigerator with a freezer. Items that will need to be refrigerated include mixed formula, open cans of powdered formula (in most cases), open cans of wet kitten food, and some medications. A freezer is useful for ice packs, long-term storage of formula bought in bulk and for making Pedialyte ice cubes. Large household refrigerators (frequently donated) will also work well. Small refrigerators will do if space is an issue.

If space and resources permit, you will want to have a refrigerator in each kitten room or separate refrigerators for food and medications. Note: Personal food for staff and volunteers must not be kept in animal supply refrigerators.

*Take care to keep office equipment away from kitten areas – especially where kittens are sick.*

### Computers, Printers

You will need at least one computer, one printer and access to the Internet. Laptops and a wireless network would give staff and volunteers the greatest flexibility; however, as noted above, take care to keep office equipment away from kitten areas – especially where kittens are sick.

### Incubators

Incubators are very useful for monitoring temperature and airflow to isolate critical kittens from ambient conditions and from the general kitten popula-

tion. Several models also have hookups for oxygen and nebulizing right in the incubator. Hospitals may be a good source for donations; however, such donations may come with legal “red tape.”

### *Nebulizers*

Nebulizers will be needed for kittens with severe upper respiratory infections and pneumonia. Donations of used, human nebulizers are also possible. (Check to see if your state requires a prescription to purchase a nebulizer.) It is also possible to make a nebulizer using a small, cool-mist humidifier and tubing. Check with your veterinarian regarding any medications for use with the nebulizer.

### *Wood’s Lamp*

You may want to use a Wood’s lamp or black light to check for possible ringworm; however, this method is not an accurate indicator of ringworm infection and should not be relied upon for true diagnosis.

### *Microscope*

A microscope is useful for many in-house diagnostic procedures if there are staff or volunteer members trained on how to properly use it. In-house testing for ringworm with the use of dermatophyte test medium (DTM) cultures or examining fecal samples for parasites, for example, can save money rather than sending samples to outside labs. The use of an in-house microscope by a well-trained person may also allow for appropriate treatments to be started sooner for the kittens rather than waiting for test results from an outside lab.

### *Other Equipment*

If your nursery will be in a location that is prone to power outages, it is a good idea to have a back-up generator available. Of course, these can be expensive, but they are a necessity if power outages are likely. A capital campaign may be the best way to raise funds for a generator – especially one staged before an impending storm!

### *Daily Supplies*

The items required to outfit even the most basic nursery are probably not all that dissimilar to supplies you already use at your organization or in foster homes. Others will be more tailored to the nursery, however. A “shopping list” of the basic items is provided in Appendix A. You will need to revise this list to fit the protocols you plan to use in your nursery (e.g., for cleaning), and the amounts needed will vary with the number of kittens you intend to care for. Some items you need only buy once at the outset; others you will need to replenish regularly. Many of these items can be donated to your nursery,



**Incubators at Best Friends - Los Angeles nursery**

*If space and resources permit, you will want to have a refrigerator in each kitten room or separate refrigerators for food and medications.*

### *Off the Record*

*“I don’t mean it disrespectfully, but disasters are good for fund raising.”*

leaving you to buy only the less “consumer friendly” items (e.g., those that are medical-related). Some of the items on the list merit further discussion or elaboration below.

### *Clothing for Staff/Volunteers*

Nurseries have a variety of approaches to what staff and volunteers handling the kittens must wear. Often, it varies with the health of the litter, but sometimes it applies universally. For some nurseries, t-shirts specific to a given litter worn over one’s clothing,<sup>3</sup> plus gloves, are sufficient. In this case, those handling the kittens ought not to “snuggle” them (i.e., let them climb up to one’s shoulder or up under one’s chin). Another option is a washable jacket that snaps up the front all the way to the collar. However, some of you will want to play it completely safe and will plan to have a budget for the purchase of gowns, caps and shoe covers that are used to handle not only kittens with ringworm or panleuk, but even healthy kittens in a single litter.

### *Gloves*

Most nurseries require staff and volunteers to wear gloves when handling kittens. However, they are expensive so if funds are an issue, a nursery can get by without gloves if staff and volunteers are extremely careful to wash hands with soap and disinfectant between litters. Gloves save time, and make it harder to make mistakes with poorly washed hands, so if you can afford them, they are worth the expense.<sup>4</sup>

### *Bottles, Syringes*

You will want to have a variety of different sizes and brands of nipples for picky bottle feeders. Remember that most nipples do not come with a hole already in them, and learning how to make the appropriate sized hole in the nipple can take some practice – and several ruined nipples. One brand of nipple that comes with an opening already in it is the Miracle Nipple ([www.miraclenipple.com](http://www.miraclenipple.com)). Syringes in a variety of sizes will be needed to feed kittens who will not take a bottle. Generally 1 mL to 12 mL will work well depending on the size or age of the kitten as well as the feeder’s preference. In addition, for tube feeding, have on-hand many sizes of French catheters (feeding tubes).

### *Food Bowls*

Paper trays that can be tossed when empty or expired are the most common choice for the most obvious reason: they do not need to be washed. These can be easily found at restaurant supply websites or even received as donations.



**ASPCA bottle feeders play it very safe, and “gown up” when interacting with all kittens, not just sick ones**

<sup>3</sup> Pulling used t-shirts on and off over one’s head could cause anything picked up from a kitten and now on the t-shirt to transfer to one’s face and hair. It will then be re-transferred onto the next t-shirt when it is put on. Use care to keep shirts “right-side-out” so as to prevent cross contamination.

<sup>4</sup> Keep in mind, though, that the gloves are only as good as your handling protocols. Dirty gloves transmit disease just as easily as dirty hands.



### *Water Bowls*

Metal bowls are most commonly used as they are durable and easy to clean and disinfect. Of course, using them will require that you have a sink/dishwasher and proper cleaning protocol in place to eliminate the risk of cross contamination between feedings.

### *Hand Mixer or Blender*

Depending on the product used, the number of kittens to be fed and the feeding protocol (gruel or no gruel, see Feeding Protocols in Chapter 4), you may need something to mix up larger batches of kitten formula or “gruel.” (“Gruel” is wet kitten food that has been watered down into a slurry consistency.) Choose blenders that assemble and disassemble easily and have fewer intricate parts, making it easier to clean.

### *Bedding*

The “best” blankets are light to medium weight fleece or flannel or pillowcases so the kittens’ nails do not catch (as they do in the loops of towels) and the warmth from a heat source can reach the kittens while still affording them softness and protecting them from extreme temperatures. It is also helpful to have a “buddy toy” – a small, stuffed or plush toy -- for neonates to snuggle with if they do not have a mom or siblings.

### *Scales with Bowls*

Kittens will need to be weighed regularly. Small kittens will endure this task if they are placed in a high-sided bowl placed atop the scale. Use digital scales that can measure in grams or 1/10 ounce increments. Do not forget the moms who ought to be weighed at least two times per week as well. Infant scales or small-animal veterinary scales work wonderfully. As kittens grow and approach eight weeks, they, too, will likely need to transition to being weighed on the larger sized scale.

### *Paper Towels, Toilet Paper, Cotton Swabs or Pads, Baby Wipes*

You will need some type of tissue or swab to stimulate bottle babies to urinate and defecate before or after feeding. Nurseries we visited use a range of products for this: paper towels, napkins, and cotton swabs, etc. There are many options. These should be kept at feeding stations in an easily accessible container of some kind (e.g., a napkin dispenser).



Eating “gruel” in paper dish at Best Friends - Los Angeles nursery



Scales and napkins in dispensers used at Best Friends - Los Angeles nursery

## Heat

All of the nurseries visited were comfortable using electric heating pads on the lowest setting (the kind that do not shut off automatically after a set time). Many also have “SnuggleSafes” available, either as back up, for use in carriers while transporting kittens or for supplemental heat. However, SnuggleSafes and other reheatable devices require regular checking to ensure they are still warm, and they must be rewarmed.<sup>5</sup> If the nursery does not have enough microwaves or a system in place to rotate warm SnuggleSafes for cold ones, they can be “more trouble than they are worth,” and the nursery may eventually shift over completely to electric heating pads.

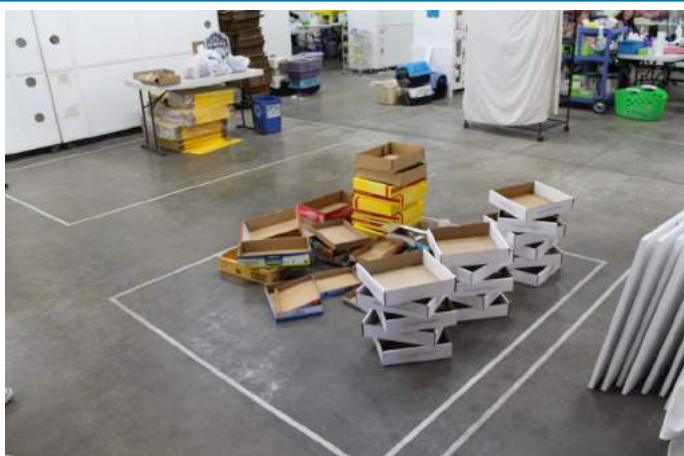
Another option is rice socks; however, these suffer from the same heat consistency problem as SnuggleSafes and, in addition, they need to be thrown away between litters as, unlike SnuggleSafes, they cannot be washed and easily disinfected.<sup>6</sup>

It would also be helpful to have available, particularly for those who transport kittens either to or from the nursery, hand warmers, hot water bottles or non-toxic chemical packs. These can be used in vehicles to keep kittens warm until they get to the nursery.

## Litter Boxes

Four of the five nurseries visited use cardboard litter boxes. They have a number of advantages over plastic, and even metal, litter boxes. Cardboard boxes can be thrown away when soiled, so they minimize the staff time needed to clean and change out boxes. You also do not have to worry about whether they were thoroughly cleaned and disinfected between uses. A nice bonus is that they have very low sides so that kittens can more easily get into and out of them.

The downside of cardboard boxes is their cost and time required by staff or volunteers to assemble them into actual boxes, as they are delivered flat. One alternative is to collect the boxed multipacks of items such as cans of cat food, soda and other canned foods as packaged when delivered to grocery stores. Typically stores throw them out. Some enterprising volunteers have arranged to collect them regularly from the stores and bring them to the nurseries in which they work.



**Cardboard litter boxes, assembled by volunteers and ready for use at San Diego Humane Society nursery**

## Litter

Nurseries that are part of larger shelters frequently have little choice about the brand of litter they can use, as the shelter often has a contract with a particular manufacturer for donated food and litter. But one requirement is common: the litter used with kittens *cannot* be clumping litter, as it can be

5. Caution should always be used with any heating source and immobile or severely debilitated kittens should never be left unattended on a heating source.

6. It is possible to place rice socks in plastic, zip-lock bags to keep them clean and switch out the plastic bag with each new litter; however, care must still be taken to avoid cross-contamination during the transfer.

dangerous if ingested and can get stuck onto a kitten's face, nostrils or other areas. Clay is the most commonly used litter at the nurseries we visited, and some use pellet-type litter. (We note that not all pellet-type products are necessarily safe for kittens. Some may contain ingredients or added clumping agents which could be dangerous if ingested by kittens, so you should check the labels on the litter you select.)

### *Cleaners and Timers*

Nurseries use a variety of cleaners and disinfectants on surfaces (cages, floors, feeding tables, etc.). The most popular cleaner of organic waste of the five nurseries is Original Formula (blue) Dawn dish soap; one nursery favors 409. The most popular disinfectant of the five nurseries in this study is Accel/Rescue, which can be used to sanitize or disinfect not only cages but also table surfaces and floors, and is gentler on skin and non-corrosive to metals. It is also safer for the kittens.

Depending on the concentration and type of disinfectant, staff and volunteers are expected to soak the dishes or work surfaces for a specific period of time. Some type of count-down timer (an inexpensive food timer will suffice) is useful for ensuring proper contact time for the disinfectants rather than relying on watching a wall clock.

### *Plastic Bins with Lids*

At some point (often or sporadically), staff and volunteers will need to take whole litters of kittens out of their condo in order to clean it thoroughly. A plastic bin with a lid and air holes punched in it can be used to house the kittens while they are out of their condo. It would be best to have one bin assigned to each litter in the nursery.

### *Cat Carriers*

It will be useful to have on hand a variety of cat carriers to transport kittens to foster care or to the vet. These might include regular plastic carriers, plastic carriers that open from the top as well as the side, and cardboard carriers. Organizations can encourage their foster volunteers to have their own easily cleanable carrier which they use to pick up kittens from the shelter, but having extras on hand for fosters who are not already equipped with a carrier will be helpful. Some nurseries use cardboard carriers to transport kittens, and then dispose of the carrier once that kitten is no longer in need of transport. They keep the cardboard carrier close to the cage in which the kitten is housed in the nursery so that it can be reused for each transport. The carrier is then disposed of when the kitten moves out for adoption. This minimizes the risk of disease transmission at the same time it saves staff resources needed for ensuring that a plastic carrier is thoroughly cleaned between kittens.

If you intend to house neonates in plastic carriers for any period of time, it is helpful to use carriers that have an opening on top, so that you can more easily reach in to handle a particular kitten than would be possible with a carrier that only opens at one end.

*The litter used with kittens cannot be clumping litter, as it can be dangerous to the kittens.*



**Kittens at Austin Pets Alive! nursery waiting for their cage to be cleaned**





## Chapter 3

# Staffing the Nursery

**H**ow to staff the nursery will depend on a number of factors. Primarily, however, it will depend on how strong your foster program is. You should be aiming to move kittens into foster care as quickly as possible. The longer it takes to do that, the more in-nursery staff and reliable volunteers you will need.

Before we explore each of these needs in more detail, two general points should be made. First, expect a lot of foster/staff/volunteer turnover. This is true for animal welfare in general because people will move, find better-paying jobs in the private sector, or just burn out. Some nurseries have found that only about 35 percent of seasonal workers return the next year.

Kitten nurseries come with an additional issue that leads to high turnover -- some kittens will die for no apparent reason or no matter how hard you work to save them. This can be hard for many people to accept. So when you get good people working in your nursery, do everything you can to keep them.

Second, because stress and burn out can be particularly high in kitten nurseries, down time -- including non-working hours as well as vacation time -- should be enforced and treated with respect. This recommendation also extends to volunteers. To prevent burnout, one nursery specifically prohibits a volunteer from signing up for shifts that total more than four hours in a given day. This regeneration time away from the nursery should be viewed as (nearly) sacred. Remaining staff and others should refrain from contacting the individual who is "off." This means you will need others who can effectively "back-up" the staffers and others who are off work.

### **Foster Program**

A recommendation you have read often in this manual is to have a solid kitten foster program up and running before you attempt to open a kitten nursery. The kitten foster program can be operated out of your organization's general foster program, or it can be run out of the kitten nursery itself. The latter approach is often more effective for moving kittens into foster homes more quickly. This, however, would require an additional person within the nursery whose job it would be to coordinate moving kittens from the nursery into foster homes.

There are many ways to build a strong kitten foster program. Educating fosters on how to care for young kittens, and bottle babies in particular, is key. You should be prepared to provide ongoing training for new and existing kitten fosters so you have a pool of people with a range of skills (queens and

*You should be aiming to move kittens into foster care as quickly as possible.*

*When you get good people working in your nursery, do everything you can to keep them.*

### Off the Record

*“If your foster program is run out of the shelter, moving kittens from the shelter to the nursery can mean that the shelter foster staff loses some of the urgency needed to find them foster homes. Out of sight... So you will need to keep the pressure on the shelter foster staff to find foster homes for kittens in the nursery.”*

*It is ... imperative to hire senior nursery staff who can multi-task, are not afraid to make decisions and make them quickly, have good ‘people skills,’ have the appreciation for and patience to work alongside volunteers, and care about the mission more than the paycheck.*

kittens, bottle babies, sick kittens, hissy kittens, etc.). You will also want to promote retention of your best fosters by showing appreciation for their time and effort. One foster program we work with sends personal, hand-written sympathy cards to fosters when a kitten in their care dies, for example, recognizing in a personal way how hard that can be on the foster caregiver.

Appendix B provides more details about the elements needed for a successful kitten foster program.

### Paid Staff

If your organization has a very limited budget, you may hope to staff a nursery fully or even primarily with volunteers. However, the bottom line from all the nurseries we visited, which included two who followed this approach in the beginning, is that this approach does not work. The smaller the nursery, the easier it is to use volunteers in key positions (e.g., as volunteer coordinator or foster coordinator). As the nursery grows, however, you will need paid staff who will ultimately be responsible – with their job on the line – for making sure things get done as they should. Of course, many volunteers are dedicated, loyal and reliable, but every nursery stated the need for a number of key positions and time shifts to be filled by paid staff. If you plan to care for bottle babies in your nursery, you will need feeders overnight and well into the early morning hours. You will likely need paid staff for this.

All of the nurseries visited group staff into two categories: year-round and seasonal (those working only during “kitten season”). In some cases, the year-round staff shifts from full-time to part-time during the “off season.” During this time, everyone evaluates successes and failures during the past year, and what needs to be changed for the next kitten season. They also deep-clean the nursery, sometimes even repainting the walls and making other capital improvements.

A kitten nursery is a fast-paced environment. Activity is constant. Life-and-death decisions must be made regularly and quickly. The fear of an outbreak of fatal disease is ever present. It is therefore imperative to hire senior nursery staff who can multi-task, are not afraid to make decisions and make them quickly, have good

“people skills;” have the appreciation for and patience to work alongside volunteers, and care about the mission more than the paycheck. Where do you find such people? One nursery recommends looking first at your volunteer base. There you will find individuals who know your organization, believe in what you are trying to accomplish, and understand your (current and ever-changing) methods of operation. You also likely have a preview of their “people skills” and work ethic. Others have brought in staff with the management and people-skills needed from areas far from the nursery itself, finding them at conferences or by word-of-mouth.

The number of paid nursery staff you will need is a function of the number of kittens you care for in a year, the number of bottle babies that stay in the nur-

sery (while they await a foster home), and your ability to raise funds to pay for staff (see Chapter 5 for some ideas on this). The smallest nursery we visited had two paid senior staff -- nursery manager and an assistant nursery manager -- plus the equivalent of two part-time paid feeders who came in for shifts ending at 3:00 a.m.<sup>1</sup> A much better funded nursery with a very slim volunteer pool had over 40 paid staff, including two managers. In addition to the direct nursery staff, you will need to have individuals (paid or otherwise) who run your kitten foster and volunteer programs. These individuals can work exclusively for the nursery or they can work indirectly there, handling kitten fosters and kitten volunteers from their perches in the shelter. One recommendation we heard from two nurseries was to have a kitten foster coordinator who would be based in the nursery. Having someone on-site, focused on moving kittens into foster care, ensures that it happens, and faster.

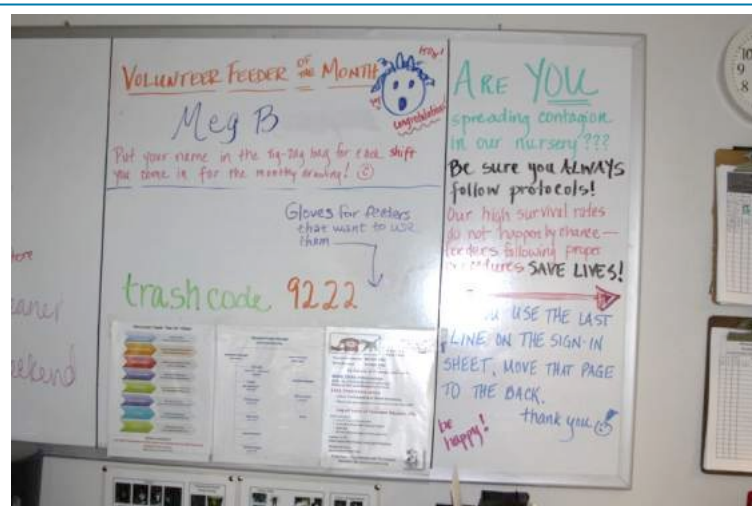
Kittens get sick, so you will need access to a veterinarian and at least one veterinary technician. At a minimum, you will need a vet to prescribe medicine. A vet should be available for at least one visit per week as long as there is also a dedicated, on-site veterinary technician or other highly trained and experienced staff member who the vet can trust to handle medical concerns the other six days of the week and will refer to the vet if needed.

Another issue to consider is some type of security for staff and volunteers who will be coming to the nursery for the overnight feedings. None of the nurseries we visited felt the need to have on-sight security staff. They and their staff felt adequately protected by a range of after-hours approaches, including cameras, extra lighting, phone calls to gain access to the building, gated facilities, and provision of emergency Life Alert buttons to after-hours staff and volunteers.

## Volunteers

In general, nurseries can successfully use volunteers. In fact, many could not function without them. Of the five visited, four use them a great deal. So attracting good ones is every nursery's challenge. There is some benefit when the nursery is located at or adjacent to the main shelter due to an existing pool of volunteers who would already be pre-disposed to consider it if they love kittens. Some nurseries attract volunteers by word-of-mouth, social media, or emails to supporters. One suggested that organizations discern what talents are needed, and then configure presentations accordingly. For foster or volunteer trainers, make pitches to teachers at local schools. For bottle feeders with flexible schedules, visit retirement communities.

Once you have a good pool of volunteers, you will need strategies to organize them so that you can assign the "right" volunteers to perform the "right" tasks. Some nurseries create formal or informal categories of volunteers de-



Notice board for volunteers at Austin Pets Alive! nursery

## Off the Record

*"Retirees are some of our best, most dedicated volunteers."*

and

*"Retirees are hard to use. They are not interested in showing up at set times on specified days. They tell us they value their freedom since retiring from their jobs."*

<sup>1</sup> Specifically, they have 14 five-hour shifts per week for overnight feedings.

pending on their levels of experience, reliability, or years of service. They allocate shifts to volunteers based on these factors. More senior volunteers often mentor new volunteers and manage teams of other volunteers, which eases pressure on limited paid staff.

*Set communication protocols that lay out a strict chain of command for notifying staff members about issues concerning kittens.*

Volunteers with whom we spoke not surprisingly felt strongly about being proactively involved in decisions regarding how the nursery is run. Staff generally agreed. One nursery surveys volunteers at the end of the year to ask them what worked, what didn't, and what they think needs to be changed in the next season. Nursery staff also

meets with mentor volunteers to find out if/how training materials need to be updated.

## Communication

Nursery management needs to provide a positive work environment as well as timely, reliable communication between staff, volunteers and fosters. An individual at one organization noted that the nursery is a very busy place, and it requires keeping questions and comments directed to the right person for maximum efficiency. So, set communication protocols that lay out a strict chain of command for notifying staff members about issues concerning kittens. Also, provide staff and volunteers with information about who to contact with questions or comments about the range of issues that will arise in the day-to-day running of the nursery.

Nurseries must ensure that all of the team members share information about each kitten and each litter on a daily basis to ensure proper care is being given. Many use "rounds" to do this. Members of the team, which at a minimum include senior management and medical staff as well as the foster coordinator go cage-by-cage through the nursery noting any changes in the kittens and deciding who is ready to move on to foster homes or other locations like community or adoption rooms. Nurseries also rely heavily on their feeders for information about a kitten's status. They set up systems for the feeders to record concerns staff and/or the medical team should address. Sometimes, they post a concern on a whiteboard, and often they also post it in writing in a nearby notebook. Whiteboards are convenient and easy to see; however, having that information recorded in a log book at the same time ensures that the information is not "lost" after it gets erased from the whiteboard.

Staff and volunteers working in the nursery will need to be apprised of new policies or health concerns of specific kittens or litters that may have changed since the last time they were in for a shift. So, a process for communicating with them regularly needs to be in place. A single bulletin board or log book located where people sign in for shifts is a good way to communicate new, essential information. Often, staff and volunteers are required to familiarize themselves with such postings when they arrive for their shift and then initial that they've read and understood the information. The use of a spreadsheet accessible by multiple people at several computers also allows those in related programs, but located outside of the nursery, to stay up-to-date on the latest



**Austin Pets Alive! nursery directory of contacts**



**Best Friends - Los Angeles observations whiteboard**



information about the kittens. This is helpful, for example, to the off-site medical staff or foster coordinator.

As important as communication is, it is also possible to over-communicate. You may be tempted to post notices of all kinds at many places in the nursery: how to clean items in the kitchen, wash hands, or mix disinfectant. If these notices are always posted, at some point people stop noticing them. Then, they miss the new important ones. So, limit additional signage by being sure that such protocols are understood by each person before being allowed to work in a particular area or perform specific tasks. An easily accessible notebook of protocol sheets is also helpful to have in every area. This way, staff and volunteers can refer to it when they have questions or want to reinforce to a new member the correct way to follow protocols.

## Training

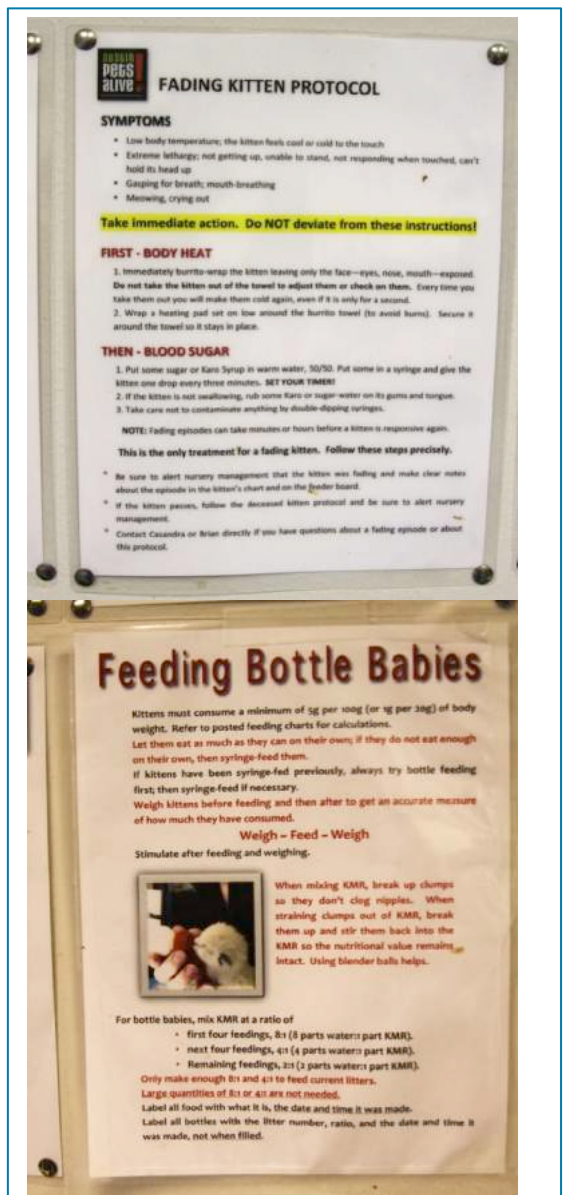
The importance and effectiveness of a good nursery training program cannot be overstated. Some volunteers and new staff may already have experience feeding bottle babies, but they still need to be trained on *your* nursery's protocols so that there is commonality and consistency in care. In fact, there may even be differences in the protocols used by medical staff in the main medical facility and those used in the nursery, and medical staff working in both places must be up to date on the nursery protocols as well.

Nurseries approach training in a variety of ways. In addition, the content of the training will vary depending on whether you are training new staff, volunteers, or fosters. In general, most nurseries conduct a general orientation followed by more detailed, specialized kitten-care training for staff, volunteers and fosters. Everyone needs to understand how the system functions as a whole, even if everyone does not perform the same tasks. When people understand *why* a particular procedure or policy is important – especially as it relates to the health and successful outcome for the kittens – they are more likely to accept and follow it. This is especially true when it comes to emphasizing the dangers of cross contamination and importance of handling and sanitation procedures.

It is important for volunteers to know from the beginning that not every kitten will make it. So, be sure to include in your training a frank discussion about all possible kitten outcomes, including disease, death and euthanasia.

You should plan to provide ongoing training for staff, volunteers and fosters to add new skill sets or just to refresh current skills. Not everyone will want to expand into other areas, but for those who do, ongoing training is an effective way to keep volunteers engaged and improves your chances of retaining them as volunteers. Different topics such as feeding bottle babies, recognizing diseases, and administering treatments can create graduated levels of volunteer responsibility – and all are good trainings. Volunteers will feel more vested when asked to contribute ideas for additional training oppor-

*The importance and effectiveness of a good nursery training program cannot be overstated.*



Austin Pets Alive! nursery posted "how to's"

tunities. Some nurseries use well-trained volunteers as instructors.

Regardless of which topics you decide volunteers should be trained to perform, be sure that you are using the most up-to-date protocols for sanitation and medical care. Always re-evaluate policies and procedures due to the dynamic nature of a nursery.

*You will need firm time and attendance rules for both staff and volunteers.*

Protocols for fostering kittens are often a little less strict than those for nursery staff and volunteers because fosters generally are dealing with just one litter or, if more, they are separated into multiple rooms in the home, whereas the nursery has multiple litters in the same room.

## Scheduling

Nurseries have a variety of options for scheduling staff and volunteers. For some, Google Calendar or even a table created in Microsoft Word is enough. Several nurseries use Volgistics for volunteer scheduling. Others put it all on an Excel spreadsheet.

Sometimes, however, these aren't enough, and getting the right software is important. No nursery that we visited had a software product they could recommend as the "best." It really will come down to the individualities of your nursery, your budget and what software programs your staff and volunteers will be able to use effectively.

The job of scheduling volunteers and staff is time consuming and labor-intensive. If you can hire someone to do it, hire someone! One nursery has a staff person dedicated to scheduling

Nursery WORK ASSIGNMENT SCHEDULE (WAS)		
4am - 12:30pm	<b>4AM - LIGHTS ON - Round with NCG's already on shift / Check NCG Communication Board - 4AM - LIGHTS ON</b>	LUNCH
A	<ul style="list-style-type: none"><li>Check the fridge for adequate amount of Fox Valley milk prepared</li><li>Decontaminate/Prep Nursing Table(s) for bottle baby feeding;</li><li><b>Bottle Feedings</b> (weigh-feed-weigh, record consumption in mLs, document elimination);</li><li>Prep and distribute food for ALL Kittens on solid 3 times a day feeding, including gruel</li><li>GM All Kittens Areas, check snuggle discs and reheat if necessary</li></ul>	8am - 9am
B		8am - 9am
7am - 3:30pm	<b>Round with NCG's already on shift / Check NCG Communication Board</b>	
C	Perform rounds with 4am NCG, Make Fox Valley Kitten Formula for day (check # of nursing kittens - update log as needed); Join/start <b>NEO Bottle Feedings</b> (weigh-feed-weigh, record consumption in mLs, document elimination); check snuggle discs and rotate if needed; Provide all care to NEO section.	11am - 12pm
D	Perform rounds with 4am NCG; Check for transfer posted, fill out monitor sheets - then Clean - Q3; check snuggle discs and rotate if needed; GM, MD feeding Q3 cages; <b>perform laundry</b> for assigned area.	12pm - 1pm
E	Perform rounds with 4am NCG; Check for transfer posted, fill out monitor sheets - then Clean - Q2; check snuggle discs and rotate if needed; GM, MD feeding Q2 cages; <b>perform laundry</b> for assigned area.	11pm - 12pm
F	Perform rounds with 4am NCG; Check for transfer posted, fill out monitor sheets - then Clean - Q1; check snuggle discs and rotate if needed; GM, MD feeding Q1 cages; <b>perform laundry</b> for assigned area. ( <b>GM Medical Intake - possible lead function</b> )	12pm - 1pm
G	Re-Stock PPE dispensers in Pee Wee, Q, <b>AS NEEDED</b> ; Join/start <b>NEO Bottle Feedings</b> (weigh-feed-weigh, record consumption in mLs, document elimination) GM Pee-wee, clean and rotate socialization pods.	11am - 12pm
12pm-8pm	<b>Round with NCG's already on shift / Check NCG Communication Board</b>	
H	TRANSFER cats released from <b>Medical Intake</b> by Doctor to Q; strip cages in Medical Intake and ensure adequate clean cages set up and ready for arriving transport; Re-stock <b>Medical Intake - perform laundry</b> for assigned area.	4pm - 5pm
I	Join/start 12:30/1pm <b>NEO Bottle Feedings</b> (weigh-feed-weigh, record consumption in mLs, document elimination); GM NEONATE cages, check and rotate snuggle discs if needed.	4pm - 5pm
3pm-11:30pm	<b>Round with NCG's already on shift / Check NCG Communication Board</b>	
J	Retrieve feeding list for syringe feeding and check pre-filled syringe quantities to ensure adequate amounts are prepared; CLEAN KITCHEN; SANITIZE equipment and perform decontamination protocols. Syringe feed as needed (incorporate staff resource as needed as well). SEE LEAD FOR ADDITIONAL	6pm - 7pm
K	Join/start <b>NEO Bottle Feedings</b> (weigh-feed-weigh, record consumption in mLs, document elimination).	7pm - 8pm
L	FEED Q1, Q2, Q3; Check for transfer posted, fill out monitor sheets, check snuggle discs and rotate if needed; <b>perform laundry</b> as needed. GM	7pm - 8pm
M	PM FEED Pee-wee; GM Pee-wee, clean and rotate socialization pods. At end of shift, breakdown each socialization pod, re-set for morning socializer	7pm - 8pm
N	FEED URI - ISO and Ringworm - ISO; Check for transfer posted, fill out monitor sheets; check snuggle discs and rotate if needed; <b>perform laundry</b> as needed	6pm - 7pm
11pm-7:30am	<b>11pm LIGHTS OUT - Round with NCG's already on shift / Check NCG Communication Board - 11pm LIGHTS OUT</b>	
O	Conduct <b>Bottle Feedings</b> (weigh-feed-weigh, record consumption in mLs, document elimination); GM NEONATE cages, check and rotate snuggle discs if needed	3am-4am
P	Restock kitchen, finish laundry; Clean items on dirty wall.	4am-5am

ASPCA nursery work assignment schedule for shifts and duties

volunteers. Others leave it to senior staff.

Because it is imperative that kittens be fed on schedule, staff and volunteers must be present for their designated shift. Therefore, you will need firm time and attendance rules for both staff and volunteers. Most nurseries will give staff members or volunteers one warning if they do not show up without notice and then fire them if it happens again. It is that important.

Another recommendation is to have consistent staff working in the various parts of the nursery. Try not to rotate people from one area to another. Rotating does not give staff or volunteers the opportunity to "know" the kittens and thereby spot problems early. That being said, at your end-of-season program review, you may want to consider if staff are interested in moving to a different area or taking on different responsibilities for the next kitten season. Doing so at this time will also give the staff time to familiarize themselves with their new responsibilities prior to the beginning of the next season.

## Off the Record

*"You need to make hard choices sometimes. Do you assign someone to feed hungry kittens? Or care for a fading kitten? Sometimes, you can't do both."*

# Chapter 4

## Protocols

**P**rotocols will be your instruction manuals for a diverse range of people who will be working in your nursery. Everyone needs to be on the same page about how to interact with the kittens, to treat disease, and to prevent its transmission. Good instructions – specific protocols – must be in place. You should plan to revise them as needed to be sure that you are approaching a problem in the most effective way. However, the key is to ensure that everyone has read and understands them.

Fortunately, there is a wealth of information available to get you started. Protocols do vary from one organization to another, so you will need to adapt those that are available to your particular needs. In this chapter, we provide you with some of the basics common to all of the nurseries we visited, noting differences where they may be helpful to you in adapting the protocols.

We focus on several key protocols: sanitation, intake, feeding, and medical protocols for the most common illnesses facing kittens in nurseries.

*It is imperative that you decide ahead of time when, how and what kind of kittens will be accepted into your nursery and foster programs.*

### **Intake**

Kittens will come from different sources depending on how the nursery chooses to accept them, i.e., public admission or transport from partner facilities. How much space is available within the nursery on any given day and your staff's capacity for care will dictate how many more kittens can be accepted. Space also may influence what kind of kittens you take in (e.g., their age or condition) and from whom they are accepted. Some organizations prioritize kittens from their own jurisdiction and then accept kittens from neighboring areas or partner groups as space permits; others accept kittens on a “first come, first served” basis, regardless of location, age or condition or the kittens.

Because bottle baby or debilitated kittens cannot wait overnight for transport and care, some organizations have transport arrangements in place 24/7. Others are not open as often and must have a scheduled time when kittens are transported. The later makes for easier scheduling of staff, volunteers and activities within the nursery; however, it also means that sometimes kittens will have to wait until the nursery opens and their condition could deteriorate.

It is imperative that you decide ahead of time when, how and what kind of kittens will be accepted into your nursery and foster programs – and then try hard to stick to those decisions. It is easy to get overwhelmed by wanting to accept every kitten. Instead, look toward the future and how you might be

able to grow your programs in order to eventually be able to accept every kitten in need.

If you will be going to the neighboring communities or partner organizations to accept kittens, it will be essential to have excellent, open lines of communication with those organizations about the number, ages and physical

*Neonates will likely need to be warmed and fed right away, as it may have been several hours since they last had food.*

condition of the kittens as well as with your nursery manager on how many spaces are available for which types of kittens. Likewise, you will need a paid staff member or dedicated, reliable volunteers available to drive. Be sure to check your liability and insurance coverage for

staff and volunteers who do transport.

When the kittens arrive at your nursery, several things will have to happen.

- An intake exam must be done to determine age, sex, weight, and physical condition of the kittens.
- Any medical conditions must be addressed. This includes illness and injury as well as preventative measures for parasites, vaccines, etc. Neonates will likely need to be warmed and fed right away, as it may have been several hours since they last had food.
- The kittens must be identified and put into the system – including what treatments the kittens received and any future scheduled treatments.

### *Initial Intake Exam*

Ideally, these procedures should all happen immediately upon arrival at the nursery. Some organizations choose to do a quick exam for age, sex, weight<sup>1</sup> and very obvious medical issues and the veterinarian or senior veterinary technician will follow with a more complete exam shortly after – ASAP but at least within 12 hours of arrival. Kittens with obvious injury or severe illness, however, should be seen by a veterinarian immediately. Remember, the health of a neonatal kitten can deteriorate very rapidly. A good, initial exam as soon as possible and continuing daily assessments are crucial. They can save money and time by treating proactively and by taking note early of any needed treatments to preclude injuries or illnesses from becoming more severe. Be sure to have clear protocols on exam procedures. Those doing exams should receive hands-on training from a veterinarian about what to look for. A fillable form to guide and record exam notes is also very helpful for consistency regardless of who performs the exam.

As noted, kittens arriving at the nursery may have gone for several hours without having been fed by their mother or a bottle. Therefore, accurately assessing the kittens' hydration status on intake is also very important. Fluid supplement orally or via subcutaneous injection may be necessary.

Likewise, take notice of the kittens' temperatures and address as needed. Since kittens cannot regulate their own body temperature until about four weeks of age, many arrive (or become) chilled. In such cases, careful, immedi-

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<sup>1</sup> Age or date of birth should be estimated as closely as possible as some medical protocols are at least partially dictated by age. It should be noted that weight alone is not, in and of itself, an accurate indicator of age. Total body score and dental assessment must also be considered.



ate warming is needed with the use of a warming device such as a SnuggleSafe, pet-safe heating pad or other means approved for use in your nursery. Similarly, kittens may also arrive too warm. Measures should be taken immediately to cool the kitten, but do so without drastic measures that would shock it. Constantly monitor the kitten and be careful to avoid warming or cooling it too much and going from one extreme to another. Again, never leave a debilitated or immobile kitten unattended with a warming or cooling device.

### *Other Intake Activities*

If the kitten is stable, some of the common treatments administered upon intake include treating for fleas and administering a dewormer and vaccine, if age appropriate. Capstar is a common choice for fleas, but there is a wide variety of other oral and topical flea treatments available depending on the kitten's age and the nursery's budget. Baths with Dawn are also a common means of initially treating for fleas. Pyrantal is by far the most common dewormer administered at intake. Some nurseries will begin treating around seven-10 days of age (determined by if the kitten's eyes are open), and others will treat starting at two weeks old.

**NEW INTAKE**  
**LVT EXAM NEEDED**

ASPCA nursery sign in Intake Room

It should be noted that one deworming is not enough, and kittens are typically dewormed every two weeks. The number of dewormings, type of product and scheduled intervals vary with different protocols.

Bottle baby kittens are too young for a FVRCP vaccine; however, some organizations have had success with administering a Heska bi-valent (rhinotracheitis and calicivirus only) intranasal vaccine to kittens at least 10 days old. Please note, this is younger than the package insert prescribes, so as with all medical procedures, a veterinarian's consult is essential.

Likewise, some organizations are administering additional medications and treatments on intake as prescribed by their veterinarian such as penicillin-G, serum or plasma subcutaneously, ponazuril, probiotics, or vitamin B-12.

Finally, as well as examining for fleas and ear mites, an exam for ringworm is also recommended. Some groups are able to start a DTM culture on every kitten or litter that comes in, others will only do one on kittens showing signs suspicious of ringworm and still others will simply isolate and treat the kitten as if it is ringworm positive.

Kittens suspicious of ringworm or any other illness should be treated as if contagious until proven otherwise and quarantined immediately following the intake exam. The examiner should be aware of, and meticulously follow, all required cleaning and sanitation procedures as well as know specifically where the kittens will be placed upon completion of intake protocols.

### *Identification*

All kittens must be clearly identified at the time of arrival. It is also good to include information about siblings and their mother so all can be easily tracked together or individually. This is especially helpful when large litters are broken into smaller groups. Common identification methods include not only names/numbers entered into a computer system and placed on cage tags but individual paper-type collars (be sure to use waterproof ink!), or pet-safe (non-

toxic) nail polish, and trimming or shaving the fur in various locations on the kitten for kittens too small for paper collars.

Decide ahead of time how you will track the kittens (and litters) that come to your nursery. One common practice is to start the first litter as 'A1' kittens, and all those kittens will have "A1NAME," "B1NAME," and so on through, say, "Z1NAME," for example. You may go through the alphabet a few times during the course of the year. This system enables the nursery to know on any given day just how many kittens have come through their doors so far

that year. Other nurseries use pure numbers and names that staff or volunteers have invented (e.g., A0336543 is the identification given to a given kitten, along with the name "Freddie"). It is good to also include a photo of each kitten with its identification number and unique characteristics listed.

Good identification and a means to track it are essential for properly recording feedings, weight and medical procedures. Forms should be developed to allow both immediate and continued tracking of each individual kitten and litter. One nursery uses its identification system

to ensure that it knows exactly where in the community each kitten came from and exactly where it was housed throughout its stay at the nursery, and which other kittens it was exposed to during that stay, for example. Other information recorded in the kittens' computerized records includes daily weight, feeding and elimination records, any medical or behavioral observations, and treatments administered. It is a lot to keep track of and one reason some nurseries employ or use a volunteer data manager. The software used by the nurseries to perform this tracking varied. Some favored PetPoint, others use Shelter Buddy. None expressed a particularly strong preference for one program over another.

Once kittens have been examined, stabilized, administered intake medications and identified, they can be moved into housing in the nursery. We recommend separating larger litters into smaller groups of two or three for easier management, less stress and reduced exposure of diseases to multiple kittens being housed together. Most of the nurseries we visited separated kittens with highly contagious illnesses (e.g., panleukopenia, ringworm) away from the general population, with varying degrees of isolation. Others kept kittens with upper respiratory infections, for example, mixed in with the general population but with clear labeling on their cages that different sanitation and care protocols needed to be followed when handling those kittens.

## **Feeding**

Obviously, feeding is one of the most important components in caring for kittens, and very clear, detailed protocols must be established *and strictly followed* by all staff and volunteers. Feeding is much more than simply supplying the kitten with food. It involves everything before, during and after the actual feeding. It includes everything from mixing the formula or "gruel," setting up the feeding area, determining which kitten should be fed next and

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what amount, stimulating neonatal kittens for urination and defecation, weighing kittens, cleaning the kitten and station afterward, properly removing waste and soiled linens and properly storing supplies for their next use with that particular kitten or litter, for example. In addition to all of this, feeding time is also when volunteers and staff have perhaps the best, ongoing opportunities to assess the well-being of that kitten.

### *“Bottle Babies”*

Feeding kittens is highly labor intensive and can be complicated for staff and volunteers unfamiliar with caring for these particularly vulnerable kittens. Again, we define “bottle babies” as kittens that arrive at the nursery too young to eat on their own and with no mother to feed them.

There are a variety of options for milk replacers and other food. Common powdered formulas include Breeders’ Edge and Kitten Milk Replacer (KMR). Other brands are available as well, and nurseries should take into consideration cost, ease of availability (i.e. some are only available for purchase online), storage requirements, etc. Be sure, whatever product you choose, that it is nutritionally complete as reviewed by a veterinarian. Some milk-type products available are, in fact, not appropriate for long-term feeding as they do not meet the nutritional requirements of growing kittens.

Most nurseries use a powdered formula, so feeders should be familiar with proper mixing and storage procedures. Each batch should be clearly marked with date and time of mixing and refrigerated when not in use. Generally, mixed powdered formula can be refrigerated for up to 24 hours, anything not used in that 24 hours should be disposed of. If more than one brand or graduated concentrations are used, these should also be very clearly marked and each kitten’s chart should indicate what it is being fed. Please note that transitioning to different food or using a formula mixture that is too rich can cause diarrhea, so we recommend maintaining a consistent diet. Some nurseries will also start the kittens on a slightly less-rich formula mixture (by increasing the amount of water-to-formula ratio) in order to help the kitten’s system more gently adjust. Then, over the course of the next couple of days, the amount of formula-to-water ratio is increased until at the amounts specified on the product label.

There should be specific written protocols for every step of the feeding process, and volunteers should be trained and familiar with each step. The health and lives of the kittens are directly impacted by the feeder’s careful attention to following protocols. Many nurseries require several volunteer trainings and/or shadowing or mentoring before a feeder is allowed to feed a kitten on his or her own, and volunteers who do not follow protocol are either retrained or dismissed.

A system should be in place and posted to track in what order and which kittens have been fed so no one is missed. Some methods nurseries use to



San Diego Humane Society nursery posted formula instructions

*The health and lives of the kittens are directly impacted by the feeder’s careful attention to following protocols.*

track kittens' feedings include cage tags, whiteboards, and file folders placed in order within a rack. Kittens' cages should be clearly marked as to what method (bottle, syringe, tube, gruel or combination) each kitten is receiving and at what intervals they should be fed.

There are a variety of bottles and nipples available on the market. It is a good idea to have several sizes and types of nipples as some kittens may prefer one type over another. Be aware that most nipples do not come with premade holes. Creating the correct size nipple opening is akin to an art form. Create a hole too big and milk comes out too fast – possibly causing the kitten to aspirate some into its lungs. Create a hole too small, and the kitten cannot take in enough milk for the amount of energy expended – possibly

causing the kitten to stop eating sooner than it should and not get all the nutrition and calories that it needs. One type of nipple that is becoming popular because it already has a pre-made opening is the Miracle Nipple.

It should be clearly noted how formula is to be warmed and transferred to individual bottles for feeding and how unused formula is to be handled. For example, some of the nurseries we visited had hot-water "baths" located at each feeding station to heat formula.

Weight Monitoring Form

Kitten Name: _____				Kitten Name: _____				Kitten Name: _____				Kitten Name: _____			
Date	Weight	Increase/ Decrease/ Same	Initial	Date	Weight	Increase/ Decrease/ Same	Initial	Date	Weight	Increase/ Decrease/ Same	Initial	Date	Weight	Increase/ Decrease/ Same	Initial

**ASPCA nursery weight monitoring form**

Comfortable seating and good lighting make the feeding process easier and safer for volunteers and kittens alike. Since kittens are always fed in a prone

position, a soft, warm location on a flat surface should be available. Some nurseries have heating pads or disks at each station to keep the kittens warm while feeding. Be sure these are non-porous and able to be easily cleaned between each kitten or litter. Regardless of a heat source, kittens should be kept warm during feeding by placing a towel between them and the table and also wrapping or covering them with a soft, warm cloth as a blanket. This is especially important for the youngest kittens.

(1) Date: \_\_\_\_\_

(2) Kitten Name: \_\_\_\_\_ Description: \_\_\_\_\_ A#: \_\_\_\_\_

(3) Circle hours between Feedings: 2 3 4 5

(4) Time Fed	(5) NCG Initials	Pre-Feed Weight in oz	Post-Feed Weight in oz	Total Amount Consumed in mls	Urine	Bowel Movement	In transition	Comments
					N Y	N Y	N Y	
					N Y	N Y	N Y	
					N Y	N Y	N Y	
					N Y	N Y	N Y	
					N Y	N Y	N Y	

(2) Kitten Name: \_\_\_\_\_ Description: \_\_\_\_\_ A#: \_\_\_\_\_

**Common nursery input/output log**

Specific feeding protocols will vary, but all should include feeding properly, weighing before and after feeding and noting amount consumed on the kitten's chart as well as elimination. Elimination can be the first step followed by weighing, feeding, burping, weighing again, then perhaps another bout of feeding and elimination. After feeding, each kitten should be cleaned, particularly around the mouth and anal areas. During elimination, check the genital area for any signs of redness or irritation that might indicate diarrhea or suckling by siblings.

Note everything on the kitten's chart: weight before and after feeding, time of feeding, amount the kitten ate, if urine and/or feces were produced as well as their color and consistency. Include a chart for tracking and notes for whatever items you decide upon and set in your protocols.

In extreme instances, tube feeding may be required to get a kitten healthy enough to eat independently. Tube feeding is an effective way to deliver

vital nutrition and hydration. However, if not done properly, fluid can enter the lungs, causing complications and even death. Therefore, tube feeding should be performed only by highly trained individuals.

Feeding may be the only point the kitten is observed or handled for any length of time, so it should be impressed upon feeders how critical their observations and input are for noting any changes or differences in health or activity. Even the smallest variation can be important, and a method should be in place to communicate such observations.

### *Older Kittens*

Typically at four weeks, kittens will begin to show interest in “regular” kitten food. Nurseries had different approaches here. Some present the kittens with wet kitten food and let them “play” with it – get it on their paws, for example, so that when they lick it off, they realize it is good. Others prepare “gruel” – wet kitten food diluted with formula into a consistency akin to a milk shake. Some nurseries may also put out small amounts of kitten kibble once the kittens’ teeth begin to show.

Of course, staff and volunteers must be careful to monitor closely whether the kittens are eating this food; initially, they will likely need to receive supplemental feedings from a bottle or syringe with milk “laced” with kitten food to ensure that they receive sufficient nutrients. So continue to keep careful records of food intake.



**Kitten takes to gruel at San Diego Humane Society nursery**

Finally, when kittens begin the process of weaning, prepare for the probability of diarrhea. Probiotics like Forti-Flora should be used during this transition. Be aware that some kittens simply do not like wet food and will skip the gruel choices and gravitate more towards dry food. Babycat by Royal Canin is a favorite of many kittens, although all of the nurseries we visited noted its expense and reported that they could only use it to the extent it was donated at kitten showers (so remember to add it to your shower wish list, see Chapter 5).

### *Sanitation*

Disease transmission needs to be taken seriously; it is a matter of life and death for the kittens. The nurseries we visited all had rigorous cleaning protocols in place. At least one noted that the rapid spread of a highly-contagious disease forces a nursery to shut down (no new intakes) for as long as three weeks or more—creating a large and negative impact on kitten lives. So, you will need to be prepared with strict, set protocols for cleaning the nursery and for handling the kittens, and it is very helpful to have someone responsible for ensuring that *all* staff and volunteers follow those protocols.

### *Cleaning the Facility*

As a threshold matter, it is helpful to eliminate as much clutter from the nursery as possible. Each extra item lying around the nursery is a potential hiding place for disease and takes extra time to clean. Try to keep work surfaces clear of all but the most necessary items, storing the rest away in --



ideally -- closed cabinets or lidded containers.

Cleaning and disinfecting are two different things. Cleaning removes the bulk or visible “dirt” and organic matter, and disinfecting removes the unseen pathogens that may be resistant to most standard cleaning products. Be aware that even small amounts of residual biological matter such as urine, feces, blood and nasal discharge render many disinfecting products ineffective. Therefore, the area must first be well-cleaned with something that removes this organic matter in order for the disinfecting product to be effective. Some newer products such as Accel/Rescue can

effectively tolerate slightly higher amounts of residual biological matter and, therefore, offer a little more protection in the event that some debris was missed during the initial cleaning.

Carefully follow mixing guidelines for any cleaning and disinfecting products used. Different diseases sometimes require varying dilution strengths of the products used. Be sure to mix appropriately. Using too little of the concentrate will be ineffective for the pathogens you are trying to eliminate and using too much is often just a waste of product and money – and could even be harmful.

Additionally, most products require a minimum amount of contact time to work effectively. This also means that the product must remain wet on

the item for the specified amount of time. Therefore, it is important to use enough product – or reapply midway - to ensure that it will not air dry before the amount of contact time has elapsed.

Likewise, some solutions are stable for only limited amounts of time once mixed. In such cases, bottles should be marked with the date that the solution was mixed and replaced when expired. Others break down when exposed to light, so they should be placed in bottles that are opaque or covered with something to minimize exposure to light.

Bleach solution is an inexpensive option used by many; however, be aware that it can be caustic to skin and corrosive to metals. Furthermore, in order to be effective, the cage must first be well-cleaned to remove biological residue which can render the bleach ineffective. Newer, quite effective cleaning and disinfecting products are becoming available and Accel/Rescue is one that is quickly gaining popularity.

Feeding stations and the items on them, such as scales and timers, must be cleaned thoroughly and disinfected between each separate litter that is fed. Don’t forget that pens and paper can carry disease too. Some nurseries keep batches of these items in containers that are specific to a given group of kittens, discarding them after those kittens have moved on to the shelter. Alternatively, you can cover these items with something disposable. For example, finger cots can be placed on pens/pencils, plastic bags can cover scales and weighing bowls, or a plastic covering can be placed on the feeding table.



Cleaning supplies ready for use at Best Friends - Los Angeles nursery

After each feeder's shift, the entire station should be well cleaned and disinfected. This includes the sides and legs of the table, the chair and any nearby items such as individual trash bins.

At least once daily, the floor should be completely swept or vacuumed, mopped and disinfected. Spot cleaning throughout the day is usually needed especially where litter may have fallen from cages.

Door knobs, light switches, telephones, and any other commonly touched fixtures in the room should only be touched with clean hands and, even so, should be disinfected at least once daily.

Don't forget vertical surfaces as well. Some facilities have tile walls or plastic overlays that are easier to clean than drywall. Those with drywall still do a thorough cleaning at the end of the season and sometimes repaint. Wipe windows, mirrors and other non-porous vertical surfaces weekly or as needed. It is amazing what can collect even on vertical surfaces! Cleaning vertical surfaces will also bring awareness to the number of items posted on the walls. Such items should be laminated so they, too, can be wiped clean.

The frequency and type of cleaning that individual cages get is in part determined by what kinds of kittens are (or have been) housed in them. Certainly, cages housing kittens with diarrhea or productive upper respiratory infections will require more frequent and thorough cleaning. Other cages may be spot cleaned for several days before a more complete cleaning is needed.

Some methods used by nurseries include removing the kittens and all of the cage contents completely, others require removing and changing out only linens, litter boxes and food/water bowls. If kittens are to be removed completely, be sure they have a designated carrier or container for them to be in while the cleaning is being done. This container should be used only for those kittens and not for any additional litter unless it is completely cleaned and sanitized. Some nurseries have enough space for a carrier to be placed above each cage making it convenient for use. Sometimes it's possible to have one person clean a cage while another person feeds the kitten.

Be aware that kittens are very sensitive to cleaning agents and their fumes. Extreme care should be taken to insure the safety of the kittens. This includes being aware of spray and fumes that could irritate or harm kittens' eyes, lungs and skin. Likewise, product directions must be carefully followed for mixing concentrations, contact time with surfaces, rinsing if required and drying before kittens are placed back into the cage environment. Similarly, humans may be sensitive to many cleaning products, and care should be taken to wear gloves, masks or eye protection if needed.

*The frequency and type of cleaning that individual cages get is in part determined by what kinds of kittens are (or have been) housed in them.*



**Cleaning status tag at San Diego Humane Society kitten nursery**

Regardless of what type of daily cage cleaning you do, a thorough “deep clean” should be done before any cage is used again for a new kitten or litter of kittens. Deep cleans often involve more detailed cleaning getting into all the corners, between bars, etc., using stronger cleaners and disinfectants, longer contact time and even taking that cage out of circulation for several days or weeks. Then, right before going back into use, it is cleaned once again. Collapsible cages may be completely submerged in a cleaning/disinfecting solution to insure that pathogens even located deep into crevices or between bars are reached. A hard plastic “kiddy pool” works well for this.

Finally, it may also be useful to keep track of particular cages that housed kittens with illnesses such as panleukopenia, calici or ringworm. If you notice a trend in subsequent litters also infected with these diseases, it may be that the cage has not been effectively cleaned or disinfected.

### *Cleaning Laundry*

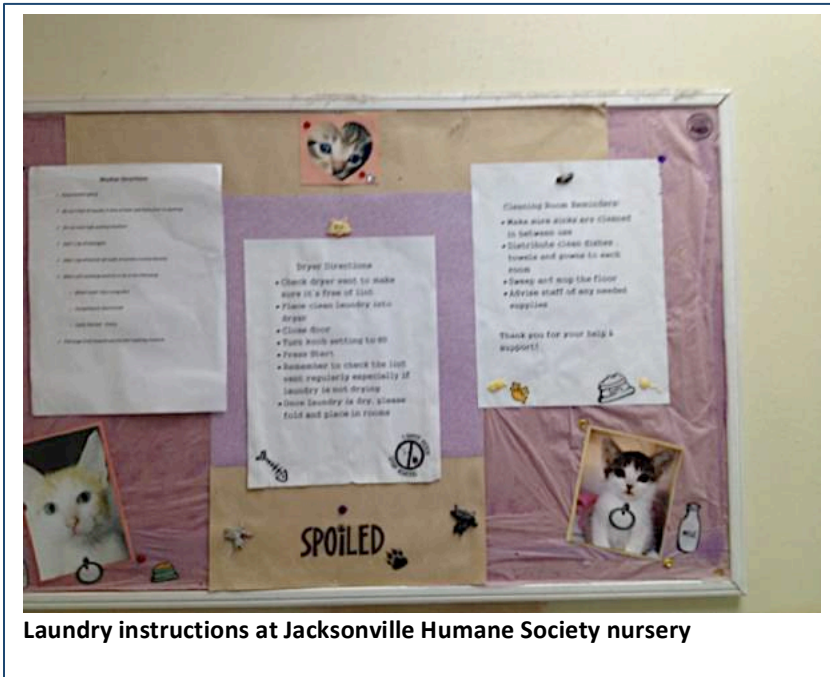
Nurseries take a variety of approaches to doing the laundry. As nurseries go through a lot of dirty bedding, most have on-site laundry machines. Strict and sometimes elaborate rules are prescribed for doing the laundry.

Most nurseries attempt to keep bedding specific to a given quarantine area within that

area. They accomplish this typically with a color coding system. One nursery gives all laundry from a given area a colored tag which stays with the laundry as it works its way through the washing machine to the dryer and then back to the nursery. The purpose of this approach is to ensure that if a highly contagious disease breaks out (e.g., panleukopenia) in a given area of the nursery, all of the bedding used in that area can be discarded immediately ensuring that it is not used in other unexposed areas of the nursery. Nurseries with known cases of panleuk kittens throw away bedding used in the cages containing those kittens, they do not send that bedding through the laundry process.

### *Staff and Volunteers*

Those handling kittens need to protect against the transmission of disease between litters. So, you will need rules about what people wear when handling kittens. The nurseries we visited adopted a wide range of practices on this score. Some use smocks, T-shirts or lab coats to cover clothing and switched them out between handling of litters. Some nurseries have a dedicated shirt for each litter that stays in a plastic bin with all the other supplies used for only that individual kitten or litter. Others use open-backed gowns which can be removed by turning inside-out upon themselves. Be aware, however, when removing garments, that pathogens can transfer from the “protection garment” to the hands, skin, hair and clothing of the person using them. So, avoid touching the outside of the garment during this process.



**Laundry instructions at Jacksonville Humane Society nursery**



Further, those handling kittens should notice where the neckline of the protective clothing is. Some choose to snuggle kittens after feeding, and the smock – especially if it is too large for the wearer -- may droop and not cover sufficiently. Likewise, long hair should be tied back so that it does not touch the kittens.

If feeders are going to place kittens on their laps during or after feeding, feeders must be sure to adequately cover their laps and change out towels or blankets between each litter. Some nurseries, for this reason, require that kittens remain on the table the entire time and even go so far as to allow no snuggling. Feeders may pet the kitten on the table, but not hold the kitten to their body. Although this may seem “sterile,” it is argued that the kittens are in the nursery only for a few days and then move on to foster homes. By minimizing handling while in the nursery, they decrease the chances of cross-contamination and possibly infecting the kitten. Once moved into a foster home, the kitten will get lots of extra handling, snuggling and love.

Some facilities use shoe pads or shoe baths (e.g., a towel soaked in bleach in a plastic litter box placed at the door to main areas or even to individual isolation rooms). These can be valuable for preventing cross-contamination when individuals must work in more than one area of the shelter or nursery. These pads or baths must be changed regularly (usually daily or more often in high-traffic areas) so that they do not lose their effectiveness or even start to harbor pathogens. Also, it is important that the pads or baths are on a non-slip surface to prevent accidental slip and falls.

Other nurseries choose to use disposable booties to cover the shoes of staff who will be entering and working in the isolation areas, and still others choose neither of these methods.

Other strategies used to minimize the risk of staff or volunteers cross-contaminating between rooms is to keep certain people assigned to only one area or to not allow them to go to other areas after being in isolation rooms. Clear protocols and “warning” signage at doors are good for helping staff and volunteers to remember that kittens’ lives depend on preventing the spread of illnesses between rooms.

### *Other Sanitation Issues*

Bottles, nipples, tubes and dishes should have specific locations; volunteers should understand the necessity for cleanliness and sterilization of all supplies and utensils and be trained in the required procedures. Some nurseries thoroughly wash and re-use bottles (but not nipples; they are thrown away) without regard to the litter that first used the bottles; others keep bottles and nipples together with paperwork for each litter or group of kittens, and dispose of the bottles when the kittens graduate to regular food.



**Syringes used for feeding at Austin Pets Alive! nursery air-drying**

Feeders should understand how and where dirty laundry and feces/urine from elimination should be disposed of. Most nurseries have a small waste basket next to each feeding station for easy disposal of the toilet paper that is used to stimulate the kittens. A laundry bin or plastic bag is generally available in each room for soiled linens. Be sure to situate this away from the kitten housing.

## Medical

Thankfully, the veterinary community is learning more about kittens and feline disease all the time. Some great veterinary schools are doing much-needed research, and shelter medicine programs are developing life-saving protocols that are now being implemented in shelters, rescues and kitten nurseries across the country – and, indeed, the world. Kittens who were previously euthanized for common, curable illnesses are now being successfully treated and given the chance at long and happy lives.

*Initially you will need to make a threshold decision about how far your resources will permit treatment.*

This section addresses some of the common illnesses and treatment options seen in kitten nurseries. “Young” nurseries or those with more limited funds or staffing may want to seriously consider their protocols regarding some of the more resource-intensive illnesses discussed below. It is not uncommon for nurseries that are just starting out to only take – and spend resources on – kittens who are healthy, have a better chance at surviving to adoption and are therefore, “less expensive.” Initially you will need to make a threshold decision about how far your resources will permit treatment. With time and a greater commitment of both financial and staff resources to the nursery, you should be able to expand the range of illnesses you can treat in the nursery.

Please note that many of the medications used in veterinary medicine have not been specifically tested or labeled for use with kittens. Likewise, there may be recommendations against using certain drugs or using only with caution. A veterinarian may decide to use a medication “off label” based on his or her expertise and the needs of an individual animal. Any medical treatments for kittens should be done in cooperation with your contracted or participating veterinarian.

## Fading Kitten Syndrome

“Fading kitten syndrome” is a term often used to describe a kitten who is generally not thriving, or is lethargic or unresponsive. Fading kitten syndrome has also been used to describe a kitten who seemed fine one day (or hour) but then quickly declined for no readily apparent reason. The kitten often has low body temperature, extreme lethargy and pale gums. These symptoms may be caused by a variety of circumstances from something as simple as low body temperature or low glucose levels to things more complex like diseases, sepsis or autoimmune responses.

Depending on the underlying cause, kittens displaying fading kitten symptoms can sometimes be “brought back” with warmth, glucose, fluids and antibiotics. Check the kitten’s hydration status and administer subcutaneous fluids (Lactated Ringer’s Solution or other as indicated by a veterinarian) if needed.

## Off the Record

*Veterinarians are too cautious about medicating neonates. It can be done more often than it is. Volunteers can give vaccines.*

Often these fading kittens' temperature is below normal, so warming the fluids will also be important.

Likewise, warming the cold kitten is imperative. This can be done several ways, but all will require some outside heat source such as a SnuggleSafe, heating pad, or warmed towels to "burrito" the kitten in. *Never* leave a debilitated kitten unattended with a heat source.

Administering Karo syrup to the kitten's gums introduces glucose into its blood stream quickly. A dab of syrup (as on the tip of a cotton ear swab) can be wiped along the gums every few minutes until the kitten starts to come around or until the limits set by your protocols.

Sadly, fading kitten syndrome is not uncommon in neonatal kittens, so set expectations with your staff and volunteers about kitten survival, and have a clear, written and practiced protocol in place for fading kittens. This protocol must also include how much time should be spent trying to save a single fading kitten and evaluating the kitten's condition and comfort level. Sometimes difficult decisions will have to be made allowing the kitten to fade or performing humane euthanasia if indicated. Few nurseries will have the staff or funds to devote extensive time and resources to each fading kitten, especially if there are other, more stable kittens who still need feeding and attention.

*Upper respiratory infections (URIs) are common among kittens, but are usually very treatable and curable with antibiotics and supportive therapies - and all the nurseries visited for this manual do just that.*

### *Upper Respiratory Infections*

Upper respiratory infections (URIs) are common among kittens, but are usually very treatable and curable with antibiotics and supportive therapies. All the nurseries visited for this manual do just that. Affected kittens are often removed from the general population and treated either in isolation rooms or foster homes; others keep the kittens mixed in with the general population but ensure that special procedures are used when handling these kittens.

At the earliest signs of nasal or ocular discharge, the kitten should be monitored more closely and supportive therapy started like wiping away discharge from the eyes and nose and ensuring the kitten remains well-hydrated, warm and well-fed. Some common antibiotic choices used include Clavamox or doxycycline, and for more severe URIs or pneumonia, orbifloxacin or enrofloxacin. Likewise, affected eyes are treated with antibiotics such as Terramycin, tobramycin and erythromycin. There are many other antibiotic possibilities that your veterinarian will be able to prescribe. For severe URIs or pneumonia, nebulizing is also a treatment that is growing in popularity and can be very effective.

If the kitten cannot smell its food due to nasal congestion, or its appetite is decreased due to simply not feeling well, it risks losing weight. Kittens should be getting weighed at least once a day already – and bottle babies with every feeding - but with ill animals you may want to weigh at least twice daily to insure they are still taking in enough nutrition. Temporarily adding tastier food like human chicken baby food or high-calorie, nutritional supplements like Nutri-cal to the kitten's wet food may help keep the kitten eating and its

weight stable or increasing. As always, pay careful attention to sanitation protocols and minimizing the kitten's stress.

### *Diarrhea*

Like URIs, diarrhea is another common occurrence with kittens, but it *can* be minimized and successfully treated. It is important to remember a few things.

First, diarrhea is not a disease. Rather, it is a symptom of some underlying cause. Second, kittens can dehydrate and become compromised very quickly due to diarrhea. Therefore, kittens with diarrhea or soft stool should be monitored more closely and more frequently and supportive therapy should be started immediately while trying to determine the underlying cause.

Often, diarrhea or soft stool is simply due to the kitten's diet, feeding schedule or feeding amount. When this is the case, adjusting the richness of the formula or gruel, extending the time between feedings or - in some cases - slightly reducing the amount fed each time (while still weighing daily to ensure the kitten is gaining weight), may be enough to solve the problem.

One common mistake made with kitten formula for bottle babies is making the formula too rich. Be sure to carefully – and consistently – measure the amount of formula-to-water for the correct ratio. In fact, you may want to start feeding new kittens with a more watery ratio for the milk and gradually increase the formula-to-water ratio over the course of one to two days. Likewise, older kittens who are eating gruel or soft food may benefit from a less-rich, less-frequent or less-abundant amount or type of food. Mixing in, for example, a chicken and rice formula, a veterinary formula like Hills i/d or Purina EN or even an adult formula with the kitten's standard food will make it less rich or easier to digest.

If dietary reasons are not the cause of the diarrhea, further investigation is needed. Has the kitten been dewormed? Is the kitten on any medications? Parasites and medications can both cause soft stool or diarrhea. Does the kitten have other signs of illness like vomiting, lethargy or fever? If so, it should be seen by a veterinarian ASAP.

Regardless of the cause, and even once treatment is started, the kitten should be closely monitored and kept as clean and comfortable as possible. It may be necessary to give the kitten a “butt bath” in order to remove caked-on fecal debris to keep the kitten, its environment and siblings clean.

### *Constipation*

A kitten that has not had a bowel movement in more than two days should be examined by medical staff. Laxatives or enema may be needed.

### *Worms*

As noted in Intake above, kittens should be dewormed on a regular schedule starting at about two weeks of age. Pyrantel is the dewormer most commonly used by the nurseries we visited. Other common choices include Panacur and Drontal. See “Fleas” below for additional deworming information.

## Fleas

Fleas can literally suck the life out of kittens and must be addressed immediately. There are various topical or oral products available for treating flea infestation; however, many of them are not labeled for use in young kittens. Despite this, many nurseries will choose to administer some of these medications at a younger age than labeling prescribes. The veterinarian must weigh the risk of medicating relative to the health risks to the kitten (and others in the facility) if fleas are left untreated. One commonly used treatment for otherwise stable kittens is a small dosing of nitenpyram (e.g., Capstar) followed by a bath. This goes a long way to getting the fleas under control until another, longer acting and broader spectrum flea product can be used. Others will choose to simply bathe the kitten with Dawn (original formula) soap, and use a flea comb and tweezers to remove as many fleas as possible. Because fleas can cause anemia, you may also consider administering an oral iron and vitamin supplement to affected kittens.

Likewise, if there is evidence of fleas or flea dirt on the kitten, assume that there will also be tapeworms. Sometimes it is several months before tapeworm segments are seen and tapeworm eggs are often not found in standard fecal floats. Therefore, to help ensure that the kitten is free of worms and to minimize the chances of it being returned *because* of worms, a tapeworm treatment should be administered at some point in the deworming schedule prior to adoption.

*If space allows, ringworm-suspect kittens should be isolated; however, with good sanitation practices, cross-contamination to other animals can be prevented even while in the same room.*

## Ear Mites

Ear mites are usually not seen in kittens younger than two to three weeks old; however, all kittens should be checked and/or treated for ear mites. Several medications are available, and ivermectin is a common choice.

Other skin mites and lice are less common, but may still be detected because of fur loss, itching or close visual inspection. Treatment will depend on the type of mite identified. Common treatments for lice include bathing with Dawn (original formula) soap and, in severe cases, shaving the fur as well. Be sure that any bathed or shaved kitten is kept warm.

## Ringworm

Ringworm is not a life threatening disease – or at least it shouldn't be. More and more, euthanasia is no longer being accepted as a means for controlling ringworm within a shelter or nursery population. It is a nuisance, it is contagious and it is somewhat resilient in the environment, but it *can*, in most cases, be successfully treated, contained and cleaned away. If space allows, ringworm-suspect kittens should be isolated; however, with good sanitation practices, cross-contamination to other animals can be prevented even while in the same room. Determine if your facility has an extra room – sometimes not much larger than a closet – to house and treat ringworm kittens. Another option is to send out confirmed ringworm cases to foster care with volunteers trained to care for these kittens.

As with other diseases, volunteers who work with ringworm kittens should not work with any other kittens afterwards, and they should take care to use pro-



protective clothing over their own so as to not contaminate their own clothing that pets at home may come in contact with.

If funding allows, you may want to start a dermatophyte test medium (DTM) culture upon intake – or first notice - of any kittens with suspicious lesions or fur loss. Some organizations do a culture at intake on every animal; however, this is costly. A DTM culture or a real-time polymerase chain reaction (PCR) test can be used for diagnosis. Other methods such as looking for fluorescence with a Wood's lamp or black light are not accurate means of diagnosis. If diagnostic testing is financially not possible, nurseries may choose to still isolate and treat kittens as if ringworm positive.

The most common treatment used by nurseries for ringworm kittens is lime-sulfur dips/baths two times per week. Some may also augment this with topical spot treatments of lime-sulfur dip solution or anti-fungal creams especially for areas around the eyes which would be difficult to safely and effectively address during the bath. Another, but less-common, option due to its cost and prescribing considerations for the kittens is itraconazole oral medication. Sometimes this is used in addition to lime-sulfur dips and sometimes it is the only treatment done – especially for cats who won't tolerate bathing.

*All the nurseries we visited had protocols in place to isolate and treat kittens who tested positive for panleukopenia.*

#### *Panleukopenia*

It was encouraging to see that all the nurseries we visited had protocols in place to isolate and treat kittens who tested positive for panleukopenia. Kittens can survive this terrible disease, but it usually does require a substantial amount of time and medical resources.

Successfully treated panleukopenia kittens are isolated and handled only by trained staff – or very experienced volunteers. Antibiotics, warmth, fluids, anti-emetics, gastrointestinal (GI) protectants, serum or plasma and anti-virals (Tamiflu) are all useful weapons against this disease. Panleuk kittens get cold and dehydrated very easily. Therefore, warmth and fluids are essential. If possible, isolation in an incubator unit is ideal for maintaining a constant ambient temperature. Otherwise, careful use and close monitoring of heating disks or pads is required. Additionally, kittens need antibiotic support to fight off secondary bacterial infections. Broad-spectrum antibiotics like enrofloxacin or orbifloxacin are common options. Anti-emetics (like Cerenia) help by allowing kittens to “keep down” the nutritional support (that often must be delivered by syringe or tube feeding) and a GI protectant, like sucralfate, along with probiotics also help. Finally, there have been increasing uses – and successes – with additional therapies including the use of plasma or serum from adult, vaccinated cats injected subcutaneously into the kitten and Tamiflu given orally or rectally. Other supportive therapies have included vitamin B-12 or B complex and feeding of highly palatable, nutritionally and calorically dense supplements like Nutri-cal.

Kittens suspected of having panleuk can be tested using a standard, canine parvo “snap test” kit and/or with additional blood work and complete blood count (CBC). Some will retest kittens to confirm the disease has “cleared” prior to allowing those kittens to move back to the regular nursery rooms with

unvaccinated kittens. As shedding of the virus may occur even after the kitten appears cured, it is important to maintain strict sanitation and vaccination protocols in order to prevent cross contamination.

### FeLV

Nurseries – and, indeed, individuals within organizations -- have differing opinions on when or if feline leukemia virus (FeLV) testing should be done, and there are many factors to consider when deciding upon your nursery's protocol. Some nurseries test on intake, others not until a certain age or amount of time in their system and some don't test at all. Instead, the rescue partners that they work with may do the testing once kittens move to them.

When thinking about and deciding on your protocol, you may want to start by considering the next step after testing. What will be done if the FeLV test results are positive?

For various reasons, diagnostic tests can sometimes produce “false positives” as well as “false negatives,” complicating your decisions even further. Due to antibodies passed to the kitten from its mother, some test results may show positive, but not actually indicate infection (i.e. “false positive”), and often when tested again weeks or months later (or with a different kind of test), the kitten's test results could be negative. Because of this, the vast majority of the nurseries we visited and spoke with will isolate those kittens or move them to foster care and retest them when they are a little older. If tests done with a “snap-type” kit come up positive, many organizations will send blood samples to an outside lab for additional testing to confirm (or negate) the result before taking action or isolating the kitten.

Of course, all of this testing costs money, and that is certainly another important factor to consider. Financial reasons are sometimes the determining factor for waiting to test – or not testing at all. Since some kittens will not survive to adoption age, several organizations wait until the kitten is ready to move on to adoption before spending the money on its testing.

It is becoming more and more common for shelters and nurseries to *not* euthanize kittens under six months of age that test positive for FeLV if they are otherwise healthy. Instead, many will retest with a second type of test (e.g., an immunofluorescent assay, or IFA test after a positive enzyme-linked immunosorbent assay, or ELISA test) or isolate the kittens and retest them at a later date. This option, of course, also depends on how many foster homes or extra space is available to house these kittens while waiting to be retested.

*It is becoming more and more common for shelters and nurseries to not euthanize kittens under six months of age that test positive for FeLV if they are otherwise healthy.*

### Euthanasia

As noted at the outset of this manual, one primary aim of establishing a nursery is to reduce significantly the euthanasia rates of one of the most vulnerable shelter animal populations: kittens. That said, it is important to make an honest assessment of your organization's strengths and challenges during the nursery planning process. This assessment will help to determine your guidelines on euthanasia.

Some nurseries we visited found that their shelter's live release rates were held stubbornly lower than desired because kitten deaths contributed disproportionately to the total. Shelters with nurseries tend to see this result more than those without nurseries because they become magnets for sick kittens who die at greater rates than other animals. If your community of donors, board members, volunteers and other supporters are particularly keen to raise your organization's live release rate, you may want to factor that into your decision to start a kitten nursery. It may be that you can make a convincing argument to them that, even though the organization's live

release rate may decline as a result of starting the nursery, for the community as a whole the organization is responsible for saving hundreds of kittens who would otherwise have had to be euthanized.

*Open, honest and transparent communication among those who care for kittens is key to helping everyone understand euthanasia decisions.*

On top of the politics of the euthanasia dilemma is the need to make decisions, often

daily, that consider the quality of life of individual kittens. Every organization is as unique as the community it serves. Despite everyone's best efforts and care, staff may conclude that a kitten cannot be further helped and must be euthanized. In general, veterinary or animal care staff at nurseries make these calls on a case-by-case basis. The decisions of necessity must reflect your organization's resources. With an eye to preventing unnecessary suffering by the kitten, how far can you go to care for a particularly sick kitten? Under what circumstances, will you make exceptions to that determination? Each euthanasia decision is unique and unlike any other because each animal is a unique individual, but guidelines may help frame the decision.

Open, honest and transparent communication among staff and volunteers who care for kittens in the nursery and off-site in foster care is key to helping everyone understand euthanasia decisions. Nurseries inform their staffs and volunteers about kittens who were euthanized. They post notices on whiteboards or on the kitten's condo and offer to answer questions about the decision. They recognize that the decision was hard on those who made it and those who cared for the kitten, and they do not hide it or the reasons for it. This helps all to better understand the rationale for the decision. When euthanasia is necessary, it is important to give staff and volunteers the opportunity to grieve and to lend support if needed. Let them know that they are valued and appreciated – that their contributions do save lives, but there will be moments of heartache along the way.

We recommend that you set expectations about euthanasia, from the beginning, in a realistic and optimistic way. When conducting your hiring and training, take the time to provide an overview of the organization. Show attendees the "big picture," explaining the whole as well as how the pieces of the organization fit together. Describe your policies and goals, but do not attempt to obscure the realities of working or volunteering at a kitten nursery. There are lows that come with the highs. Be optimistic, but not naive, in your presentation to new staff and volunteers.

Lastly, don't judge those who euthanize kittens too harshly. It is safe to say that people involved in animal rescue are in it to save lives. Show compassion to your colleagues.

## Chapter 5

# Costs and Fundraising

**E**very project costs money, and a kitten nursery is certainly no different. While much of the equipment and supplies you need can be raised from generous donors, you will still need actual cash to supplement those donations.

### *Possible Costs*

Nursery administrators find it very difficult to get a firm “fix” on what their kitten nurseries cost their organizations. This is due to a variety of factors. First, all the nurseries we visited and talked with use donations-- in-kind goods and volunteer labor. These fluctuate considerably from one year to the next. They also modify their programs, sometimes considerably, from year to year, so their paid labor costs tend to fluctuate a lot. For example, one year a nursery may rely more heavily on seasonal workers and then decide they need to convert one or more of those workers to a permanent full-time schedule. Second, some years their medical expenses soar because of a disease outbreak. A third factor is that every nursery uses resources from other parts of the shelter or rescue (e.g., medical staff, development staff, even operations staff) that are parts of other budgets, not the nursery budget. The hours each of these staffers devote to the nursery are not specifically tracked, so their cost to the nursery is not known. All of these moving parts make it very hard for nursery administrators to know from one year to the next what their nursery will cost. You should expect an equal amount of uncertainty should you decide to move forward with a nursery that is not a sole, independent entity.

All that being said, some of the nurseries we visited were able to provide us with very rough estimates of their nursery costs. The estimated “out of pocket”<sup>1</sup> 2016 budgets of the five nurseries we visited ranged from a low of about \$190,000 (caring for about 1,800 kittens) to a high of about \$2 million (caring for over 1,700 kittens). The lower end of this range is a shelter that has some paid staff and uses volunteers heavily (also significantly, nearly all of its day-to-day supplies and much of its operating equipment are donated).

*“If you don’t have the resources to save them all, how can you save the most with the resources you have?”*

*-- Senior shelter administrator with a successful nursery*

*It is very hard for nursery administrators to know from one year to the next what their nursery will cost. You should expect an equal amount of uncertainty...*

<sup>1</sup> “Out of pocket” is used here to refer to the cash the shelter needed to find to pay for expenses and labor that was not donated.

### **Off the Record**

*“The nursery is like an ATM machine, a large source of donation income to the [organization].”*

Unfortunately, it is not possible to provide an average budget for a kitten nursery caring for, say, 1,500 kittens a year. However, it is possible to draw some general conclusions from the experiences of the five nurseries. First, paid labor costs will be the most significant part of a nursery’s budget, typically representing as much as 69 percent of the full budget for the nursery (assuming little to no donations of in-kind goods or labor), or as little as 46 percent (in the case of another). Second, if you work very hard at it, you can manage to get much of your day-to-day supplies donated by supporters in the community. A well-run “kitten shower” (see below) can be highly successful. One nursery managed to raise enough in donations to cover 46 percent of its estimated total budget for the year.

### **Fundraising Options**

*If the organization has a strong “fan base” in the community, it can manage to raise most of its supply needs...*

Kitten nurseries have a range of practices for paying for their operations. Some rely very heavily on in-kind donations (all use in-kind donations to some extent). Others are part of a well-endowed organization and the nursery is primarily funded out the larger organization’s general income. In every case, however, the nursery is not self-sustaining and at least some of its costs must be paid for by the organization of which it is a part.

Some ways to raise money suggested by the nurseries we visited include the following:

#### **Kitten Shower**

“Kitten showers” are popular methods for getting donated supplies to run the nursery. They are usually held just before “kitten season” starts. They can be one-day on-site events, or month-long online events. In the former case, nursery supporters (volunteers, fosters, members of the community generally) are invited to come to the nursery at a specific time on a specific day. They must bring with them something from a published list of supplies the nursery will need for the year. Those who are interested can stay for a tour of the nursery. Needless to say, this can be a rather labor-intensive effort on the part of staff and nursery volunteers. But if the organization has a strong “fan base” in the community, it can manage to raise most of its supply needs in this way. If you opt to offer a tour, be sure those on the tour understand, for disease transmission purposes, the importance of not touching items or especially kittens.

Alternatively, the shelter can announce a month-long “kitten shower,” put a wish list on its website and ask supporters to purchase something from this list and have it sent to the shelter, or drop it off at the nursery at their convenience. Requests for monetary donations and gift cards are often popular as well. Don’t forget to use your social media options to generate interest and donations!

#### **Individual Donors**

There are “dog people,” “cat people,” – and “kitten people” among the ranks of most shelters’ and rescues’ donor pools. How do you find the kitten people? Options include doing donor surveys. Ask existing donors about their



priorities, what inspires them, what issues they hope the shelter will address, what they think about a kitten nursery – and send those surveys to your donor database as often as necessary to get a response from as many as possible.

Once you have identified kitten fans, bring them up to speed on your goals for starting the nursery or, if you have one already, what is happening there. Offer to provide them with individual tours of the facility and apprise them of your plans for it.

You will, of course, need to ask them to make a financial contribution to support the work of the nursery. Ask for a donation at a “significant level” and place it into a general kitten nursery fund. These “asks” can be, depending on your community and the donor, large or small gifts. You should try to keep the scope of your “ask” for the nursery fund as broad as possible for tracking purposes. Then, call and meet with all donors to find out why they donated and to ask if they can do more.

Another option is to work closely with individual donors to the organization to get them to commit to multi-year investments for specific things the nursery needs: equipment, staff salaries, yearly supplies. Call them “Leadership Donors” and make sure they are acknowledged (unless they object!) both internally and in the annual report of the organization.

You should be prepared to provide donors – especially large donors -- with impact reports. You want them to know that you are spending their money effectively. This is where some of the kitten metrics described in Chapter 6 will come in handy.

### *Capital Campaigns*

Capital campaigns are good ways to raise blocks of money for particular facets of the nursery. For example, if the nursery needs (new) industrial washers and dryers, or a generator, or some other large piece of equipment, a capital campaign can be undertaken to raise the necessary funds. If a donor is willing to pay half the cost of the project, a “challenge” can be issued to the broader donor community. That is, the donor will match contributions dollar for dollar if they are made by a specified deadline.

### *Community Resources*

Are there community resources that could be channeled to support a nursery? For example, a Boy Scout did a community project of building dividers for a nursery’s cages to keep suckling kittens apart. Retirees at a local home could make blankets for the kittens or put together rice socks. A local service organization could mobilize to paint the inside of the facility after kitten season is completed. Or, a group may want to commit to raise funds for a transport program to take local kittens to an area where the needed community resources exist to launch and operate a nursery.

### *Need “Eye Goop”?*

*When babies are born in hospitals, nurses typically apply an antibiotic ointment, such as erythromycin -- and then throw away the still nearly-full tube! Some animal shelters have teamed up with the nurseries of their local hospitals to redirect these valuable tubes from the trash to nearby animal shelters for the care of cats and kittens with upper respiratory infections. Instead of throwing out the partially-used tubes, hospital staff save them for the shelter. Perhaps once a month, a volunteer (or shelter staff person) stops by the hospital nursery unit to pick up the collected tubes of erythromycin. These tubes typically cost a shelter \$4-\$5 each, so you can save on medication costs if you live in a jurisdiction that permits the re-use of medicine.*

*If you attempt to set up such a program with your local hospital, be patient. It will take time! Not only are hospital lawyers likely to insist on a “hold harmless” agreement with the shelter, it will also take some time to retrain hospital staff to stop discarding the tubes.*

## Grants

None of the nurseries visited relies on grants to fund their nurseries, although one used grants to fund a large portion of its first and second year budgets. Today, it no longer receives grant money. One suggested that a nursery should not expect to get more than 10 percent of its budget from grant sources. In part this is because most grant-making organizations will not fund usual, ongoing expenses. They may, however, have an option for a one-time grant to start a nursery program or to increase one piece of it (e.g., grow a related kitten foster program).

Instead, grants can be used to fund specific items needed for the nursery. Alternatively, it may be possible to shape a nursery need to fit a category a grant-giving organization is seeking to fund. The most obvious example is the funding extended to support “no kill” programs -- a kitten nursery certainly contributes to that. Another idea could be grants to support the education of kitten fosters, growing the number of those fosters who are so crucial to the underlying success of the nursery. Finally, some grant-giving organizations may fund the build-out of a nursery. These include the U.S. Department of Agriculture, focusing on shelters in rural areas (see <https://www.rd.usda.gov/programs-services/community-facilities-direct-loan-grant-program>) and the Mason Animal Foundation (see <http://www.masonanimalfoundation.org/>).

## Manufacturer Donations

Arrange for product donations (e.g., of food or litter) from manufacturers of those products, but make sure it is food and litter appropriate for kittens (i.e., no clumping litter). Many shelters have such arrangements in place with manufacturers. If you do not, typically in exchange for the products the manufacturer will, for example, require that you use its products exclusively, give sample bags out to adopters, put signs around your facility advertising the manufacturer’s products, or put the manufacturer’s logo on posts on Facebook, with a picture of a kitten eating the manufacturer’s food.

## Kitten Cam

*Kitten cams are not only fun,  
they are also very popular.*

Setting up a kitten cam in one of the kitten condos is a great way to keep the community engaged in the nursery without having to take people through the nursery. Kitten cams are not only fun, they are also very popular. A camera could be placed in a condo or at the feeding station timed to broadcast only when there are feedings (make sure to have a strong signal so there are no buffering issues). Having a steady feed going of cute kittens in the nursery, with a “Donate Now” button always within eyeshot, can be a tool for raising money or getting items from your “wish list” donated. Kitten cams will cost some money, so an option would be to find a donor to pick up the cost.

### Adoptions Team

We all know that the adoption fee for a kitten, even at “full price,” does not come close to covering the full cost of the care that kitten received at the nursery and/or in the shelter or rescue (including spay/neuter costs). Kitten adopters should know this. One suggestion a nursery’s development team made is to have the adoptions team advise each kitten adopter about all of the time and expense that the organization invested in that kitten. Put a dollar value on it and ask the adopter to consider a donation. Later in the year, a special donation “ask” can be made of that adopter.

### General Communications

You will want to get the word out to your community about the important work your nursery is doing to save lives. This is good not only for raising monetary support but also for drawing in new volunteers and fosters to the nursery. These efforts are particularly successful when they translate kitten nursery numbers into compelling stories. Put out press releases when you have a heart-warming, nursery-related kitten story to tell. Or send an e-blast with the story and a “Donate Here” link for that kitten. (Note: one nursery development expert cautioned to be careful to phrase the request for a donation generally – e.g., help care for Princess “and others like her” so that you do not have to prove that all funds raised for that appeal went exclusively for the care of Princess).

In addition, you will want to explain to your readers how your nursery is special and an investment in saving kitten lives now and in the future, including the sharing of information with outside organizations to assist in the creation of more kitten nurseries across the country. The five nurseries that agreed to be part of this research effort are cases in point. They are generous providers of information to others who want to launch and operate successful kitten nurseries.

### Bottom Line

Raising money to save kittens is likely to be a tough task for any group, no matter how eager the community is to launch the project. But if you are going to take the leap, you will want the effort to be sustainable over time. This may mean that you need to opt for doing as much as you can with a small cache of actual money for your core needs (some staff, medical care expenses), relying heavily on your community for donations of goods and labor. At least two of the nurseries we visited demonstrate that you can save thousands of kittens year after year on relatively small budgets.

### Off the Record

*“Cross communication between different divisions of an organization about the nursery needs to happen. Information that goes out to the public needs to be accurate because the nursery volunteers also get those emails and confusion happens when the information is wrong.”*

*The five nurseries that agreed to be part of this research effort are cases in point. They are generous providers of information to others who want to launch and operate successful kitten nurseries.*



## Chapter 6

# Measuring Impacts

Nurseries assess their successes using a variety of metrics. Regardless of method, it is important for your internal plans and protocols as well as for your community and donors that you keep good records.

### *Total Kittens Cared for by the Nursery*

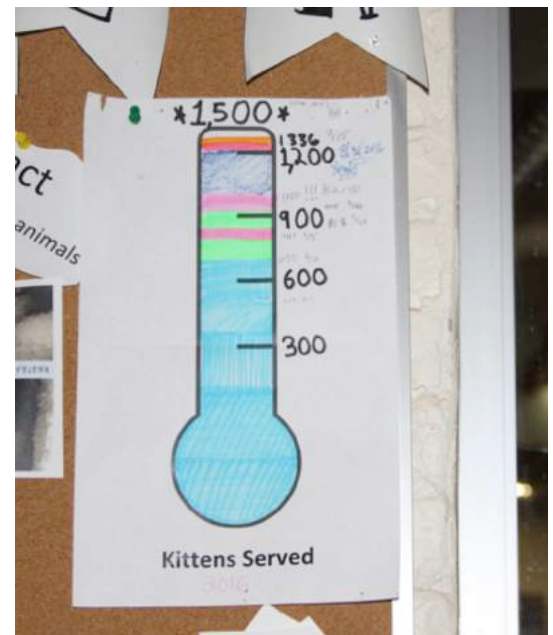
The most commonly asked for and given statistic is the total number of kittens cared for in the nursery in a year. It can be inspirational for staff, volunteers and fosters to know that hundreds, even thousands, of kitten lives are being saved thanks to the nursery. It also generates favorable “buzz” in the community and with actual and potential donors. It is indeed a “good thing” to be saving so many lives.

But as a practical matter, it is a tough metric from which to draw meaningful conclusions for a given nursery. Year-to-year total kitten numbers alone do not tell those nurseries very much. As noted in earlier chapters, all nurseries change their operations from year to year. Some years they take in bottle babies; others years they do not. Some years they accept all kittens, up to eight weeks; other years they limit their intake to those four weeks and under.

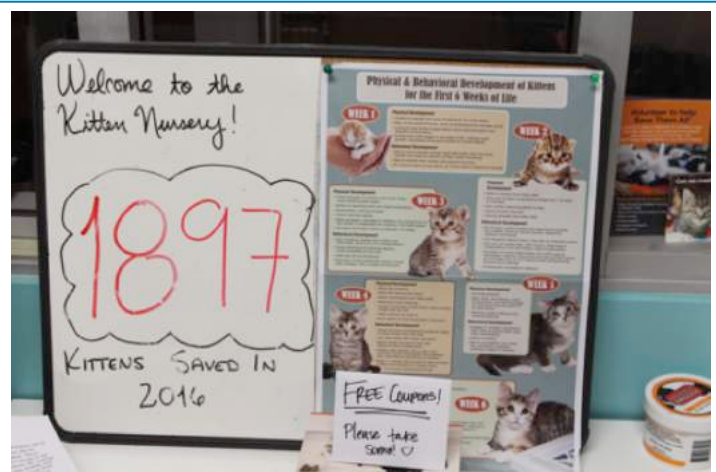
It is also not very meaningful for comparing one nursery to another. Some nurseries are more dedicated to moving kittens quickly out of the nursery into foster care. Their annual kitten counts will be higher than another nursery with the larger capacity that does not have a thriving kitten foster program and therefore keeps kittens in its nursery until they are ready to be spayed or neutered.

### *Survival Rate*

More meaningful is the nursery’s kitten “survival rate,” or “success rate,” as the goal of all of the nurseries is to reduce (if not eliminate) the unnecessary euthanasia of kittens. This survival rate is the number of nursery kittens that went on to be spayed or neutered and adopted out, divided by the total admitted to the nursery, in a given year. Nurseries that reach 90 percent or higher have much to celebrate. Some are committed to reach overall “no kill” rates for their community, in one case by 2017.



ASPCA kitten nursery count in progress



Best Friends - Los Angeles kitten count in progress



But this survival metric as well needs to be interpreted with care. It can be impacted by a host of variables outside the control of the nursery. For example, some nurseries will be obligated by contracts with the animal control agency to accept all kittens that come to them. They do not have the

luxury of turning away those with panleuk, or other fatal or near fatal diseases or ailments. If or when these die or need to be humanely euthanized, their deaths negatively impact the nursery's "survival rate," pushing it down perhaps into the 70-80 percent range.

So while you will want to calculate your nursery's "survival rate," be sure that those who would judge your success by it understand any countervailing factors,

outside of your control, which may impact that number.

*While you will want to calculate your nursery's 'survival rate,' be sure that those who would judge your success by it understand any countervailing factors, outside of your control, which may impact that number.*

### **Cost per Kitten**

Understanding just how much the kitten nursery is costing your organization is important so that it can judge if it is a cost-effective endeavor. This is best done in comparison to something else: the cost of caring for kittens in your foster program, for example. While clearly the latter will be lower than the former, a shelter should still ask whether the added expense of the nursery, per kitten, is "worth it." Would it make more sense to build the foster program into something larger that could save more kittens? Has the foster program expanded sufficiently, but there is still a need for some temporary nursery housing until a foster care provider can be freed up to take more kittens?

Unfortunately, few nurseries seem to have a good fix on the costs of either program for the reasons noted in Chapter 5. It is hard to estimate the costs of the various components of a nursery when so many of them received donations or "borrow" from the budgets of other divisions of the shelter or rescue (e.g., medical care, foster program, volunteer program).

At a minimum, however, it should be possible to come up with some estimates, even if they are incomplete. Smart organizations will attempt to use their donors' money in the most cost-effective way possible. Every organization should seek to develop as strong an estimate as possible of how much it is spending per kitten in the nursery, relative to other options (i.e. on a kitten foster program).

Indeed, on this note we come back to where we started: think first about your kitten foster program and building it into something strong before you jump in with a kitten nursery.

# Chapter 7

## Conclusion

**T**he kitten nursery “story” is one full of both good news and sobering news.

The good news is that nurseries have the potential to save thousands of kitten lives. In the process, they lower considerably a rescue organization’s euthanasia rate at the same time they enable these precious animals to find loving homes. Nurseries build strong positive links to the community for the organizations hosting them. New volunteers and donors are attracted to the rescue organization to support the mission to save kitten lives. Community groups get engaged, and learn more about other activities of the rescue that they become eager to support as well.

But the sobering news is that running a kitten nursery is a serious proposition. It can be expensive, especially as the number of kittens cared for increases into the thousands. It can be heartbreaking because, no matter how well you operate, some kittens *will* die. It can be challenging to those running the nursery: finding good and dedicated staff and volunteers is crucial, and not easy.

All that said, not a single nursery we visited regretted their decision to open a kitten nursery. All were justifiably proud of their success at forming partnerships with a long list of others keen to save kittens and to advance toward a “no kill” environment in their community.

Launching a kitten nursery is certainly a worthwhile endeavor. But as we hope this manual has made clear, organizations contemplating this path need to weigh all the “pros” and “cons,” decide if another path may not be worth pursuing first (e.g., growing your kitten foster program) and, if not, take on this important initiative after thoroughly researching your organizations internal and community resources for support.

With well thought out foundations, clear protocols, an established foster program, community support and dedicated staff and volunteers with a lot of heart, kitten nurseries can succeed and be a valuable resource for saving more lives.



A “guest” at San Diego Humane Society nursery



# Appendix A

## Basic Daily Supplies

<b>Food</b>	Kitten milk replacer
	Wet kitten food
	Dry kitten food
	Human baby food (onion-free)
<b>Food dispensing</b>	Paper food trays
	Bottles
	Nipples
	Scoops for dry food
	Plastic bin for dry food
	Utensils
	Wooden tongue depressors
	Blender, handheld blender or small whisks
	Large bowls for mixing gruel (plus smaller, dedicated bowls for weighing kittens)
	Metal water bowls
	Can opener
<b>Medical and health</b>	Exam gloves (small, medium, large, extra large)
	Glove box holders
	Hair dryer
	Flea combs
	Oral syringes (various sizes 1 mL -12 mL, etc.)
	Tubes for tube feeding
	Syringes with needles, (various sizes for vaccines, medicines and sub-q fluids)
	Thermometers
	Fluids (LRS or other per veterinarian)
	Baby wipes
	Napkins, toilet paper, tissue, cotton balls, cotton swabs (for stimulation)
	Vaccines
	Flea control products
	Dewormers (pyrantal, Drontal, others)
	Albon and/or ponazuril
	FortiFlora or other probiotic
	Antibiotics and other medications
	Scales (small ones for kittens, larger ones for moms)
	Isolation gowns
	Hair coverings
	Shoe coverings
<b>Cleaning</b>	Paper towels
	Dishwashing soap
	Hand washing soap
	Dishwasher soap
	Laundry soap

<b>Cleaning, continued</b>	Floor mop
	Buckets on wheels
	Brooms and dust bins
	Sponges
	Window cleaner
	Bleach and/or other disinfecting additive
	Accel/Rescue or other cleaners/disinfectants
	Step stools
	Trash bags and bins
	Small spray bottles
	Hand sanitizer
	Small dish racks
	Ziploc bags (large and small)
<b>Litter products</b>	Non-clumping litter
	Litter bins – cardboard or metal
	Litter scoops
<b>Bedding</b>	Blankets, preferably fleece
	Beds
	Stuffed animals
	Electric heating pads, no auto shut off
	SnuggleSafes
	Towels or small swaddle blankets
	Washable cat toys
<b>Office supplies</b>	Pens
	Paper, white and colored
	Dry erase boards and markers
	Sheet-sized laminator or plastic sheet protectors
	Clock
	Post-Its
	Highlighters
	Loose leaf rings (clip board hangers)
	Thumbtacks
	Sharpies
	Nail polish
	Razor and razor blades
	Scissors
	Adhesive hooks
	Nails
	Tape
	Staples and staplers
	Batteries
	Printer toner
	Clipboards
	Folders
	Three-ring notebooks
	Plastic file bins
	Trash cans
	Egg timers
	Paper collars for older kittens, moms
<b>Other Items</b>	Cat carriers



# Appendix B

## Key Components of a Kitten Foster Program

A recurring recommendation from the many kitten nurseries we have visited is the importance of establishing a solid foster program before launching a nursery. A well-run foster program provides numerous advantages, increasing your ability to save lives, providing relief to staff and enhancing your reputation in the community. Foster programs are the backbone to the care provided by home-based rescue organizations. For shelters and rescues fortunate enough to have a physical space, foster programs enhance the ability to help even more pets by extending care beyond the walls of the building.

Because there is no one-size-fits-all solution for starting or managing a foster program, your best bet is to research how other successful shelters and rescues manage their programs and choose what might work best for your organization and community. We all know that uniqueness exists from shelter to shelter and rescue to rescue in part due to the communities in which they reside. Even neighboring counties or towns can have vastly different “personalities.” One of the best aspects of the animal welfare community is the willingness of shelters, rescues and volunteers to share with each other. We know that we’re in this together to save more lives. So, our first piece of advice is for you to get to know your neighboring sister shelters and rescues. It will pay dividends as you establish your own foster program and as your program evolves over time.

This appendix is not meant to be an exhaustive approach to the creation and management of a kitten foster program. Rather, it’s a jumping off point. In this appendix we’ll present some key components broken into six general areas:

- Administrative set-up,
- Foster program documents,
- Recruitment of foster volunteers,
- Setting clear expectations,
- Retention of foster volunteers, and
- Obstacles to success.

*Get to know your neighboring sister shelters and rescues. It will pay dividends as you establish your own foster program and as your program evolves over time.*

### Administrative Set-Up

As with any other endeavor, doing your research and having an outline of what you want to accomplish is extremely helpful. Start by talking to colleagues, volunteers, community members, etc. about your desire to start a foster program. Don’t forget your brothers and sisters in arms at other shelters and rescues who may have helpful insights. You don’t have to reinvent the wheel. Another shelter or rescue may have some great ideas and lessons-learned that will be valuable as you begin your initial set-up. Don’t be shy; ask for their input and help. And remember, foster programs will go through many changes as they grow and as you learn more about what is working and isn’t. Stay flexible and have an open mind!

From an administrative standpoint, let’s put first things first. Who is going to manage your foster program and serve as the main point of contact? Some organizations are fortunate enough to have a full-time foster coordinator, and this is the ideal scenario. Others have one person wearing multiple hats, including foster program management. Still

others do not have a single individual designated to administer a program, requiring you to assign tasks among several individuals. Will you use volunteers to help you run your foster program (e.g., to be case managers, working directly with a group of kitten foster homes to ensure all is well)? No matter your situation, solutions do exist for each of these scenarios, and success can be achieved if you invest time in creating a clear administrative foundation before you launch a kitten foster program.

A good way to start thinking about your foster program is to develop a flow chart of a kitten's path through your organization. Every shelter and rescue has its own existing policies, procedures and processes. Follow the path taken from intake to disposition and find the appropriate points to incorporate a foster program into this flow chart. This will clarify what needs to be done, when it should be done and by whom. Work with colleagues across divisions to determine who is responsible for what portion of the kitten's path to ensure nothing is forgotten. A flow chart can also trigger basic administrative and operational questions such as what documents you will need, how you will on-board foster volunteers, who will handle potential adopter visits and adoptions (i.e. adoption at the organization, another venue or via the volunteer's home), etc.

*Develop a flow chart of a kitten's path through your organization.*

As you consider the flow of a kitten through your organization, be sure to build buy-in from your board, staff and volunteers. Sometimes, this buy-in comes readily, but sometimes you will have to prove the program's worth after things are in motion. Success will come, and colleagues who were not initially receptive will bend at the positive results garnered from a well-run foster program that is saving lives.

*Funding is a critical piece to establishing a foster program.*

Funding is a critical piece to establishing a foster program. Foster programs have a cost, so be sure to do your homework and to be thoughtful in your needs assessment. First, assess what supplies you believe you'll need and how medical care will be funded.

Decide if you will provide foster volunteers with all, partial or no supplies. Keeping an inventory of items needed by foster volunteers can be expensive – not to mention the storage involved. Create your list of supplies and research how much each item costs. Then, look at previous years' intake numbers for kittens (and types of kittens) to determine how many you might expect in the foster program the first year. The same exercise can be done for medical care as well though this is a bit trickier because of the unpredictability of what you may see – do your best. Work with your finance manager, budget analyst, treasurer, etc. to determine how you'll subsidize the program. Will it be part of animal care costs? Or will it fall under outreach programs? Do you have a

*Having a data management plan ahead of time will make your life easier once the program is in full swing.*

Friends-of-the-Shelter group that can provide funds? Are monetary and in-kind donations the way to go? What about corporate sponsorships or partnerships with other animal-welfare organizations? Knowing what you have to work with regarding financial resources reveals the challenges you may have with operating a foster program. Remember, these challenges can turn into opportunities via foster-focused fundraising and community appeals. Most communities rally around shelters and rescues seeking to expand their reach in an effort to help sick, orphaned, injured and homeless pets.

Another important administrative consideration is data management – how will you keep track of kittens, fosters, funds and supplies? Some may consider this an unexciting portion of our jobs, but it is so critically important. Having a data management plan ahead of time will make your life easier once the program is in full swing. When it comes time to promote your successes, field questions on how you are spending your resources and find ways to improve your program, there is no substitute for the ground truth of real-life, real-time accurate data. Some suggestions on what to track include inventory so you have the supplies your fosters need when they need them; which fosters are willing to take what types of kittens so you know where program deficiencies lay for recruitment purposes (i.e. more bottle fosters); and overall number of kittens fostered broken down by type of kitten. You should track what you believe is most relevant for operating your program and for answering funding questions. These data are helpful for

your current year of operation but also provide a year-over-year comparison so you can assess how the program is doing – and you can assess how other organizational programs are working (i.e. trap-neuter-return, spay/neuter, etc.) There are many data management tools out there. Never fear, however, if you don't have a budget to cover a "fancy" data management system. There are less expensive options such as Excel, which can work just fine and get you where you need to go.

Two final notes on administrative set-up. Don't forget to consider insurance coverage – check with your carrier and ask detailed questions. Because there is risk inherent when working with animals, consider how you will handle situations in which a volunteer is bitten, scratched, etc. by a foster kitten. It's a good idea to do a risk management assessment of the foster program – think about what risks exist with managing such an initiative and how you can mitigate them (hint: a great training program as well as good policies and procedures go a long way in minimizing risk). Also, keep in mind that time is a limited resource. Be thoughtful during this early phase of your set-up. For example, when on-boarding new fosters, will you interview candidates one-on-one? Conduct home visits? Host an orientation and/or training? Take care to create a foundation that is both rock-solid and manageable, or you'll end up with problems and challenges later.

*Take care to create a foundation that is both rock-solid and manageable, or you'll end up with problems and challenges later.*

## Foster Program Documents

Once you have outlined the process for on-boarding foster volunteers and managing your program, consider what documentation will be needed.

### Application

A foster application is a great way to vet candidates by collecting information about the volunteer candidate, including contact details, the types of animals the person is comfortable caring for as well as any time constraints or availability limitations. Other types of vetting opportunities include orientation and training presentations, interviews, and home visits.

### Foster Agreement

Foster agreements are a necessity for many organizations. Foster kittens legally belong to the organization, and the foster volunteer is providing temporary care. This document serves as part of a paper trail noting who is caring for (or has cared for) an individual animal. You can also draft foster agreements with important reminder information such as emergency contact numbers and information about the individual kitten, including age, gender and any specific medical or behavioral challenges to be addressed during foster care. It's a good idea to keep the original on file and to make a copy for the foster volunteer.

### Kitten Health Records

Providing volunteers with health records for each of their foster kittens gives a snapshot of what has been done for them thus far. This practice especially comes in handy for emergency situations. A vet can review the material and get a decent picture of the kitten's medical history. A foster agreement combined with health records "speaks" for the animal in your care, gives a bit of back story, and could help save a life.

### Foster Manual

While creating a paper and/or electronic foster manual is a lot of work, it is a good idea to have one. Some things to include are general information about the program; contact information (including emergency details); procedures for pick-up, vaccine updates, returns, etc.; the schedule followed by the organization regarding dewormings, vaccines and general health checks; symptoms of illness and what to do; disclaimer for any pets owned by the volunteer; etc. Set the manual up in a way that it can serve as a reference document – have a table of contents or some other way for volunteers to quickly reference what they need.

Some other documents and forms to consider having available to your fosters include:

- Bottle feeding chart: to keep track of when to feed and how much,
- Medication chart: to ensure medication is given in the appropriate dosage at the correct time,
- Personality profile: to monitor the uniqueness of each foster kitten and to share with potential adopters,
- Special tip sheets: to list any specific information relevant to the particular type of kitten being fostered (i.e. a ringworm kitten needing treatment with dips), and
- Inventory list: to make sure you have all the supplies on hand that your foster volunteers will need (if you choose to provide supplies to them).

As you consider what documents or forms to create, ask yourself, “If I, as the foster coordinator, am not available/on vacation/resign, etc., would someone else be able to step in and quickly understand how to run this program?” This will help identify what infrastructure you will need to create to manage the program smoothly and to ensure good record-keeping.

### Recruiting Foster Volunteers

Once you have thought about how to operate the foster program and created all the necessary documents, you need to recruit volunteers. A great place to start is with kitten-lovers you already know. Look at your current volunteer pool and talk to staff and colleagues in the field. Don’t forget about your

adopters and visitors. House kittens who need foster care in your lobby and let visitors know they are available for fostering. Also, if your organization has an animal control arm, include them in your recruitment efforts. Suggest “fostering in place” when a resident finds kittens and wants to help. Your organization can train and equip officers with information and supplies on your foster program, helping you grow the number of people who want to help with your life-saving efforts.

*You should constantly and consistently recruit to increase foster volunteer ranks and cover for attrition.*

Once you get your foster pool started, your best tool for expanding it will be your current foster volunteers. Ask them to share their stories with the public via social media, etc. Cute photos and videos also go a long way in helping to recruit volunteers. Get those testimonials and be sure to create a photo and video archive of foster kittens that you can use in future recruitment efforts. You should constantly and consistently recruit to increase foster volunteer ranks and cover for attrition. Think cross-functionally about how other divisions or colleagues can partner with you to create a successful foster program.

You’ll also need to get the word out into the local community. Solicit help from your volunteers, staff and colleagues in this endeavor. Also, reach out to the veterinary community – they are often huge supporters of foster programs. Create relationships with media outlets, and recruit via community outreach events. Be sure to harness the power of social media too!

### Setting Clear Expectations

Part of your on-boarding process must include setting clear expectations for your foster volunteers. Not only does this help your program run smoothly, it also forms a foundation of trust, support and transparency for foster volunteers. They need to know what to do (and what not to do), how the organization and program work and the reasons for policies, procedures and decisions. Being clear, transparent and open can save time and minimize fallout from any future challenges or problems that arise.

What expectations should you convey to foster volunteers? Think about the following:

- Time commitment involved with fostering,
- Scheduling flexibility to ensure vaccine schedules are maintained, etc.,
- Ability to commute to and from the shelter or rescue, veterinarian, etc. as needed,
- Willingness and ability to follow policies and procedures,
- Knowing how the adoption process works,
- Understanding the unknown and that we often don't know the back story of the kittens who come under our care – kittens can look healthy initially and then succumb to illness, etc., and
- Realizing the shelter or rescue is the ultimate decision maker for that kitten's care.

*Build fosters' confidence through solid training and support ... training removes fear.*

Your foster volunteers are partners in saving lives. As you let them know about your expectations for them, be sure to include what they can expect from you. Make sure they know that they can always rely on you, and they'll never be alone. An organization expects that a foster volunteer will follow policies and procedures when caring for kittens, and the organization has to trust that the foster will live up to this commitment and do what needs to be done. We must live up to our end of the agreement as well in this life-saving partnership!

## Retaining Foster Volunteers

Once you've got foster volunteers on-board, you need to work at keeping them. This starts with clear policies, procedures, documentation and expectations. Then, give your foster volunteers the tools they need to succeed. Build their confidence through solid training and support. Remember that training removes fear and saves lives.

When thinking about how to retain your foster volunteers, consider the intangibles too. A good place to start is by following the golden rule: treat others as you would want to be treated if in their place. Give true and meaningful support; show trust and transparency, never guilt or pressure volunteers into taking a foster animal; and watch for fatigue – many fosters can't say "no" and will continue to take because the need is so great. Just as shelter and rescue staff can suffer from compassion fatigue, so can volunteers. A good foster coordinator watches for compassion fatigue and gives breaks to allow volunteers the time to recharge. Show sympathy. Losing a kitten is hard on anyone, and especially on volunteers. Some foster coordinators take the time to send a hand-written sympathy card, acknowledging the hurt and thanking the foster for giving the kitten a safe, warm and loving home for the little one's too-brief life.

Be thankful. Show gratitude in your words and actions. This can take many forms. One way to show appreciation is by personally contacting volunteers after their foster kittens are adopted. Volunteers love the personal touch, and information about an adopter and the adoption visit goes a long way in sustaining their connection to the organization and their roles as fosters. Another option is to build in opportunities for advancement or increased responsibility. How about a mentoring program for your foster volunteers? This is a great way to keep new fosters on-board and to retain your seasoned pros. New fosters can find caring for kittens intimidating the first few times, and talking to someone like them (i.e. another volunteer) can ease their anxiety. A mentoring program also shows that you trust volunteers and value their contributions to the program's success.

Ultimately, you cannot say "thank you" enough – there is no such thing with foster volunteers. But be genuine in your thanks. A foster "pot luck" appreciation lunch or picnic is a great way to connect fosters to each other – and to invite staff to show gratitude to volunteers. In lieu of a formal event, don't underestimate the simplicity and importance of an "atta-girl" or "atta-boy" when thanking volunteers. Share their successes and be sure to highlight



the good work they did. The sky is the limit when looking for ways to express gratitude and build volunteer retention into your foster program!

## Obstacles to Success

Few endeavors come without obstacles to success. You will surely face your own unique challenges, but we have found that several obstacles are common to organizations trying to create and manage a kitten foster program. First is sustaining a team approach. Often, the excitement in the early stages of a foster program wanes over time. A successful foster program requires contributions from everyone in your organization, even when one person is the main point of contact in its management. Foster programs cross so many different divisions within an organization -- animal care, adoptions, communications, social media, fundraising, etc. Form good relationships with colleagues and stress the importance of their roles in creating and sustaining a successful foster program. Take the time to keep your colleagues engaged – share statistics (remember the value of data management), stories and photos (collected from your fosters) of how well kittens are doing in foster care and how the entire team contributed to these positive outcomes.

Next is transparency and feedback. Don't be shy about the problems you encounter. Be honest with your foster volunteers. Give them constructive feedback. They want to help, so tell them how. Be transparent and respect the faith your foster volunteers have placed in you. Amazing things happen when you partner with volunteers in a true and meaningful way, even when emergencies such as mass illness or hoarding cases occur. If you have built a solid foundation of trust and mutual respect, your volunteers will support you, rally behind you and advocate for you. They will be your biggest ambassadors and champions in your community.

Even with the best laid plans, you can still run into funding issues, difficulties in finding volunteers for a specific type of foster situation (i.e. neonatal kittens), attrition due to compassion fatigue or the death of a foster kitten, or a foster volunteer who just isn't up to the task and you must find the courage to ask them to stand down. Be resilient, continue to forge ahead, rely on colleagues and friends in the animal-welfare community, think outside the box and never give up!

## Conclusion

This appendix provides merely an overview of key components of a kitten foster program. Because each organization is as unique as a human fingerprint, there are infinite ways to create a foster program that will work for you.

Perhaps the two biggest takeaways are: (1) foster programs evolve and change over time (as you know better, you do better) and (2) success is built on strong relationships with your foster volunteers. Start with research, networking within your community and good fundamentals. Then, have an open mind and be a learning organization. Be flexible and recognize that foster programs are fluid as you work to improve upon the life-saving work you are already doing. And, at the end of the day, a robust foster program is created by taking the time to build relationships with the people who foster the kittens you are working to save. The effort you make to create and strengthen these individual relationships will pay dividends. So, communicate, build trust, provide support and show gratitude. It is through our relationships with our wonderful volunteers that we are so much better and can do so much more for the kittens we love.

*The two biggest takeaways are: (1) foster programs evolve and change over time (as you know better, you do better) and (2) success is built on strong relationships with your foster volunteers.*

## Appendix C

# Nursery Profiles

In this Appendix, we summarize the policies and practices of the five nurseries we visited from September to October 2016. The information provided also draws from volunteer and foster manuals and protocols the nursery staff generously shared with us.

We shared drafts of these profiles with the nurseries to ensure accuracy and to the best of our knowledge the information contained in the profiles is accurate as of the date of this publication. However, as noted earlier in this manual, nursery administrators make frequent changes to practices, procedures and protocols, sometimes over the course of the year and almost always from year to year. Therefore, some of the details of how each nursery operates will likely differ in 2017 and thereafter than what is presented here.

The nurseries profiled all expressed a desire to be helpful to others contemplating establishing and operating a successful kitten nursery. Contact information for each nursery is provided in the event you wish to follow up with one or more to get further details about how one approaches a particular issue or problem.



# American Society for the Prevention of Cruelty to Animals

## Overview

The American Society for the Prevention of Cruelty to Animals (ASPCA) is a private, non-profit, animal rescue organization. It operates a kitten nursery in a facility it owns on the upper east side of New York City, a block away from its adoption center at 424 East 92<sup>nd</sup> Street.

Kittens and nursing cats with litters come to the nursery from New York's five-borough public shelter system, Animal Care Centers NYC (ACC). From time to time the nursery also takes in kittens brought to it by individuals, but only if the kittens are less than five weeks of age. The ASPCA considers these kittens, "medically compromised" because they cannot eat on their own. Generally, the nursery is reserved for these kittens, and weaned healthy kittens go to foster care or the main shelter facility.

## History

The nursery opened its doors in July 2014. In 2015 it cared for 1,523 kittens. Between May and December 2015, the ACC saw an increase of 35 percent – 1,300 – in its kitten live release rate and the ASPCA believes this increase is directly related to the opening of the kitten nursery during that period. The nursery estimates its current survival rate is about 88 percent.

Today, the ASPCA nursery cares for just over 300 kittens per day in its facility during "kitten season," which runs from April-October, and was on track at this writing to have taken in 1,743 in 2016. The peak of activity typically lasts for six to seven months, plus an additional two to three months to "ramp up" and "wind down" – nine months total.

The idea for the nursery materialized as the ASPCA staff thought about ways it could put to use a building it owned, and which it no longer planned to lease to others, to help ACC and the animal community in New York. It knew that kittens, particularly unweaned kittens, are one of the largest categories of shelter animals that are euthanized, so it elected to devote one floor of this newly reclaimed building to a nursery. Planning started in 2012, and the facility took in its first kittens in July 2014.

ASPCA worked closely with the San Diego Humane Society to develop plans for the space and protocols for using it effectively. The idea and execution were largely staff-driven. The ASPCA's board tends to defer to staff in these operational decisions and activities.

## Facility

The nursery occupies about 4,700 square feet of space. It is made up of two large rooms with some smaller rooms within those spaces: a medical intake area off the entrance, a large "Quarantine" area for all kittens for the first 14 days they are in the nursery, a "Pee Wee" area for healthy kittens eating on their own, and isolation for kittens of all ages. Within the Pee Wee area is a separate section for queens with kittens. An area in the back is set aside for panleuk and calici kittens with special guidelines for staff access. Another small area in

### Fast Facts

*Opened July 2014*

*Cared for 1,743 kittens in 2016*

*Survival rate: 88 percent*

*Facility is approximately 4,700 square feet*

*Paid staff: 48*



ASPCA kitten nursery in New York City

the front is reserved for kittens with mild upper respiratory infections. Another small room with a door houses ringworm kittens.

A large number of movable bank cages populate the space arranged in square or rectangular groupings within each of these spaces. They are made of laminate on wood substrate with half glass panel doors and half horizontal bars for open air. Some (for neonates) have heated “floors.” Because the banks of cages are not attached to the wall,



**The isolation area for panleuk kittens is away from the main nursery floor, but not within its own room with a door; only ringworm-positive kittens are housed in a separate room with a door that stays closed**

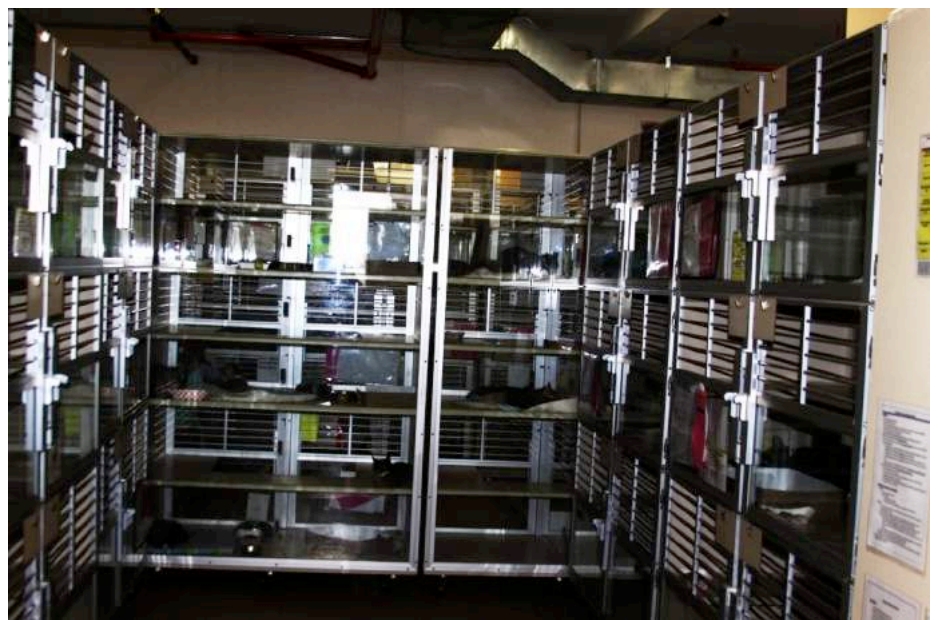
nursery staff can move them around to reconfigure the nursery as needs dictate. Costing about \$300,000, these cages were a large initial investment for the nursery (a capital campaign raised the funds to pay for them).

The cages in the main (Quarantine, “Q”) room are typically arranged in four groups with metal and plastic tables within each area at which staff bottle feed kittens. Kittens from a single litter are housed together, up to four per cage if they are two weeks old or younger, and up to three per cage if they are older. For younger kittens housed in condos without heated floors, SnuggleSafes are used. There are two microwaves and refrigerators in these spaces. There are four sinks: in the Pee Wee room, the Q room, near the isolation room, and in the kitchen.

A kitchen has a refrigerator, two microwaves, a sink, storage cabinets, bowls, food, supplies and a high temperature sanitizer for dishes (dishes are washed by hand and then put in the sanitizer). A supply room is stocked with litter (Yesterday’s News), wet and dry food (Triumph), Fox Valley milk replacer, disposable cardboard litter boxes (plastic ones require too much cleaning), gowns and gloves, toys, exercise pens, condos that are loaned out to fosters, and other supplies. The nursery has one industrial washer and dryer.

## Staffing

The nursery relies largely on paid staff, rather than volunteers, for a number of reasons unique to highly regulated cities with an active union presence. Volunteers do not perform tasks that paid staff perform. This situation reduces staffing flexibility (and raises costs, see below). The nursery works with volunteers when possible, but they plan staffing as if there were no volunteers available.



**One of four groupings of kittens**

The ASPCA kitten nursery currently has about 48 employees working in shifts over the course of the day and the year. “Seasonal” employees work during peak kitten season; off season they may work at other jobs elsewhere at ASPCA. About five employees are non-seasonal, working 12 months of the year. These positions include the chief veterinarian (DVM), and the nursery managers. It has one vet supervisor on duty five days a week, plus one vet working per day. It hires “per diem” vets from a temporary agency. It does not have security on staff, and in part for this reason does not disclose the address of its facility.



## *Paid Staff*

The nursery employs paid staff in a variety of positions:

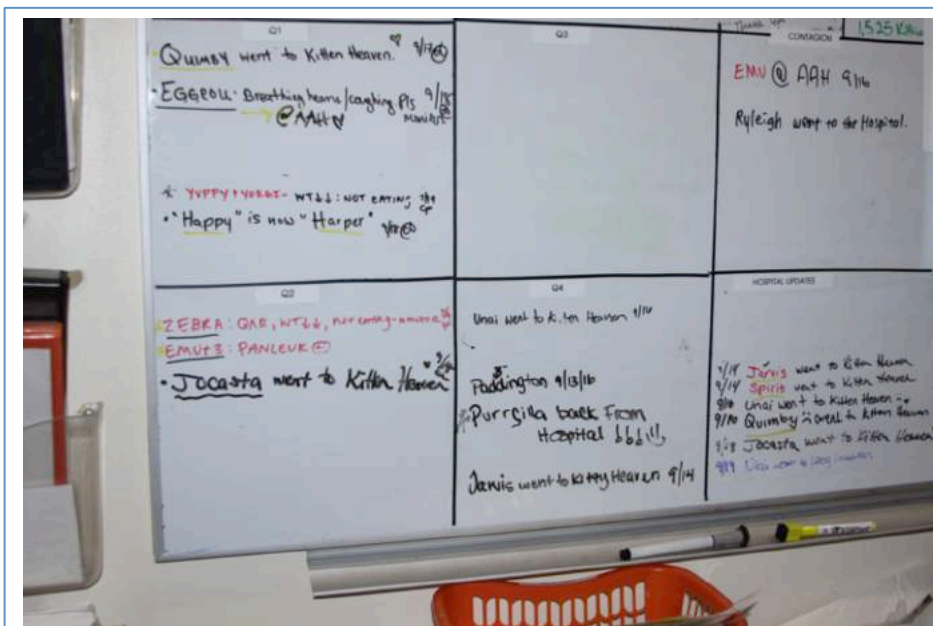
- A Nursery Senior Manager (full-time, non-seasonal) oversees department operations in the nursery (as well as another department within the same facility), plans operations and oversees budgetary considerations, and manages all nursery staff except the DVM supervisor.
- A Nursery Manager (full-time, non-seasonal) oversees the nursery caregiver staff, ensures their training, assists with daily operations, manages the nursery operations (and the operations of another department within the same facility) when the senior manager is not there, and ensures that optimal care is provided to the kittens.
- A Medical Manager (full-time, non-seasonal) oversees and trains the medical nursery caregivers and the licensed veterinary technicians (LVTs), oversees the specialized care of the kittens in accordance with nursery policies and protocols, helps develop the protocols in cooperation with the DVM, and communicates with hospital staff about nursery kittens in their care.
- A Department Coordinator (full-time, non-seasonal) supports the day-to-day operations of the nursery by handling payroll, ordering/processing supplies, providing clerical support, providing support to the Logistics Coordinator for the foster program and serving as the backup contact for volunteers working at nursery, and scheduling staff work shifts.
- A Shelter Logistics Coordinator keeps the nursery moving fluidly. This individual attends rounds, identifies and addresses bottlenecks of animals moving through the shelter, and coordinates the transfer of kittens into and out of foster.
- 25 Nursery Caregivers (one full-time, non-seasonal; the rest are part-time, seasonal) provide routine bottle-feeding and monitoring the health of nursery animals, as well as general care and maintenance of the wards and nursery areas, and provide enrichment and socialization for nursery kittens, with an emphasis on those less than eight weeks of age.
- 14 Medical Nursery Caregivers (one full-time, non-seasonal; the rest are part-time, seasonal) provide clinical care for nursing cats and litters, and neonates and kittens without mothers, under the direction of the veterinarian and Nursery Manager, including conducting rounds and administering medications.
- A Medical Administrative Assistant (full-time, non-seasonal) schedules all spays and neuters and non-routine surgeries or specialist appointments, and trains others on database entry.
- Four Lead Caregivers (three full-time, one part-time) serve as first point of contact for caregivers with questions about the nursery's protocols and procedures and oversee work flows. Their time is also shared with another department within the same facility.
- Four Licensed Veterinary Technicians (full-time, seasonal) provide treatments and intake appointments; provide clinical care for kittens and nursing cats and kittens, including syringe feeding, bottle feeding, medications, nebulization and catheterization; administer vaccines under guidance of the DVM and provide specialized care for compromised neonates; assess kittens upon intake and put them in the right place in the nursery with the right feeding plan.

A medical team from the ASPCA supports the nursery with these positions:

- A Veterinary Medical Supervisor (full-time, non-seasonal) oversees and trains the per-diem vets, pursuant to nursery protocols and procedures, creates and updates protocols, and works in nursery (as well as in two other departments).
- Five per diem Veterinarians (seasonal) perform exams and treatments in line with protocols and procedures.

One of the nursery's biggest problems is staff retention and time and attendance issues. Large numbers of staff frequently call in sick, which was affecting staff coverage of animals in the nursery's care. ASPCA tries to boost morale (e.g., it provides meals for staff occasionally). "Compassion fatigue" is another problem, especially for young staff. Also, turnover is high.

ASPCA's nursery works with kitten fosters. The nursery does not use fosters to care for kittens who need to be bottle or syringe-fed, however. Nursery staff has found that bottle babies need so much support that it is easier to provide that directly in the nursery. Also, it can be logistically challenging for fosters to get to the ASPCA adoption center for medical care. Therefore, most of the kittens the nursery sends to fosters – two-thirds of the nursery's kittens during the 2016 season -- are weaned and healthy, where they get much-needed socialization. (Due to the stress public transportation can place on a shelter animal, the ASPCA pays for taxi fares for fosters for vaccine visits and medical care when



Information is posted about the status of kittens, including those who have gone to "Kitten Heaven," keeping everyone apprised of all outcomes

vaccine visits and medical care when necessary, and those fares represent a large line item on the budget, \$13,000.)

The staff communicates in a variety of ways, depending on the issue and its urgency. Informational memos posted on the Communications Board announce changes in policies or procedures, note statistical information, and make general announcements concerning nursery events. 'The Board' also highlights the most important information that staff should know at the start of each shift. Team meetings are scheduled occasionally. A 30-minute overlap built into each shift allows staff to communicate important information at shift changes ("rounds"). A Communication Log Book contains notes from these meetings for staff members to review. A Medical Health Log contains non-emergency questions about the health of a kitten. If the medical concern is an emergency, the question is brought to the attention of a Veterinarian, a Medical Nursery Caregiver or a Veterinary Technician.

New staff participate in a week-long group orientation program at the beginning of the season. Trainee who arrive later in the season are paired with a “coach” for usually three weeks, after which, if they are determined to be ready, they work independently.

## Protocols

### Intake

Kittens arrive at the nursery several times a day. The nursery has very strict and specific rules for protecting the nursery from incoming disease that may be borne by newly-arrived kittens. These include, for example, disposing of any bedding that comes into the nursery with the kitten, as well as disposable carriers (and not letting either touch the floor of the nursery, but placing them instead on “bogus paper,” or on stainless steel carts.)

Upon intake, a licensed veterinary technician gives the kittens an exam. Kittens under two weeks old were given a subcutaneous injection of serum in an effort to introduce antibodies to their system that they would otherwise have received from their mother. This was a new practice implemented about halfway through 2016, but was not found to have a measurable difference so staff will not continue to use it in the future unless research indicates otherwise.

All kittens (all ages) receive ponazuril and panacur on intake as a deworming protocol and again two weeks after the initial dosing.

Kittens, no matter how old, are also tested for FeLV. If they test positive, the test is redone with a fresh blood draw. If they test positive a second time, the kitten is euthanized. This protocol is in place to minimize potential exposure to the nursery community. The ASPCA is finding that staff is having a hard time with this protocol.

**These Kitten(s) are under Quarantine**

Intake Date \_\_\_\_\_

Quarantine end Date: \_\_\_\_\_

*Kittens cannot be moved to another condo until after the above date unless directed by medical staff*

**Quarantine Reason:**

☐ New Intake

☐ Panluek

☐ Other \_\_\_\_\_

Intake quarantine status form

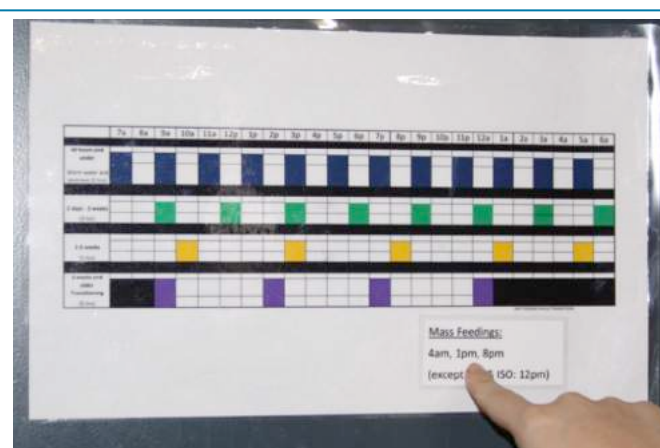
Also upon intake, kittens are given baths when needed in one of the sinks located in the nursery.

Kittens typically spend just one day or less in the intake area and then are moved into the main nursery; neonatal kittens stay in intake usually just an hour or two because they often arrive hungry. Kittens just moved into the nursery are then put on a 14-day quarantine period before they can be moved around the nursery, primarily to monitor for panleuk.

### Feeding

The ASPCA feeds on a color-coded hourly system that takes into account a kittens' age, weight, and health. Fox Valley Milk Replacer is fed to “bottle babies.” When kittens get to the longer feeding times, wet and dry (Royal Canin Babycat) food is introduced. The ASPCA does not offer gruel to kittens. They will get a bottle and wet food as they wean. Wet food will not be left in the condo with kittens under four weeks of age because they will walk in it, get wet and their body temperatures will drop.

A daily monitor sheet is kept on a cage card and updated with each feeding. Neonates also get an input-output log (minus the post-feed weight column, which is no longer collected).



ASPCA feeding schedule

Electric heating pads or SnuggleSafes are always used when feeding neonates.

Kittens are not grouped in the Quarantine pods by hourly feeds, but rather by when they arrived at the nursery. Staff try to disperse the kittens evenly throughout the pods.

## *Sanitation*

When working anywhere in the nursery, staff are required to wear disposable yellow gowns, gloves, and hair covers. For healthy kittens, staff does not need to change gowns between cages – unless soiled, defined as any time the gown or gloves touches a kitten or any part of a cage. They always, however, need to change gloves between cages. Animals suspected of a disease (e.g., ringworm, panleuk) must be treated as if they had the disease, and interactions with them can be done only if staff is wearing a Tyvek suit under a yellow gown plus gloves, shoe and hair coverings.

After kittens are moved to a transfer cage that is lined with bogus paper, cages are cleaned every morning with Accel/Rescue solution. Toys, metal water bowls, and cold SnuggleSafes are put in a bucket filled with 1:16 Accel/Rescue solution and taken to the kitchen. Metal bowls are washed and then placed in the sanitizer; the same bowls are refilled and replaced in the section from which they came. Once a condo is cleaned and ready to be occupied by a new litter, a Lead Caregiver must inspect it with a flashlight to ensure it is free from dirt or body fluids. A sign is added to indicate that the condo is clean.

More rigorous cleaning protocols exist for condos with kittens with panleuk or ringworm.

Floors are also cleaned with Accel/Rescue solution. After the Accel/Rescue is applied and allowed to stand for five minutes, a deck brush with warm water is used to scrub the floor completely. Excess Accel/Rescue and water is mopped up with a squeegee with a towel wrapped around its head until the floor is dry.

## *Medical Protocols*

Caregivers and volunteers make entries on an Animal Health Log for any kitten that needs to be seen for a non-emergency follow-up or to make sure Medical Caregivers are aware of a health situation, which they also note on the Daily Observation Sheet. The health log is used to monitor a long list of potential signals of disease, ranging from sneezing to lethargy and depression.

### *Fading Kitten Syndrome*

The ASPCA's protocol for fading kitten syndrome focuses on supportive care. When a kitten is found crashing, immediate action is taken. The kitten is wrapped up in a towel, similar to a burrito, leaving only its face exposed. A heating pad set to low is then wrapped around the burrito to warm the kitten. Three drops of dextrose are given to the kitten every three minutes via an oral syringe. When symptoms are caught early and the protocol is followed closely, the ASPCA has found it has a high frequency of success saving these kittens.

### *FeLV*

Kittens who test positive for FeLV are immediately retested and if found positive for a second time, euthanized to avoid potential exposure to the whole community.

### *Panleukopenia*

When signs of panleukopenia are present, the ASPCA staff treats the individual symptoms. Observation for panleuk is the primary reason kittens are placed on a 14-day quarantine prior to moving into the main nursery. Administering serum on intake is meant to introduce antibodies into the kittens' vulnerable systems to help fight against panleuk or other diseases. Symptoms of panleuk are addressed with fluids, warmth and antibiotics when deemed necessary.

### *Ringworm*

Kittens suspected of ringworm are monitored in place with appropriate warning signage. Those strongly suspicious or confirmed with ringworm are placed in isolation. They are sent to the main shelter facility for treatment (lime-sulfur dips), or spot-treated in the nursery if there was no room at the main shelter for them. The nursery isolation room will be updated with a sink and stronger heating source so that in the future treatment can be performed in the nursery if space limits at the main shelter warrant it.

## *Upper Respiratory Infection*

Kittens with mild URI symptoms (e.g., eye discharge only) are kept in place and appropriate signage is posted on their cages. If they do not improve or have additional symptoms, the kittens are moved to the nursery's URI section. The kitten's temperature is closely monitored and antibiotics will be administered if a secondary bacterial infection is suspected.

## **Budget and Funding**

The ASPCA's kitten nursery requires a relatively large budget of about \$2 million to operate. This works out to about \$1,300 per kitten (not including spay/neuter costs, acute medical care, and some overhead-related expenses (e.g., development) that are provided by ASPCA to the nursery).

Because of work rules noted, staffing costs are the largest line item in the ASPCA nursery budget. In 2015 wages, overtime (for hours in excess of 45), employee taxes, benefits (including health insurance for full-time and seasonal employees), and training costs represented 69 percent of the total budget. Excluding labor costs, the nursery cost per kitten drops to about \$425.

Other large line items include repairs and maintenance (especially large because the ASPCA owns the building, and problems are unpredictable). Electricity is a particularly large expense because the facility operates 24 hours a day and the heated cages and multiple refrigerators draw large amounts of power. They finally acquired a generator for back-up power (they had been relying on an emergency pack).

Expenses for operating supplies (excluding food and medicine) – e.g., bedding, litter, disposable litter boxes, cleaning supplies, bottles, etc. totaled \$162,000 in 2015, eight percent of total expenses.

Food expenses totaled about \$50,000. Dry food is donated by manufacturers. The budget for medicine was \$80,000. New York State rules will not permit the nursery to accept open medicine from any source, including medicine that comes with the kitten from ACC.

ASPCA has seen an increase in general donations to the organization thanks to the popularity of the kitten nursery. Most of the money received from donors has not been restricted to use in the nursery. ASPCA does not receive income from other sources to support the nursery, including ACC. However, it may apply for (and receive) donations from an identified foundation in support of particular expenses (e.g., a generator). Its most effective way to raise money is to provide tours to private donors and foundations. Media attention tends to result primarily in more kittens.

For further information, contact:

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# Austin Pets Alive!

## Overview

Austin Pets Alive! (APA!) is a private, non-profit, animal shelter in Austin, Texas, that takes in animals on euthanasia lists at area shelters, primarily in Travis County and the Austin Animal Center (AAC), the city's open-admission public shelter.<sup>1</sup> The APA! Neonatal Program (formerly called the Bottle Baby Nursery Program) feeds and treats orphaned, unweaned kittens (six weeks old and under) until they are healthy and old enough to be spayed or neutered and enter the cat program for adoption. It also takes in nursing moms with kittens and pregnant cats.

The APA! Neonatal Program currently cares for 1,600-1,800 kittens during the Texas kitten season, which generally runs from March/April to October/November, with a peak in May to August. The facility has a capacity to handle about 45 litters (litters typically average two to five kittens), for a total of about 1,600 kittens per year. The May-August peak can see as many as 50-100 kittens residing in the nursery. The aim is to use the kitten nursery only as a short term "way station" to foster care (e.g., about seven to 10 days), not a place for kittens to stay until they are ready to be spayed/neutered. The Neonatal Program maintained an average 90 percent survival rate from 2013-2015.

APA! headquarters is located at the Town Lake Animal Center, 1156 W. Cesar Chavez St., Austin. The nursery is about two miles away, in a building located in a commercial strip shopping area.



Entrance to APA! nursery

### Fast Facts

*Opened September 2009*

*Cares for 1,600 kittens a year*

*Survival rate: 90 percent*

*Facility is approximately 2,200 square feet*

*Paid staff: About 12*

## History

Dr. Ellen Jefferson began the Neonatal Program in September, 2009 with no start-up funding and only a handful of volunteers by mimicking an open admission Wildlife Center's nursery where she had worked. The Wildlife Center cared for baby squirrels, possums, and other wildlife and did not euthanize. It used an efficient method to feed the animals that maximized its limited manpower. Dr. Jefferson decided to try that for kittens because APA! was having trouble finding enough fosters willing to stay up all night to bottle feed kittens, and neonatal kittens were having to be euthanized at AAC.

In 2009, volunteers cared for about 250 kittens; in 2010, about 500 kittens. In 2011 some paid staff joined volunteers to care for about 800 kittens. Care peaked in 2012 with 2,000 kittens.

<sup>1</sup> As a matter of policy and under APA!'s contract with the City of Austin, APA! does not take animals directly from the public. Exceptions may be made for kittens that enter the Positive Alternatives to Shelter Surrender (PASS) program. If AAC receives kittens, nursing moms and pregnant cats they cannot keep, they call APA!. If APA! is at or over capacity in the nursery, APA! must decline, in which case the kittens will be euthanized.

## Facility

When it started in 2009, APA! did not have a shelter and therefore no space dedicated to care for neonatal kittens. So it set up a (donated, used) trailer in a parking lot it used for dog adoptions, using half the space for to care for kittens and the other half for adult cat adoptions. The idea was that this busy location would provide visibility and draw volunteers and donations.



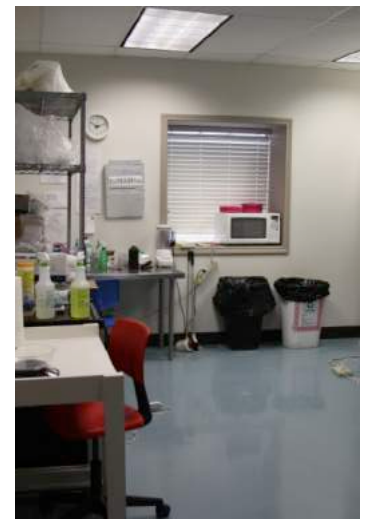
**The APA! nursery began in a donated Gulfstream trailer**

room with a sink, dishwasher and supplies; and another room for laundry (using regular household washers and dryers) and more supplies.

Each of the three kitten rooms is self-contained. To prevent disease transmission, equipment and supplies are not moved from one room to another. Each room therefore has steel cages for kittens, a refrigerator (donated), two microwaves (donated), a sink, laundry basket, multiple SnuggleSafes (donated) and electric heating pads, blankets and towels, wood laminate tables for feeding kittens (made by a volunteer), plastic chairs on wheels for the volunteer feeders, fans, scales (donated), food (Kitten Milk Replacer, largely donated, as well as canned kitten food and kitten kibble), litter and other supplies (bowls, baby wipes, bottles, syringes for feeding, hand sanitizer, cleaning supplies, paper towels, etc.)

## Staffing

The APA! Neonatal Program was initially operated completely by volunteers, until 2011 when a small number of paid staff joined the team. As the Program grew, some paid staff was needed (including individuals to feed kittens overnight – it proved hard to find volunteers to do this as often and as reliably as needed). But the Program still relies heavily on about 100 volunteers to feed and otherwise care for the kittens from 6 a.m. to 3 a.m.



**One of three kitten rooms**

The nursery cares for kittens about eight months of the year, and staff and volunteers are working the most hours during these months. The remaining three months volunteers take a break, and staff shifts to part-time hours. During this time, they assess what happened over the year and plan for the next, adjusting protocols and making changes as needed to improve how the nursery operates.

## Key Positions

The nursery now employs a number of paid staff:

The Neonatal Program Manager runs the Program. She oversees the staff, administers medications, injections and subcutaneous fluids, tube feeds, and works with the vets to ascertain what medical care is needed. She works with other APA! teams to establish and enforce protocols for the

general care and medical treatment of the kittens, sanitation and quarantine procedures. She provides individualized care and attention to critical kittens. She ensures the nursery has adequate supplies and staff and prepares nursery budgets.

The Assistant Manager assists the Program Manager with the daily functioning of the nursery. He maintains a detailed accounting of the kittens in and out of the nursery. He schedules volunteer and paid feeders and provides a daily End of Day report to the Program Manager about any kittens with critical status, supply needs, scheduling issues and any other matters requiring immediate attention. He is also authorized to administer medications, injections, and subcutaneous fluids and is authorized to tube feed.

The Neonatal Foster Manager's primary task is to ensure that kittens are moved into foster care from the nursery within seven to 10 days. She trains the fosters. She ensures there are foster "mentors" to help the kitten fosters with any problems they encounter. One of the most important prerequisites to a successful nursery is a strong foster program, including a solid number of fosters who can bottle feed, so a strong (paid) individual in this position is key. APA! has about 400 cat fosters, but only about 20 bottle baby fosters, which is not enough to ensure that kittens are moved out of the nursery within the goal of a week. At the APA! nursery, the Foster Manager reports directly to the Program Manager.

*The APA! Neonatal Program was initially operated completely by volunteers, until 2011 when a small number of paid staff joined the team.*

The Rescue Coordinator holds a time-sensitive position that works with the shelters to ensure that kittens who need to be transferred to the nursery get there quickly. It is a seven-day-a-week job.

The Volunteer Liaison works as a liaison between the Nursery Manager and the volunteers and maintains open lines of communication between the volunteers and program management. He/she plans fun events for the volunteers and works to keep morale up. Volunteers sign a volunteer agreement stipulating all that is expected of them.

The Nursing/Pregnant Cat Foster Coordinator helps to find nursing moms who might be good candidates to accept a single kitten.

The Training Coordinator provides volunteers with two hours of in-person orientation, including a presentation outlining everything they will do (how to bottle feed, cleaning protocols, how to work a nebulizer, how to care for fading kittens, etc.). Four trainings are given each month for up to 20 people. Once a training has been completed, volunteers "shadow" an experienced feeder. They "shadow" two times, for three hours each, before they are allowed to feed kittens on their own.

A Data Manager keeps numerical track of all the kittens and inputs data into PetPoint and performs other administrative "number crunching" and quantitative needs.

Vets from the APA! medical center support the nursery team. Neonatal Program Medical Technicians and Interns feed and provide basic care and medical treatment to the kittens and pregnant/nursing moms; administer medications; draw blood used to test for FeLV, and tube feed.

### **Volunteer Feeder Tasks**

Volunteer feeders who have completed training commit to one three-hour shift per week of their choosing, from 6:00 a.m. to 3:00 a.m. Paid feeders supplement volunteers from 6 a.m. to 10 a.m. and from 10 p.m. to 3 a.m. During peak season, it can take up to three feeders per room to care for the kittens in a timely manner.

The APA! Neonatal Program uses Google Calendar to set up feeding shifts. Maintaining this calendar is challenging, and APA! staff recommends that it be done by a paid staffer, either in-house or contractor.

Each litter must be fed on set schedules, so it is imperative that volunteers show up for their shifts. When a volunteer cancels a shift, he/she must make it up later (by filling in for someone else who cancels, for example). One chronic problem is that a volunteer will call to cancel their shift on short notice and a replacement cannot be found quickly, leaving staff to scramble to schedule another volunteer or provide coverage themselves. If a volunteer does not call in to cancel and simply does not show up for a scheduled shift, he/she is automatically terminated.

Feeders keep detailed records about how much each kitten weighs before and after a feeding, and any other observations that are important (e.g., Is there diarrhea? Is there vomiting? Is the kitten lethargic?). They log this information both on paper records in file folders above each cage and on a whiteboard/log in the room. Any medical concerns are brought to the immediate attention of the Program Manager or Assistant Manager.



**File folders above kitten bank cages hold information about each litter at the nursery**

Feeders also thoroughly clean each litter's cage after every feeding. At the end of their shift, feeders must do at least one housekeeping chore before signing out (e.g., laundry, loading/unloading the dishwasher, etc.) so that the nursery can stay clean, stocked and operational.

### **Communications**

Staff and volunteers communicate in a variety of ways. The Volunteer Liaison is the first link between volunteers and program management. Team meetings may be held, but not typically during kitten season unless there is something of immediate importance to communicate to the team. Program management will send emails to volunteers only when it has something important to communicate (e.g., changes in procedures or protocols, pleas for shift coverage when the nursery is short-handed, pleas for supplies).

### **Protocols**

The APA! Neonatal Program is meant for kittens six weeks old and under, so protocols are geared to the needs of those kittens.

### **Intake**

When AAC (or another shelter) receives kittens, they alert the APA! Neonatal Program Rescue Manager who confirms the Program can accept the kittens and sends out transport to get them.

Upon arrival in the nursery, each kitten's body temperature is stabilized (if necessary) and each is weighed. The kittens are tested for FeLV and their overall health evaluated. FeLV kittens are isolated and a foster is found for them (they do not stay in the nursery). Flea treatment and dewormer are given. Necessary medications and/or medical treatment will be started. Every kitten receives penicillin G. If their eyes are open they receive their first dose of pyrantel. Kittens' "bottoms" are bathed if they have severe diarrhea; a full bath is avoided if possible as they get cold



too easily. If fleas are present, Capstar is administered (to kittens of any age).

If a foster is available to take the kittens, they are passed immediately to the foster. If not, they go into the nursery. If a kitten comes in that is seven days old or under, the Nursing/Pregnant Cat Foster Coordinator will try to find a nursing mother to take that kitten and move it out immediately into foster care. If that is not possible, it will be cared for at the nursery.

Litters are identified by an alphabetical-number system (A1 through Z1, A2 through Z2, etc.). Kittens within a group (A1) will get individual names starting with “A” (e.g., Albert 1). If kittens within a litter are hard to tell apart, a dot made with a color sharpie will be applied to the inside of the kitten’s ear to distinguish it from its twin.

The Program follows an “all in, all out” policy: kittens come into one room until that room is full, and no kittens are added to that room even as space becomes available as kittens move out. After the room is empty of kittens, it is “decontaminated” and a thorough deep clean is done of the entire room. Only then will new kittens be added to that room. This practice was instituted in 2013 following a panleuk outbreak in 2012, and “save rates” went from 79-80 percent to 90-91 percent since implementation.

Kittens are placed into a cage and a file with their medical chart and each kitten’s feeding chart is started. Accurate record-keeping is essential. The kittens are fed immediately as they may not have eaten in a while.

Other administrative tasks associated with the intake of a kitten are completed by management or the Data Manager.



**Bottle baby volunteer feeder at APA! nursery**

## **Feeding**

The nursery uses powdered Kitten Milk Replacement (KMR). Open bags are kept in the refrigerator before and after mixing. Nursery feeders and fosters do not change formula brands once started.

KMR is mixed in graduating ratios of water to KMR to ease the kitten’s transition from its mother to bottle feeding. This is done to prevent diarrhea, which commonly occurs whenever there is a change to a kitten’s diet. The nursery has very specific rules for mixing and using the KMR, which are in the volunteer manual. If a kitten will not use a bottle, syringe feeding is tried.

If necessary, a kitten will be tube fed, but only by the Nursery Manager or Assistant Manager or other authorized personnel.

At about 3.5 weeks, or when the kitten’s teeth begin to break through, kittens will be transitioned to gruel. The nursery wants to wean kittens as soon as they are ready because “gruel babies” typically take less time to care for than bottle babies and it is easier to find foster homes. Kittens will be introduced to gruel in a dish, and if they do not take to it right away, feeders will syringe-feed them with gruel. Gruel is made with canned food and water until it reaches applesauce consistency (typically two cans of food with one can of water). If a syringe is to be used, the food will need to be blended in a blender.



**Posted instructions on bottle feeding kittens**

## Sanitation

Kittens are housed in three different areas of the nursery, designated Room A, Room B and Room C; there is also an overflow/intake room to be used when the nursery is at peak. Kittens coming into the nursery go into one room until it is filled, then the next room is used, and then the third. New litters are not put in a room once it has reached capacity until all those litters have left the nursery and that room has been decontaminated (see “all in, all out” in the Protocols section above).

409 Cleanser is the only cleanser approved for use in the nursery. It is also used to clean carriers. After 409 is used, carriers are sprayed with either diluted bleach or Trifectant and allowed to soak for 10 minutes, then wiped clean.

Bedding and cardboard carriers accompanying kittens that arrive at the nursery are discarded as soon as kittens are removed from the carrier.

All feeders must put a t-shirt, dedicated to each litter, over their own shirts when they begin to care for that litter. They pull the shirt from the folder that also contains the litter’s records.

When they are done, they remove the shirt and put it back in the folder with the records.

Feeders must wash hands between litters (they do not need to use gloves when caring for the kittens, unless they want to). Towels can be used with the same litter until soiled. Work surfaces must be cleaned with 409 when soiled, then wiped down with disinfectant (Trifectant) or diluted bleach. All surfaces are cleaned and disinfected between litters, including scales, pens, markers, SnuggleSafes, work surfaces and chairs.

A litter box with a towel soaked in bleach is at the threshold of each of the three kitten care rooms, and anyone entering or leaving the room must step in it with each passing.

## Medical Protocols

### Constipation

Constipated kittens will receive one drop of mineral oil per 24-hour period until the kitten has bowel movement. Then, it is stopped to prevent diarrhea.

### Diarrhea

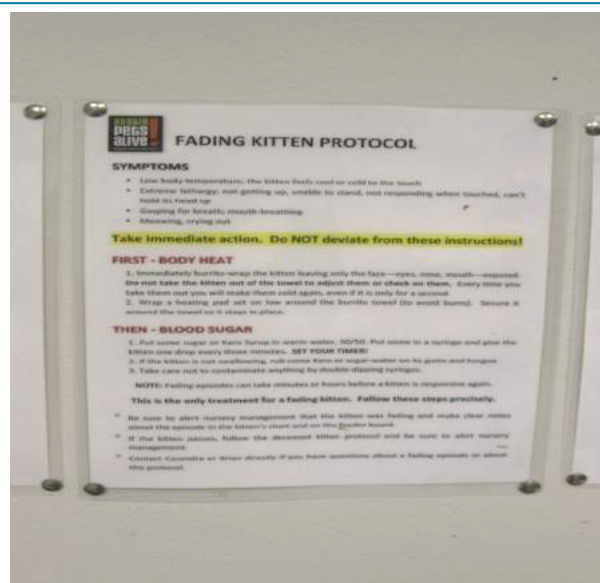
Kittens with diarrhea may be treated with a range of medications since the cause of the diarrhea can be so varied. Some medications include: kaolin, amoxicillin, metronidazole, Panacur, Marquis Paste, Baytril.

### Fading Kitten Syndrome

One of the nursery’s most important illness protocols, caring for fading kittens, is also one which volunteers are equipped to handle. Volunteers “burrito” the kitten to try to get its temperature back up, incorporating a supplemental heating source, and give it oral Karo syrup or sugar water. About 50 percent will make it and then they will be started on an antibiotic. The cause of the fading likely will be unknown, so the kitten will be treated with



APA’s nursery depends on donated household laundry machines



Posted instructions for a fading kitten



various medications to attempt to address any underlying problem. If kittens do not respond, staff will let the kitten fade without pre-emptive euthanasia.

### *Ringworm*

Kittens with ringworm are not housed in a separate area of the nursery. They are included with other kittens in a given room. But their cages are labeled so that volunteers and staff know to take extra precautions when handling these kittens. Volunteers can use gloves to work with these kittens, but the volunteers must supply the gloves. Kittens under 6 weeks of age will be spot treated with a lime-sulfur dip solution. Older kittens will be treated with lime-sulfur dips/baths and sometimes also with oral medication.

### *Panleukopenia*

Testing for panleuk is not routinely done at intake since the test will not show positive results until the virus is shedding, and vaccinated cats and kittens may sometimes have a false positive from the parvo snap test. Once kittens are suspected or confirmed of having panleuk, they are put into quarantine or placed with a specialized foster for treatment. A special team of experienced feeders are trained to work in the parvovirus/panleuk ward with these kittens when specialized fosters are not available. Once the infected kittens test negative for the virus and are approved to comingle with healthy cats and kittens, they can go to foster or to the cattery for adoption. When a nursery kitten is diagnosed with panleuk, or suspected panleuk, the entire area must be decontaminated.

### *Upper Respiratory Infections*

Kittens with URIs will be treated with a doxycycline suspension, Zithromax, or Baytril (depending on the severity of the URI).

### *Vaccines*

Kittens are vaccinated once they are four weeks of age and weigh at least one pound. If one or more kitten in a litter is not ready to be vaccinated, vaccinations will be done when all kittens are ready so that the entire litter is on the same schedule.

## **Budget and Funding**

APA! estimates its 2016 Neonatal Program budget at about \$350,000. This amount includes some, but not all, of the value of the donations it receives to run the nursery (e.g., it does not reflect donated laundry equipment or some food) and what is included is estimated. It also does not include some expenses that are borne by APA! more broadly (e.g., medical care and insurance). Roughly, management and other staff and volunteer time represent about 59 percent of the total budget; rent and utilities, about 13 percent; food, about 9 percent; medicines and related medical supplies, about 7 percent, and the balance, other supplies.

The APA! Program is fortunate to have a large group of supporters who donate supplies of all kinds to the project. In March it holds a “baby shower” that draws more than 380 visitors bringing most of the supplies it needs for as long as six months (e.g., bleach, laundry detergent, Snuggle Safes, scales, food, litter, etc.). Staff estimates that the value of these donations and other donations received, including volunteer hours and space for example, may represent 46 percent of the budget estimated above for the Nursery.

Thus, the cost per kitten cared for, if fully paid, would amount to at least \$195 in 2016 (based on an estimated 1,800 kittens when the budget was prepared), but thanks to all the donations is probably closer to \$104. Again, this estimate does not reflect the costs of some medical care or of spaying and neutering the kittens.

The APA! Neonatal Program receives no government funding. It has no financial arrangement with AAC or other shelters from which it pulls kittens. It has received grant money to support the nursery: two supporting grants in

2016, and three to four in 2015. The 2016 grants totaled about \$30,000, or 10 percent of the budget, which APA! believes is about all any kitten nursery should expect from grants in support of any program. The only tangentially-related income would be adoption fees from kittens that went through the nursery, which probably average about \$100 per kitten.

Staff believes that the nursery does draw increased financial donations to the organization. APA! has a strong brand in Austin and a loyal base of supporters. Two successful approaches to raising resources have been the annual “baby shower” held in March and special events hosted by the nursery for APA!’s larger donors so they can see the nursery. For the “baby shower” in 2016, the “price” of admission was to donate something from the nursery “wish list” of supplies.

Most of the Program’s “income” results from donations of supplies, labor and space. It successfully uses social media and email to communicate with donors.

For further information, contact:

Casandra Mensing, Neonatal Ward Manager, [casandra.mensing@austinpetsalive.org](mailto:casandra.mensing@austinpetsalive.org)

# Best Friends Animal Society - Los Angeles

## Overview

Best Friends Animal Society - Los Angeles (BFAS-LA) is a private, non-profit, animal rescue organization located in Mission Hills, California. It operates a kitten nursery as a program of the “No-Kill Los Angeles” (NKLA) initiative, a coalition of animal rescue organizations led by BFAS-LA. The nursery, which started in 2013, takes in kittens from six Los Angeles Animal Services shelters.

In fiscal year 2016 (October 2015/September 2016), the BFAS-LA nursery cared for 2,665 kittens, and ages ranged from newborns to eight weeks. The nursery also cares for moms and kittens.

Although the kitten season in Los Angeles runs from February to November, BFAS-LA takes in kittens all year. The nursery has the capacity to handle an average of 150 kittens per day, including 50-70 bottle babies.

The nursery’s survival rate has held steady in recent years at just over 80 percent. For the Los Angeles area more broadly, which BFAS-LA supports with its own kitten nursery and with others located around the city, kitten euthanasia rates have been declining steadily as the number of kittens entering Los Angeles nurseries has grown – approximately 4,300 kittens were euthanized in 2016, which is a substantial decrease from the 2012 number of 7,000.

The nursery is located within BFAS-LA’s shelter at 15321 Brand Blvd, Mission Hills, California.

### Fast Facts

*Opened February 2013*

*Care for 2,665 kittens 2016*

*Survival rate: 80 percent*

*Facility is approximately 1,000 square feet*

*Paid staff: About 12*



Entrance to BFAS-LA shelter facility

## History

BFAS-LA opened its kitten nursery in February 2013. It cared for 1,611 kittens that calendar year (CY), and the numbers have grown since: 2,026 kittens in CY 2014 and 2,275 in CY 2015. It cared for 2,665 in fiscal year 2016.

The number of kittens that BFAS-LA takes in every year continues to grow, surpassing the nursery’s ability to accept them all. So, to achieve the goal of making Los Angeles a “no kill” city by 2017, BFAS-LA is helping other rescue organizations start nurseries for Los Angeles kittens. It has helped to fund such nurseries at Kitten Rescue Los Angeles, which took in 500 kittens in 2016, and at the Spay Neuter Project of

Los Angeles, which opened a new kitten nursery in late 2016 and pulled 450 neonates from Los Angeles Animal Services.

## Facility

The nursery occupies just under 1,000 square feet of space within the BFAS-LA shelter. This includes dedicated nursery space as well as two smaller quarantine rooms for panleuk kittens located down the hall from the nursery proper. This square footage total does not include space used to house older kittens waiting to reach 2 pounds (in the “Pre-School” room), those otherwise ready for adoption but waiting for space to open on the adoption floor,



**Main room in nursery**

or older kittens with illnesses or other contagious diseases. Pre-School has 36 kennels and an average of three kittens per cage, for a capacity of 108. Quarantine for panleuk kittens has 24 kennels with an average of three kittens per cage, for a capacity of 72. Isolation, the ringworm ward, has 16 cages and 10 towers with an average of three kittens per cage for a capacity of 78 kittens.

The nursery consists of one main room, and six much smaller rooms around its perimeter (all with doors). One serves as the foster office (for now; it may be converted in the future to kitten care). Another houses moms with kittens, the so-called “Mommy and Me” room. The “Weaned” and “Grad” rooms are for kittens who are eating on their own but still very young and need 24-hour monitoring. Some kittens in these rooms may have health issues (e.g., upper respiratory infections, calici, etc.) Bottle babies who are too young to be in one of the quarantine rooms (because overnight staff does not go into those rooms) remain in the nursery, ideally in the staff office room (see below).

Each of the rooms housing kittens has a sink. Another is the “prep room,” which contains a large sink, a small refrigerator, a hot water dispenser, a microwave and an electric hand mixer for gruel. Of note in this room are the tiled walls which make cleaning splashes of water and gruel easier. A last room serves as both a staff office with computers and a “NICU” for kittens requiring feeding assistance. A table outside this office, and in the main room, has up to six aquariums on it containing bottle babies. A wall along one side of the main room is lined with steel cages containing bottle babies and “gruel” kittens.

The nursery primarily uses stainless steel bank cages to house its kittens. A sheet of plexiglass placed on the inside, bottom two-thirds of the cage door keeps kittens from reaching out to others in neighboring cages and makes it easier to clean the cages. The Mommy & Me room has much larger cages for the moms with kittens, and the lighting is subdued (with a cloud-scenery gel that covers the ceiling’s fluorescent light). Doors to each room are supposed to remain closed.



**Bank cages in one of the kitten rooms off the main room**

One of the nursery’s unique features is the use of aquariums for very tiny bottle babies. In the past, staff used incubators but found them too difficult to clean, and too hot for the kittens. The aquariums are more open and much easier to clean. It is also much easier to see the kittens and monitor them for undesirable activity like suckling on their siblings.

Electric heating pads are used to keep all the kittens warm, including those in the aquariums. SnuggleSafes are used as well, but only as back up as staff found them too much work to keep warm.



The main room, in which kittens are fed, contains six small tables covered with sheets of plexiglass. Each table has on it a scale, a napkin dispenser with napkins for stimulating and cleaning the kittens, a five-minute timer for ensuring required contact time for cleaning and disinfecting products and a small waste bin on the floor next to the table. By the entry door to the nursery is a volunteer sign-in sheet and whiteboard for writing caregiver observations they want the vet to see.

The nursery does not have its own laundry machines. Staff and volunteers take laundry to the main shelter's laundry room, which has an industrial washer and dryer. Clean laundry is returned to the nursery and stored on shelving units off to the side. Laundry is color coded: all bedding used in the Mommy and Me room is pink; that used in the Weaned/Grad rooms is green, and bedding used in the main room is blue.

Each room is fully stocked with its own supplies, all of which are color-coded for the individual rooms. These include gloves, t-shirts, soap and disinfectant, water bowls, food, litter (Scamp dust-free clay litter), paper trays for food, and plastic bins to hold all the supplies for each individual litter of kittens.

In addition to standard bottles with nipples, the nursery also uses spoons and oral syringes for feeding kittens who are transitioning from bottles to regular food.



**Aquariums with neonates, located in main room of nursery**



**Feeding tables in main room**

## Staffing

When the nursery started, BFAS-LA said “yes” to all kittens. That was a “huge mistake,” because they had not thoroughly considered staffing needs for the kittens they took in. Therefore, they had to staff up quickly in order to care for them all. Since then, the nursery has settled on a mix of paid and volunteer staff that seems to fit its intake needs.

### Key Positions

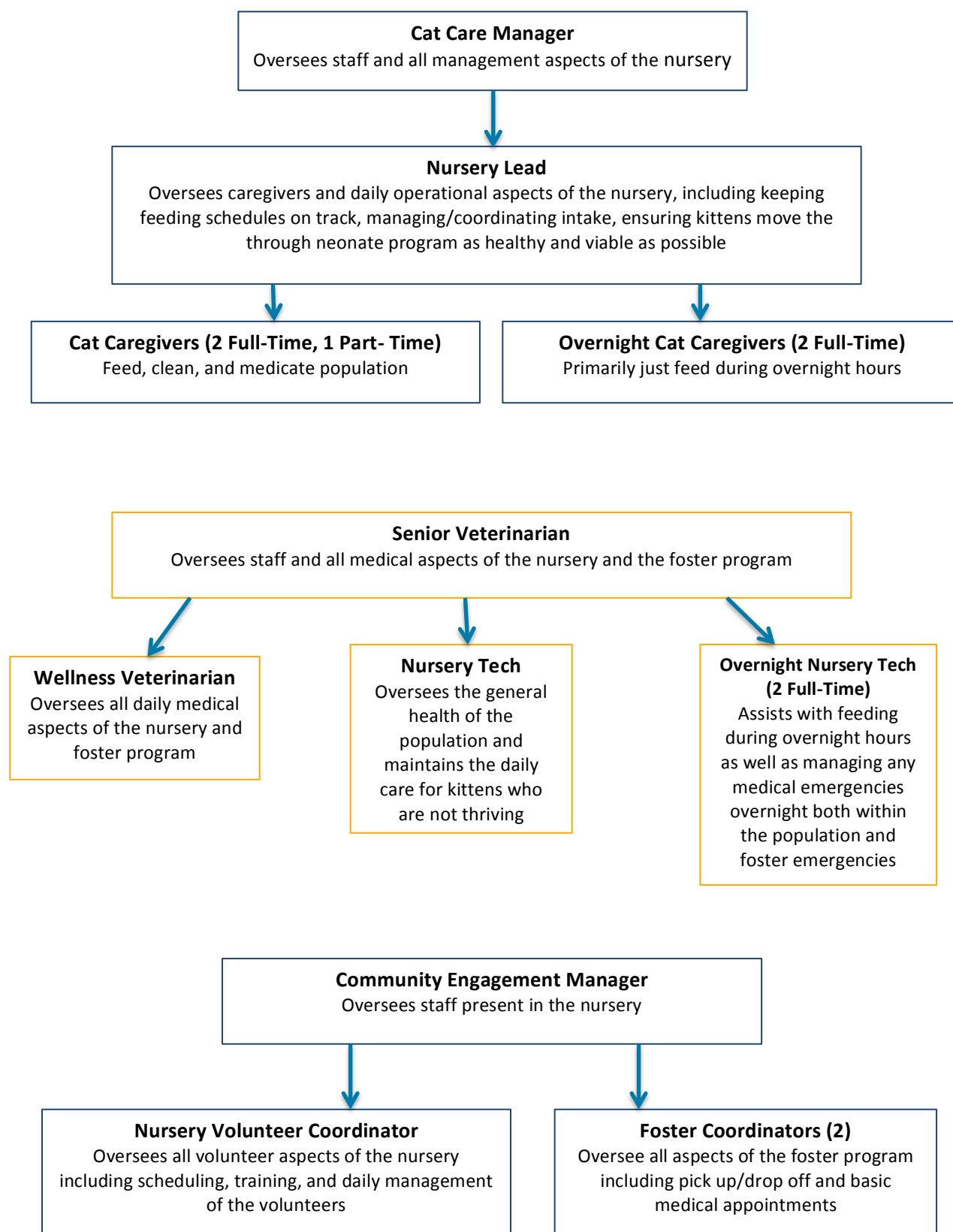
The nursery employs at least 12 individuals, with job descriptions summarized in the Nursery Organizational Chart below. The nursery is run by the Cat Care Manager, who spends about 40

percent of her time on nursery management (the rest of the time she manages BFAS-LA's cat program). A Nursery Lead spends all of her time working in the nursery. The nursery employs two full-time, two part-time, and two overnight caregivers, who primarily feed kittens. Two overnight veterinary technicians feed and are also available for medical emergencies that happen, including those experienced by kitten fosters.

Two veterinarians and a vet assistant are in the nursery every day. In addition, there are two registered veterinary technicians, one of whom works closely with the veterinarian.

The nursery uses Digital Cheetah to schedule staffing of volunteers and fosters. It is user friendly and allows easy communication with volunteers; however, staff has found that it can be difficult to pull certain reports (e.g., how many volunteers have not completed the required amount of hours).

# BFAS-LA Nursery Organizational Chart



Source: BFLA



## Volunteers

The paid staff at the nursery is not enough to care for all the kittens it takes in; 250 volunteers also work in the nursery. In 2016, BFAS-LA's nursery consumed about 10,000 hours of volunteer time.

*250 volunteers also work in the nursery.*

There is no volunteer manual; information volunteers need can be found in a general nursery manual. A coordinator works with the volunteers to schedule them. Volunteers can sign up for two-hour shifts in a 24-hour period, and are expected to donate a total of eight hours per month. Ideally, three volunteers will work in one shift. The first time a volunteer misses his/her assigned feeding shift and does not notify staff for coverage, he/she will receive a warning from staff. After the second time, that volunteer may be asked to drop out of the program.

Volunteers receive four training sessions of two hours each before they can be approved as a kitten feeder and sign up for shifts. These trainings consist of two to three people per session. Volunteers must attend an orientation session and then pass three "shadow sessions." The first session is to learn the nursery's protocols for cleaning. That is followed by a session on feeding (both with bottles and gruel) and on handling and cleaning kittens. During the third session, volunteers are on their own with a staff member observing them from afar and available to answer questions as needed.

Staff divides volunteers informally into different tiers based on their level of experience. The volunteers who are allowed to handle panleuk kittens are the most qualified and have had special training. Volunteers do not vaccinate.

Kitten caregivers are the key to spotting medical issues. They weigh kittens after stimulation and before feeding to get a start weight, then they are weighed after the feeding to see how much they have eaten. All of the information is tracked on charts on the kennels. BFAS-LA requires a minimum amount of food to be taken in based on their weight/stomach capacity, and if they are not eating enough to gain weight, caregivers will syringe feed them.

Retirees are among the nursery's most dependable volunteers. The 6:00-8:00 p.m. shift is the hardest to fill in Los Angeles, probably because of the traffic.

Another important volunteer role is for transport of kittens from the Los Angeles City shelters to the BFAS-LA nursery. A Best Friends staff member serves as the lead of a team responsible for communicating with the nursery each morning to find out how much space is available in the nursery and, therefore, how many kittens they can take from the city shelters.

## Foster Program

A strong foster program supports the nursery. BFAS-LA has about 100-130 active fosters, and the vast majority of them care for kittens. During peak season, 200-300 kittens per month will be in foster homes. The shelter's goal is to send at least half of the kittens in the nursery to foster care, and it is usually the weaned kittens that are sent as the time commitment for them is only about four weeks. BFAS-LA has found it harder to line up bottle baby foster homes; it currently has about a dozen fosters who can take in bottle babies.

*During peak season, 200-300 kittens per month will be in foster homes.*

*The shelter's goal is to send at least half of the kittens in the nursery to foster care.*

BFAS-LA knows they must turn away bottle babies – and any kitten, for that matter – if the nursery and fosters are full. Therefore, they try to make it as easy to foster for BFAS-LA as possible, and they have not had any trouble finding people who want to foster for the organization. Those interested attend a general foster orientation meeting at which they indicate if they are interested in fostering kittens, fill out a one-page application, and sign a foster agreement. There are no background checks or home visits required.

When fosters take kittens, they are given a “Foster Plan” sheet which lists the dates they need to return for vaccines and how to make appointments. Fosters are not required to go through any further training, even those interested in caring for bottle babies. They are given a kitten foster manual, scales, bottles, KMR and other basic supplies, or they can buy their own.

Fosters have access to an emergency line, a “Google Voice” number that forwards to whomever is on call that night. If a foster leaves a voicemail, someone will call back within 15 minutes. There are not that many “middle of the night” calls. Fosters are expected to come to Mission Hills for medical care. However, traveling there from Los Angeles can be difficult because of distance and traffic. So, fosters can take their kittens to their own vet for care but BFAS-LA will not be reimbursed for that cost.

Once a week staff will send an email to fosters with updates, adoption success stories, and photos of kittens available to be fostered. The foster program does not have different levels of foster expertise. The foster manager knows which foster is capable of handling which kind of animal. Fosters sign up to take in kittens using Digital Cheetah. They use this also to schedule appointments for vaccines and other recurring appointments well as to return kittens.

BFAS-LA has found that bottle baby fosters prefer to hold on to their kittens all the way to eight weeks, rather than turn them over to another foster when they are weaned.

BFAS-LA will send panleuk kittens to foster care, particularly to foster homes that have already had an outbreak. Those kittens will stay in the shelter when first diagnosed, however, in order to begin treatment and to monitor them more closely before deciding if they will be able to go to foster care. The shelter gives these fosters a lot of extra support and staff attention. They also make sure to express sympathy in person and with follow up emails if a kitten dies.

## **Communications**

Staff and volunteers write any problems they see with individual kittens on a white board in the main nursery room and below it in a notebook. Entry into the notebook as well as on the white board is essential for maintaining a permanent record. The information is reviewed by the vets who then prescribe medications and treatments.

## **Protocols**

### **Intake**

Kittens are named with a letter of the alphabet, a number and the year. For example, A12016...Z12016, A22016...Z22016. This method makes it easy to know how many kittens have been treated at the nursery at any point in time.

On intake, kittens receive pyrantel, FVCRP (if four weeks old or older), probiotics, fipronil, and ponazuril. Pyrantel and FVCRP will be given again at two week intervals.

No one is tested for FIV or FeLV until they are four months or older. Even moms on intake are not tested until they are spayed.

Information is recorded in PetPoint, but because this shelter is so large, they are switching to Shelter Love.

### **Feeding**

Cages are labeled as to whether the kittens in that cage are to be fed bottles, gruel or both.

Kittens are weighed before and after feeding and stimulated before feeding.

Feeding via bottles is the standard, but if needed, kittens who do not have teeth can be tube fed, but only by staff. Kittens ready to be weaned will be given gruel on a spoon. If they will not take it from the spoon, they will be syringe fed only as a last resort because kittens tend to get dependent on eating from a syringe.

The nursery feeds Kitten Milk Replacer (KMR) to its bottle babies; the bottle is floated in a cup of hot water to warm it up.

“Gruel” for transition kittens is made by mixing cat food with water and using an electric hand blender to mix it to a smooth consistency.

### **Sanitation**

All bowls, boxes and other supplies are expected to remain in the room that they originated in. All bowls and utensils can be washed with Dawn soap in the sink in the same room as the kitten is located, then moved to the Prep Room (kitchen) for final cleaning and disinfecting with a five-minute Accel/Rescue soak in the sink there. Each used bottle and nipple is rinsed between uses, sanitized one time a day in boiling water, and then stored in the appropriate bin for that individual cage in which the litter is housed to prevent cross contamination. Bottles and nipples are sterilized once daily for 15 minutes in boiling water. They are thrown away after the litter using them moves on to regular food.



**Feeding time for bottle baby**

Each kitten or litter of kittens has an individual, designated bin in which all the needed supplies are kept. One item is a T-shirt that the feeder must put on over their own clothes. Blankets, pens and bottles or syringes specific to that litter are also kept in the bin and used by the feeder only for that litter. Feeders wear gloves which they change between litters.

Cages are cleaned in a specific order, indicated by color. Green tags mean the kittens are healthy and their cages are cleaned first. White is for new or unknown health, cleaned second. Blue is for kittens with upper respiratory infections, cleaned next. Orange is for kittens with diarrhea, which could signal panleuk or other illness, so they along with red caged kittens are cleaned last. Dawn dish soap and water are used to clean work surfaces of organic matter. Then, Accel/Rescue is applied and left to soak for five minutes as a disinfectant. No bleach is used.

Because kittens get comfort from their belongings, bedding and toys are changed only when dirty or wet. Laundry is done in the main shelter; bedding from panleuk kittens is thrown away, not washed.

Cage walls, ceilings, doors and bars are cleaned daily, working around the kittens by spraying directly on the cleaning rag and then wiping down interior cage surfaces. Kittens are not removed from the cages during spot cleaning as it creates more work and increases the likelihood of cross-contamination. The Nursery Protocol manual contains this emphatic note: **“ALWAYS COUNT KITTENS TO ENSURE YOU HAVE NOT LOST ONE IN LAUNDRY!!!!!!”**

Bottles for each litter are thrown out after that litter has moved on. Cages are deep cleaned. The cage is completely emptied and all surfaces in the cage are sprayed with Accel/Rescue, which is allowed to sit for five minutes, then wiped clean.

Before leaving, feeders must double check to ensure that a litter was not accidentally skipped from feeding; clean and sanitize the table at which they sat to feed kittens; throw away trash; refill water bowls if necessary; and sweep common floors.

The nursery’s walls are cleaned several times a day.

## *Medical Protocols*

The nursery does not currently have written protocols for illnesses. Veterinary staff intend to develop more standardized disease protocols, but do not have them at this time. Instead, treatment plans are prescribed by the veterinarian for each case.

### *Diarrhea*

Diarrhea is a huge problem. A lot of it is related to food changes especially during the weaning period as kittens transition from milk to gruel. Other causes may be related to illness or parasites. Metronidazole and Panacur may be prescribed. The nursery had a particularly bad outbreak of diarrhea 2016 which staff eventually traced to cases of canned food they suspected had gone bad.

### *Fading Kitten Syndrome*

Fading kittens are placed in an incubator for warmth and oxygen support. Dextrose is given orally every three minutes and possibly a vitamin B-12 injection. Hydration is supplemented with warmed subcutaneous fluids. Older, larger kittens may receive dextrose and fluids intravenously.

### *FeLV*

Kittens are not tested for FeLV until they are four months or older. If positive, they are rechecked. BFAS-LA used to check for FeLV at younger ages but decided it was too expensive to continue. The number of kittens that test positive for FeLV is such a small share of the total (and so many of those proved to be “false positives”), BFAS-LA concluded it was not worth it to test the entire population. Even moms with kittens are not tested until they are spayed.

### *Panleukopenia*

There is a lot of panleuk (and calici) in southern California, so the shelter is more used to it than other areas of the country might be. Snap parvo tests are used to diagnose panleuk. Staff handle the care and feeding of panleuk kittens in the panleuk quarantine ward. Kittens that are too young for that ward may be kept in the nursery and specially-trained volunteers may assist with their feeding. Kittens in foster care that break with panleuk are moved back to the shelter for the immediate initial sick period; later they can be moved back to foster care. Gowns and booties must be worn to minimize or prevent accidental cross contamination, but no hair coverings are required. Rooms for sick kittens contain their own refrigerators, microwaves and scales, and there is an incubator in each room. Treatment options include the use of metronidazole, vitamin B-12 injections, fluids, antibiotics, Cerenia for vomiting and additional medical and supportive therapy as needed. Staff tracks their symptoms; kittens must be symptom free for at least two weeks before they are cleared. Once cleared, the kittens are moved back to the general population (by the time they are cleared they are usually big enough for adoption).

### *Ringworm*

Staff uses a Wood's lamp and DTM culture to identify ringworm. Treatment for kittens under two months of age is lime-sulfur dips. Kittens older than two months may also be prescribed itraconazole. Two negative DTMs done two weeks in a row are needed to call the kitten cured of ringworm.

### *Tapeworm*

Droncit injection is used to treat for tapeworm.

### *Upper Respiratory Infections and Calici*

The nursery administers general antibiotic treatment with doxycycline, Clavamox or Orbox. Erythromycin or tobramycin may be given for affected eyes along with warm compresses to wipe away ocular debris. Staff maintains hydration with subcutaneous fluids (Lactated Ringer's solution, LRS). They may nebulize with saline; gentamicin may sometimes be added to the nebulizing treatment per the veterinarian's prescription. Oxygen is available in the incu-

bator units. Sucralfate is used for calici ulcers and buprenorphine as needed for pain. If kittens have a fever that is less than 105 degrees F, a bolus of subcutaneous LRS is administered along with an ice pack. If the fever is higher than 105 F, Metacam and intravenous fluids are administered. In cases of known formula aspiration during feedings, the kitten is started on Clavamox.

### ***Euthanasia***

BFAS-LA has recently started allowing overnight staff to euthanize if needed, although they have to call a vet first to get authorization.

### **Budget and Funding**

BFAS-LA does not keep expense records specific to the nursery. It shares supplies with the shelter generally. Some staff is shared as well, including the nursery's manager, so those expenses are part of the overall shelter budget and not broken down for the nursery. Some supplies, notably food, are also donated. The food supply is donated via a contract with Instinct or from kitten showers. Other food that is preferred by staff (e.g., Royal Canin Babycat) can only be used if it is donated. KMR used in the nursery is largely donated as well.

That said, BFAS-LA roughly estimates that it spent about \$325 per kitten in 2016 (supplies, staff, medical expenses).

The BFAS-LA nursery receives no government funding. It has no financial arrangement with the Los Angeles Department of Animal Services. Individual nursery donors are given tours of the nursery.

To the extent it receives support from the Development team at Best Friends, that comes out of the Utah headquarters location.

For further information, contact:

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# Jacksonville Humane Society

## Overview

The Jacksonville Humane Society (JHS) is a private, non-profit animal rescue organization headquartered in Jacksonville, Florida. In April 2012, it joined with Jacksonville Animal Care and Protective Services (ACPS) and First Coast No More Homeless Pets (FCNMHP) to start a kitten nursery to handle underage kittens the foster network could not absorb and to take steps toward making the city of Jacksonville a “no kill” community. The project is dubbed “Kitten University” and kittens that have been cared for by the nursery and its related foster program are called “graduates,” a fact touted in their adoption biographies.

In 2016, the JHS nursery cared for nearly 1,600 kittens, newborns to eight weeks old, as well as feral moms with kittens. Its network of foster homes cared for 2,337 animals, including dogs, cats, kittens and puppies. The majority of animals in foster care is kittens up to eight weeks old.

The peak kitten season in Jacksonville runs from May to September. The nursery has 71 bank cages available for cats/kittens at Kitten University. So, if on average each cage held three kittens, the nursery could handle about 200 kittens at any given time.

JHS primarily measures the success of its nursery by tracking kitten survival rates. The nursery’s survival rate in 2016 was approximately 85 percent.

### Kittens Taken In Under Eight Weeks Old

	2014	2015	2016
Total	2,454	1,323	1,563
Live release	2,167	1,132	1,336
Non-live release	287	191	227
Survival rate	88%	86%	85%
Mortality rate	12%	14%	15%

The nursery is located in a converted house that was donated to JHS, within walking distance of the main shelter. It has the advantage of being separate from shelter traffic, which makes it easier to isolate/separate kittens from the general animal population.

JHS is building a new shelter facility, expected to open in 2017. It will move most of its kitten care to that facility, which will

contain separate rooms to house kittens with ringworm, panleukopenia, upper respiratory infections, and other illnesses that are difficult for fosters to handle. Healthy kittens and bottle babies will continue to be sent to foster homes. The original nursery will remain and be used to house overflow if needed.

### Fast Facts

*Opened April 2012*

*Care for 1,563 kittens 2016*

*Survival rate: 85 percent*

*Facility is approximately 1,200 square feet*

*Paid staff: About 5*



JHS kitten nursery in 2016, a donated house.

## History

In 2012, the Jacksonville Humane Society joined with the City of Jacksonville’s Animal Care & Protective Services and another non-profit focused on spay/neuter programs, First Coast No More Homeless Pets, to start a kitten nursery to address the inordinately high rates of kitten euthanasia happening in the Jacksonville area. JHS had a spare building, staff (veterinarians) and volunteers to contribute. FCNMHP had grant money from Best Friends Animal Society as well as from volunteers; ACPS had kittens.

It took one month and minimal funding to get the nursery up and running that first year. The goal was to save 500 kittens; they cared for 578. JHS relied almost exclusively on volunteers to feed the kittens (including bottle babies 24/7) and do all the cleaning. The next year JHS cared for 745 kittens during the four months it was open (April-August), but the kitten mortality rate was a too high at 26 percent. It became clear that the nursery could not rely so heavily on volunteers. Paid staff inevitably had to cover for someone who had to miss a shift. While volunteers continue to be important to the nursery, JHS realized it needed dedicated nursery staff. It also concluded it needed to slow admission until staff and volunteers could get comfortable with the protocols and to train volunteers better. This was the first big lesson learned.

*JHS learned in its first year that the nursery was not the best place to care for bottle babies.*

A second lesson JHS learned in its first year was that the nursery was not the best place to care for bottle babies. Around-the-clock care was very expensive and it was hard to rely on volunteers for overnight feedings. Without a mom, these kittens are especially fragile and require more staff resources. JHS decided they could not justify keeping orphaned kittens under four weeks at the nursery while the city shelter was euthanizing over a thousand five- to six-week old kittens. Older kittens have a better chance at survival and require less resources and time to get to adoption age. JHS changed course, sending all bottle babies into foster care and helping the city shelter develop a strong bottle baby foster program, called the Kitten Army. JHS also works to find additional foster homes for bottle babies when animal control gets overloaded. JHS uses the nursery to care for sick kittens and feral moms with kittens.

JHS maintains that four key ingredients fuel their efforts: partnering with like-minded organizations that each bring something different and important to the table (people, money, kittens); having enough paid nursery caregivers to supplement volunteer time; having a thriving kitten foster program, and getting media coverage to bring in more volunteers, fosters and money.

## Facility

The current JHS nursery (until the new shelter opens in 2017) is a one-story, wood-frame house donated to JHS and initially used as a medical facility. It is about 1,200 square feet, and currently has five rooms flowing off one central room. Three of five rooms are used to isolate kittens with diseases that require quarantined housing (e.g., ringworm). A fourth room functions as a laundry and supply room. The fifth room houses kittens and administrative workstations, and is used as an exam room both for in-nursery kittens and for foster appointments. There are sinks in these rooms. The main room contains cages for kittens, and medical and other supplies.

JHS uses a mix of standard steel bank cages and laminate on wood cages to house kittens. It also has a standard household washer and dryer (one of each) to handle all its laundry. Other basic equipment includes a microscope, laptops and printers, a steel exam table, and many cabinets (both open and closed) for storage.



Stainless steel bank cages in one kitten nursery room

JHS is part of the Purina One Shelter Pet Program so it feeds kittens Purina brand kitten food, Fancy Feast canned kitten food, and uses Yesterday's News litter. It uses Purina FortiFlora on the food. It uses disposable aluminum foil pans for litter boxes

(supplemented with plastic litter boxes). Gowns, gloves, cleaning supplies (Accel/Rescue), and a range of medical supplies are stored in the laundry/storage room as well as on bookshelves in each of the other rooms of the nursery.

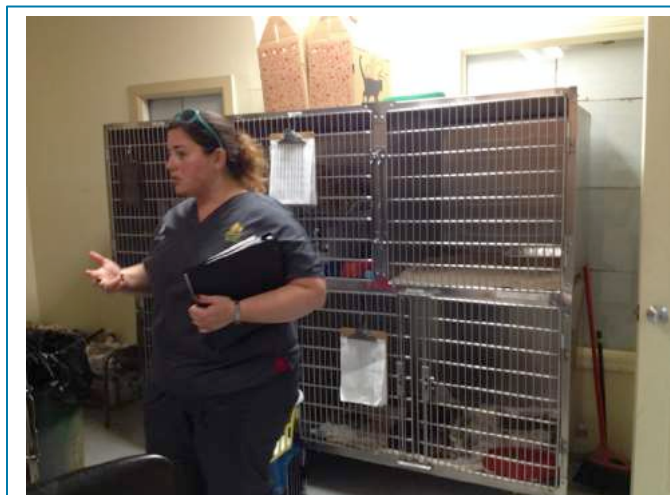
JHS holds a “kitten shower” each Spring to ask for donations to support the nursery and its foster homes. Items received from the showers include Kitten Milk Replacer powder formula, pediatric scales, gauze pads, hand sanitizer, SnuggleSafe heating discs, thermometers, computers and printers, Accel/Rescue cleaning solution, a washer and dryer, counter top refrigerators and microwaves, laundry and dish soap, mop buckets, mops, mop heads and spray bottles, kitty litter pans (plastic and foil), and monetary donations for medical supplies as well as gift cards to pet supply stores.

## Staffing

### *Paid Staff*

The nursery has two full-time and two part-time staff plus a medical team. There are two paid staff on duty at any given time, seven days a week. A full-time Shelter Technician works with the veterinary staff to ensure that the kittens receive proper care (e.g., diagnostic testing, administering vaccines and medications, and filling medications), keeps track of inventory and ordering supplies, provides surgery support (e.g., recovery, patient record updates, cleaning/wrapping of used packs) cleans the nursery, and keeps the records updated. A full-time Shelter Technician Assistant assists the Shelter Technician.

One medical team staff member is on hand at all times during the height of the kitten season. A Shelter



JHS Vet Katie Green on “rounds”

Veterinarian provides care to kittens in the nursery (as well as other animals at JHS generally). A Medical Manager oversees the entire kitten nursery operation.

Because the number of staff members is relatively small and the nursery does not care for bottle babies, staff scheduling can be done simply by using a table created in Microsoft Word.

### *Volunteers*

Volunteers dedicated to the nursery have always been an integral part of the Jacksonville nursery. Enthusiasm for helping to feed and care for kittens ran high from the day it first opened its doors. JHS signed up many volunteers new to the organization

to work only in the nursery. In addition, employees from local businesses would sign up for shifts. JHS also worked closely with active feral cat groups to get the word out and to take feeding shifts. Another regular source of volunteer labor has been individuals performing their court-ordered community service obligations.



A volunteer coordinator, who is an employee of the JHS shelter generally, schedules kitten volunteers. Staff will provide him/her with input if they have special needs or when they need additional help. Volunteers sign up for shifts using Volgistics.

All kittens under four months old are tested for FeLV prior to going to foster using the FeLV snap test and are individually tested. Every kitten in a litter is tested. If the snap test comes back positive, a combo test (for FeLV/FIV) will be administered. No kittens will be euthanized simply because of a positive result.

Information is entered into PetPoint.

### **Sanitation**

Once a week all cages are pulled away from the walls and the floors are mopped behind and under where the cages typically stand using Accel/Rescue. Each cat cage is cleaned and outfitted with fresh bedding and bowls every day.

When cleaning isolation rooms, staff must wear protective gowns and gloves. Gloves should be changed between each kitten/kitten group being handled and each cage that is being cleaned.

Carriers are cleaned in a designated cleaning area and stacked with the cage door facing up. They are rinsed with water and then cleaned with Wysiwash, and scrubbed with a hard bristle brush and/or sponge. They are rinsed again and stacked in the clean carrier designated area with the cage door facing downward.

All dishes, litter boxes and plastic toys are washed with Accel/Rescue and hot water in the sink in the area from which it came. All items should be completely submerged in the water and left to sit for five minutes. Dishes and litter pans are stacked in their designated area and left to air dry.

### **Medical Protocols**

#### **Diarrhea**

Upon first observation of diarrhea, a fecal float and direct smear analysis will be performed. If vomiting, lethargy, or anorexia are also present, the kitten will be tested with a snap test for panleukopenia.

If the result is hookworms, roundworms, or negative for parasites, staff ensure the kitten was dewormed with a broad spectrum dewormer (pyrantel or Panacur). Deworming occurs again every two weeks from the first dosage, given concurrently with Forti-Flora for probiotic therapy.

If the result is coccidia or negative for parasites, the kitten is dewormed with Marquis Paste and also given FortiFlora for probiotic therapy.

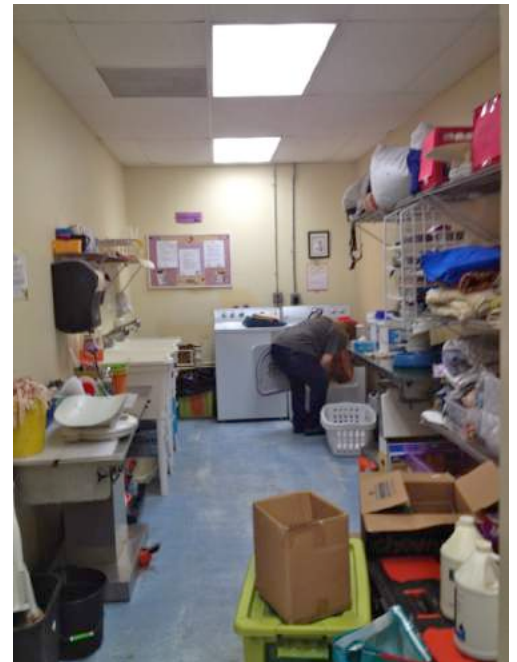
If diarrhea persists despite deworming, the staff may change the kitten's diet to prescription food, and a full veterinary exam should at this point be performed.

#### **Fading Kitten Syndrome**

Fluids, temperature monitoring and sometimes antibiotics are used as supportive care for kittens suffering from fading kitten syndrome.

#### **FeLV**

Kittens are tested for FeLV as soon as the veterinary staff can get a vein. Testing whole litters (batch testing) is not reliable as each kitten's immune system is unique to that individual. All cats and kittens that have discordant FeLV test results will be retested four weeks after the posted date of the previous immunofluorescent assay (IFA) analysis, and then six weeks after the second IFA if the results are still discordant.



JHS nursery laundry, main supply room

Healthy kittens that test positive for FeLV will be placed in appropriate homes or are sent to rescue.

### *Panleukopenia*

Kittens with panleuk are treated on a case-by-case basis. Kittens will be dewormed and given fluid therapy through an intravenous catheter, possibly supplemented with dextrose and/or potassium. They receive Baytril and Ampicillin together.

Often, Cerenia is administered for nausea and metronidazole is used to combat diarrhea. Food is offered as early as possible in the early course of the disease.

Most JHS panleuk kittens survive through supportive care and active involvement with the medical team.

### *Ringworm*

When ringworm is suspected a Wood's lamp evaluation is performed by a medical team staff member. Regardless of the Wood's lamp result, a DTM (dermatophyte test medium) culture is started. Kittens who test positive are immediately quarantined and lime-sulphur dips are performed twice weekly for four weeks. Eye lubricant is applied to the kittens eyes to protect them during the dip. Kittens are housed in cages with access to a room heater to avoid getting too cold. Each cage is deep-cleaned on the days the kittens are dipped.

Kittens over two pounds can start on oral anti-fungals. Kittens are re-examined every two weeks with a Wood's lamp.

### *Upper Respiratory Infections*

Kittens with clear ocular discharge and occasional sneezing are monitored daily but remain in the general population. It is hoped that stress-induced herpes virus will clear as the stress eases. If it does not, kittens with mucoid, green/yellow ocular or nasal discharge, repetitive sneezing with discharge, oral ulceration, open mouth breathing and anorexia are moved to isolation or sent to foster care.

Kittens are given oral antibiotics, starting first with doxycycline, and if no improvement, then azithromycin, and then Baytril. Kittens with ocular changes, ranging from discharge to conjunctivitis, swelling under the lids or excessive blinking are given first erythromycin, and if no improvement then gentamycin, then tobramycin. Kittens with both congestion and anorexia are given saline in each nostril until it resolves; and if not, then cyproheptadine. Kittens with oral ulceration may receive pain medication. If calici is suspected, the doctor is notified.

**URI Monitoring Chart**

	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>Appetite</b>	Eats everything offered	Eats most of what is offered	Picky, eating occasionally	Anorexic, not eating anything offered
<b>Eyes</b>	Clear eyes with no discharge	Watery eye or occasional winking	Healing ocular ulcer or purulent ocular discharge	Ocular ulcer or severe swollen eyelids
<b>Nose</b>	No nasal discharge	Clear nasal discharge	Purulent nasal discharge	Purulent crusty nasal discharge
<b>Sneezing</b>	No sneeze marks on kennel walls	Occasional clear sneeze marks on kennel walls	Purulent sneeze marks on kennel walls	Rapid fire sneezing and several sneeze marks on kennel walls
<b>Congestion</b>	No audible breathing sounds	Slight breathing sounds	Moderate breathing sounds	Very audible breathing, sometimes open mouth breathing
<b>Oral Ulcers</b>	No oral ulcers seen on tongue or scabs on nose	Healing oral ulcers (pink in color)	Healing and raw oral ulcers (pink and red in color)	Several raw oral ulcers present (red in color)
<b>Attitude</b>	Very bright and interactive	Bright but not interactive	Does not seek attention but alert	Depressed and hiding in back of kennel

Kittens may become anorexic from oral ulcers (pain), severe congestion (unable to smell food) and nausea. Subcutaneous fluids will be administered. If there is no improvement within a day, appetite stimulants may be prescribed.



## *Euthanasia*

Veterinarians make all euthanasia decisions. Fading kitten syndrome is the largest cause of kitten death at the nursery. Also important are otherwise treatable illnesses that were not treatable because symptoms were not recognized soon enough in foster care, so the kitten was not brought in early enough for medical care to help.

## **Budget and Funding**

The nursery started on a shoe-string budget. In its first year, the monthly budget was \$10,000-\$12,000 (for five months, April-August). This was funded in part from the Best Friends grant, which expanded in the second year to \$120,000, enough to run the program year-round in an area with a kitten season that actually runs longer than April to August. For the first couple of years the nursery operated under a multi-year “no kill” grant from Best Friends. JHS received no municipal funds for the nursery. It currently receives no grant funding for the nursery.

JHS cannot estimate the current total cost of the kitten nursery because so much of its expenses are shared with the shelter generally. Medical staff works for both the nursery and the shelter more broadly, and hours spent in the nursery are covered by the medical center’s budget, for example. The salaries of the kitten Foster Coordinator and the Volunteer Coordinator are part of the JHS budget more broadly.

Media coverage of the opening of the nursery was a boon to fundraising. Front page stories with pictures of cute kittens being bottle fed brought in volunteers and donors who provided funding and held “baby showers” at local big-box retailers to bring in needed supplies.

Indeed, community partnerships have been a large source of both income and cost savings for the nursery. Washers, dryers, microwaves and refrigerators used in the nursery are all donated by the community.

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# San Diego Humane Society

## Overview

The San Diego Humane Society (SDHS) is a private, non-profit animal rescue organization headquartered in San Diego, with smaller “campuses” in Escondido and Oceanside, California. Many of the kittens at SDHS (all three campuses) come from the Department of Animal Services Central, North, and South campuses, El Cajon Animal Shelter, and Chula Vista Animal Care Facility. But kittens also come from owners as surrenders or strays, or sometimes from organizations outside San Diego county.

In 2016, the San Diego nursery cared for 1,107 kittens up to four weeks old, and moms with kittens.<sup>1</sup> Older kittens were sent immediately to foster care, sent to the other campus nurseries, or housed in holding kennels at other campus nurseries until foster care could be arranged. While the focus of the nursery is on kittens four weeks old and younger, it does often have kittens over four weeks old when they are not yet candidates to go to foster due to health concerns or lack of an available foster home.

The area’s kitten season runs from March to November. The San Diego campus has the capacity to handle up to 160 kittens per day; however, 125 is the preferred capacity. During the off months, the nursery is closed and any kittens that come in go to the main shelter or to foster care.

The nursery’s survival rate in 2016 was 66 percent for kittens aged one day to two weeks, and 93 percent for kittens aged two to four weeks.

The nursery that is profiled here is located in a leased warehouse building across the street from the main shelter facility located at 5500 Gaines Street, San Diego. The Oceanside and Escondido facilities also have kitten nurseries, but they are small and do not care for bottle babies as they are not operational 24 hours a day.

### *Fast Facts*

*Opened March 2009*

*Cared for 1,107 kittens in 2016*

*Survival rate: 66-93 percent*

*Facility is approximately 2,000 square feet*

*Paid staff: 22*



**The San Diego Humane Society nursery is in a leased warehouse across from the main shelter**

## History

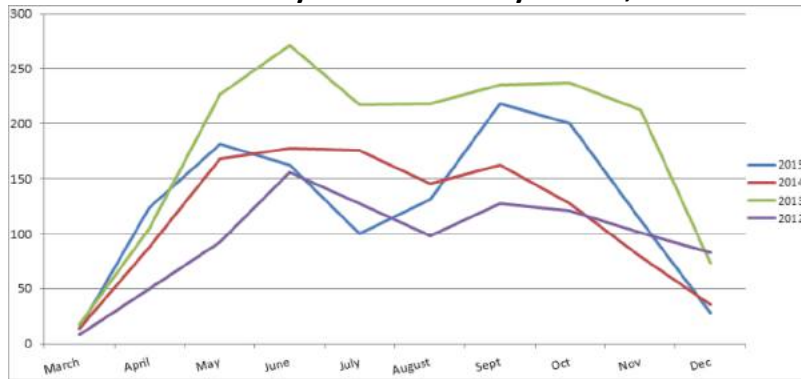
Underage orphan but treatable kittens were being euthanized in the San Diego area in large numbers in 2007 and 2008 due to a lack of resources available to care for them. SDHS and other area shelters and rescue groups realized something needed to be done, and SDHS took on the task of starting a nursery. The goal was to end euthanasia of treatable pets.

So in March 2009, SDHS started its first high-volume, 24-hour kitten nursery for orphaned and newborn kittens thanks to a coincidence of key ingredients. Space became available in a leased warehouse building across the

street from the SDHS shelter, and funds to run the nursery materialized with part of a \$1.4 million grant

<sup>1</sup> This count does not include kittens that went to nurseries at the other San Diego Humane Society campuses or straight to foster without routing through the nursery first.

### SDHS Kitten Nursery Kitten Intake by Month, 2012-2015



Source: SDHS

from the ASPCA, thanks to a bequest from a San Diego resident and long-time supporter of both the SDHS and the ASPCA.

When it started, the San Diego nursery took in kittens up to eight weeks of age, and sometimes even as old as 16 weeks, so after an initial intake of 660 kittens in 2009, the kitten count hit a peak of over 1,700 in 2014 with a survival rate of over 88 percent. However, serious disease outbreaks reduced the intake numbers in 2015 (1,500) and 2016

(1,100) and the survival rates as well. The numbers cared for also declined because the size of the nursery was reduced in 2016 to make room for the space needs of its foster and community PAWS programs. The age range of kittens cared for in the nursery was reduced in 2016 to four weeks and under, and older kittens were moved largely into foster care. This enabled SDHS to focus its specially-trained 24-hour staff on the younger, more delicate kittens most needing specialty care (those under four weeks).

## Facility

The nursery uses about 2,000 square feet of space in a warehouse building with very high exposed ceilings. Until 2015 it had no heat or air conditioning (this largely impacted staff and volunteers more than it did the kittens). The space is one large room with a very small adjoining room in which there is one sink and two (each) household washers and dryers. As leased space, SDHS has so far had to make do with the plumbing and drainage that already existed in the warehouse.

The space is divided into three areas: “Quarantine A,” and “Quarantine B,” and “Queens and Kits.” A fourth distinct area, “Socialization” (which was meant largely for older kittens who now get sent to foster care) was dropped in 2016 when the nursery space was reduced. (Younger kittens continue to get socialization from staff and volunteers in the nursery, just not in a separate section of the nursery.)

Each area is self-contained with a complete set of supplies (again, everyone must share just one sink located away from the three sections). Even blankets and towels remain in the same section (before and after being washed). Tags and laminated magnets help to identify which supplies are currently in the washer or dryer so they can be returned to the correct Quarantine area.

The areas each contain a microwave; small refrigerator; several (plastic) tables; a metal table for medical exams; shelves with supplies; a cart with supplies like gloves, tissues, paper towels, cleaning supplies, tongue depressors, etc.; a trash can, a whiteboard, plastic bins in which to put kittens when they are outside of their cages, paper trays for food, plastic food and water bowls, wet and dry food, a heating pad for a hot water container (e.g., a coffee mug) or a crock pot for heating water, and lots and lots of toys, including plush toys for snuggling.



Laminate on wood condos at San Diego Human Society nursery

## SDHS Kitten Nursery Floor Plan



Kittens enter either Quarantine A or Quarantine B based on vacancies, rather than age group. Larger litters are split between two cages. One cage in one area contains a kitten cam.

Singletons are kept alone until their eyes open, after which they are combined with other kittens for socialization and comfort. A single neonate will be introduced to a nursing queen to see if she will accept it, but if not accepted within a few hours, the kitten is removed. The staff believes that socialization and comfort are worth the potential risk of a contagious disease.

### Equipment

Cages are laminate on wood with stainless steel bars made by Shor-Line. A set of four costs about \$3,000. Nursery staff has no complaints about their ability to clean these cages with strong cleaners. They noted that the laminate may bubble if a heating pad is placed on them after cleaning with liquid that has not yet fully dried, however.



The cages are divided into sections with portholes that allow the kittens (and their mom if she is present) to move from section to section. These sections can be walled off with removable dividers as needed to keep kittens in one area while cleaning happens in another, or to keep bottle babies confined in a small space to ensure they stay warm. Also, unfriendly moms can be more easily separated from their kittens when the kittens need to be handled.

Additionally, the nursery uses taller cages made by Ferret Nation to give older kittens more room to run and climb. They are also used for overflow housing when all the other kennels are full.

The nursery uses household washers and dryers, which they have to replace every two years or so due to wear and tear from near-constant use.



**Kitchen/laundry room at San Diego Humane Society nursery**

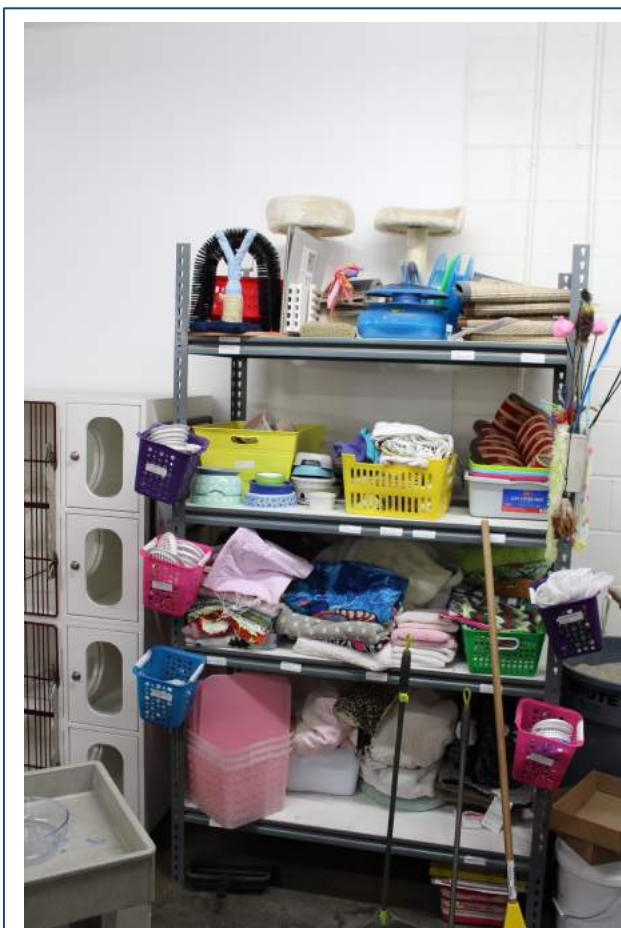
### *Supplies*

The nursery uses foldable litter boxes and cardboard boxes that came with bulk shipments of canned food. One volunteer arranged to have a store collect boxes for kitten litter boxes.

All of the kittens' paperwork is kept in a central location in each area in a plastic binder. Feeders take notes about the kitten they are caring for on scrap paper and later transfer those notes to the file folder in the plastic binder with clean hands and pen.

Other key supplies include: Sunbeam electric heating pads (not SnuggleSafes), clear plastic bins for use as nebulizer boxes or for containing kittens while their cages are cleaned, Purina clay litter (or Yesterday's News litter for kittens that eat clay litter), pee pads, scales with clear plastic bowls, small heating pads for coffee cups containing water or crock pots with water to heat bottles, bottles and nipples (Miracle Nipples for those kittens having difficulty latching), and Kleenex and baby wipes to stimulate kittens.

The nursery has a board on which Post-It notes are placed notifying volunteers of nursery supply needs. If they wish, people can pull off a Post-It note for an item they plan to get for (and donate to) the nursery.



**Supplies in a quarantine area**

### *Staffing*

#### *Paid Staff*

The nursery employs a Director and a Supervisor, and about 20 paid nursery caregivers. Some of these positions (full-time and part-time) are seasonal. The nursery supervisor is responsible for the supervising nursery caregivers including 24 hour shift scheduling. The Supervisor works in close partnership with the foster team to provide support for the foster program, and is respon-

sible for oversight and training of SD Nursery volunteers. A veterinarian or other approved member of the shelter's medical team is part of the daily "rounds" team and will prescribe treatments for ill kittens as needed.

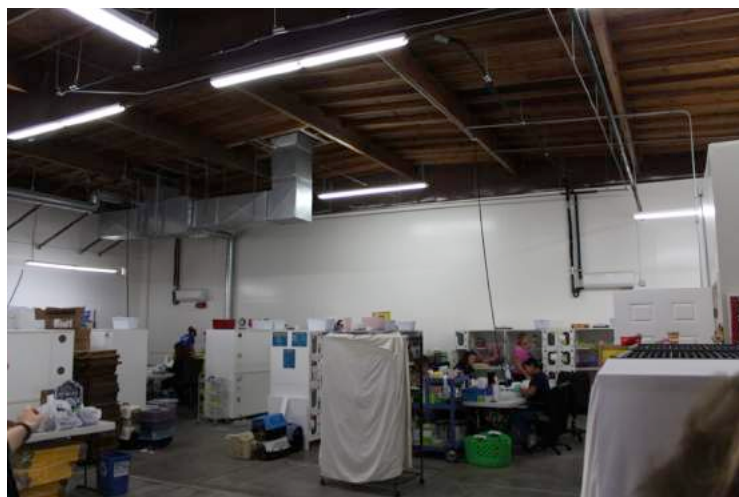
Caregivers weigh and feed kittens, stimulate and bathe them (as needed), socialize the kittens, enter notes and medical requests in Shelter Buddy, and clean the condos and quarantine areas in which they are placed. After feeding the kittens, for example, caregivers declutter the station, clean and disinfect the station, sweep the floor, empty trash, fold laundry, re-stock supplies, and ensure that all communications forms and boards are up to date. Caregivers also train volunteers.

After each season, seasonal caregivers need to reapply for the next year (full-time regular staff does not need to reapply). Seasonal staff is paid for the months they work and get those benefits required by local employment laws. Caregivers are paid hourly, at a rate just under \$13 per hour. California has specific and strict overtime rules that increase the cost of labor.

Staff scheduling is done on an Excel spreadsheet.

Staff turnover is an issue. The seasonal nature of the work means that after the season ends, some employees find other jobs that run the full year and they, therefore, do not reapply to work in the nursery the next year.

### **Volunteers**



**View of two Quarantine rooms at San Diego Humane Society nursery**

When the nursery started, it did not use volunteers. But SDHS soon realized it could not function without them and the nursery now relies on more than 220 volunteers who donated about 5,600 hours during the 2016 season. During the peak of kitten season in 2016, 110 volunteers per month were working in the nursery. SDHS has found their volunteers to be reliable. They know that the work they do is vital to the success of the nursery. Volunteers are also made to feel an integral part of a team that includes paid staff.

If volunteers are primarily interested in "cuddling kittens," SDHS encourages them to become kitten fosters (who largely care for weaned kittens; some can take kittens still partially on the bottle). If volunteers are ready for a more clinical experience (i.e., wearing gloves, following sanitation and disease protocols and "arms length" kitten cuddling – i.e., they can hold, pet and play with them as long as they follow appropriate protocols), they are invited to volunteer in the nursery. Volunteers are told that the likelihood that a kitten could die is high, and SDHS tries to prepare them for this outcome, but as gently as possible.

Five volunteer mentors, and two volunteer bottle baby mentors, support the non-seasonal staff in training other volunteers. These trainers have worked in the nursery for some time and have teaching skills. SDHS also uses 15 training videos that cover everything from how to take out the trash to how to vaccinate kittens (see for example, [https://www.youtube.com/watch?v=QYWXZJn2W\\_Q&feature=youtu.be](https://www.youtube.com/watch?v=QYWXZJn2W_Q&feature=youtu.be)). Volunteers watch these videos from home. Volunteers also take a quiz (using Survey Monkey) to ascertain that they have learned the required materials.

Kitten season begins with a week-long staff and volunteer training session, where staff is trained in how to work with volunteers as team members. Mid-season another training session is held for new staff and volunteers, again making extensive use of the videos.

Volunteers are organized into three tiers. The first focuses on “foundation” tasks: cleaning, doing laundry, folding litter boxes, giving kittens baths, making formula, and helping the nursery caregivers with data entry. Volunteers must complete a minimum of five shifts performing these foundation tasks before they can sign up for the second tier training: bottle-feeding kittens and cleaning kitten condos. Even volunteers who have experience bottle feeding kittens elsewhere must go through training to ensure that they fully understand the SDHS nursery disease prevention protocols. If these feeders find they cannot adjust to the SDHS protocols, they may choose to foster bottle babies at home rather than feed them during a shift at the nursery. The third category of volunteer is able to treat kittens medically (e.g., give vaccines), and typically volunteers in this category are professional veterinary technicians who come in on a set schedule. SDHS has four volunteers in this category working two shifts per week. They also may assist with kitten foster appointments.

*If volunteers are primarily interested in ‘cuddling kittens,’ SDHS encourages them to become kitten fosters (who care for weaned kittens).*

In 2016 SDHS added another category of volunteers: those able to care for panleuk kittens. These volunteers must be very skilled and are drawn from the nursery’s ranks of long-term volunteers.

A volunteer’s first shift occurs within a week of the completion of training. SDHS uses Volgistics to schedule two-hour shifts running from 5:00 a.m. to 1:00 a.m. the next day. Volunteers are expected to work at least four hours per month, or one shift every other week. They may schedule two back-to-back shifts (i.e., a total of four hours per day), but no more to prevent “burnout.”

SDHS attributes the success of its effort to integrate volunteers into the nursery to the team approach it takes. The season starts with volunteers being invited to attend all-day staff training sessions which are held during the week. The fact that volunteers decide to attend (many taking time off from work or other obligations to be there) impresses the staff and helps to build the team outlook. In addition, SDHS makes sure to show its appreciation of its volunteers. It holds various volunteer appreciation events throughout the year, including an end-of-season/holiday party.

### **Foster Program**

*Bottle baby foster classes are held once a week ... and attendees are expected to take home kittens at the conclusion of the class.*

The foster program primarily focuses on placing weaned kittens in over 260 kitten foster care homes, including about 50 who are willing to take kittens transitioning from the bottle to regular food. There are about 10 bottle baby fosters as well. SDHS does not do

foster home visits, as it requires a lot of staff time and resources and, when SDHS staff did such visits, they were not finding anything in the checks to raise concerns or decline a potential new foster.

Bottle baby foster classes are held once a week, typically with five to ten people in each class. They are taught by foster department staff. Attendees are expected to take home kittens at the conclusion of the class. Other foster classes (for all animals) are held twice a month with eight to 15 people per session. The kitten foster (and volunteer) pool consists of University of San Diego students, retirees, stay-at-home moms, and individuals in the hospitality industry (they typically have certain weekdays free to volunteer), among others. Not much advertising is needed to encourage people to foster, but when there is a particular need, a Facebook post is helpful.

Fosters are not trained to provide medical care. They are instructed to observe and report any problems to the foster staff, who then work with the medical staff to resolve the problem. A foster staff person is on call 24 hours per day for emergency needs. Fosters are asked to contact this person (there is one number for them to call and foster staff follow a weekly rotation of being on call; the number forwards to the cell phone of the person currently on call) to see if the foster person can provide guidance over the phone. Fosters are also asked to call this number prior to

taking their kittens to an emergency clinic. Fosters are permitted to take their kittens to one of four emergency veterinary hospitals if there is an emergency. These vets give SDHS small discounts. The aim is to enable fosters to do all they can to ensure that a kitten doesn't die at their home, which is of course a troubling experience.

## Communications

Staff, volunteers and fosters communicate in a variety of ways. The Volunteer Liaison is the first link between volunteers and program management. Team meetings may be held, but not typically during kitten season unless there is something of immediate importance to communicate to the team. Program management will send email to volunteers only when it has something important to communicate (e.g., changes in procedures or protocols, pleas for shift coverage when the nursery is short-handed, requests for supplies). Volgistics has a new texting option that staff uses to contact volunteers when there is an urgent need for extra help.

Once a day the whole team, including a member of the medical staff and a member of the foster team, conducts "rounds." Medical concerns are noted (and also flagged in the computer system so the vets have a "heads up"), and kittens ready to be moved into foster care are identified. The vet will stay on after rounds to prescribe and administer medications.

SDHS maintains a foster website and blog. Fosters are expected to take the initiative to go to the site to see what animals are available for fostering. SDHS staff does not typically reach out to them with emails; however, if a situation is urgent they will. SDHS will send out e-blasts when it has kittens (or others) needing to get out of the shelter or nursery, or when it has special needs cases. In addition, often when they have an animal (or litter) needing foster, SDHS foster staff knows of specific homes that are open and would be suited to that animal, and they will call or email those homes directly rather than sending out an email to the whole foster list.

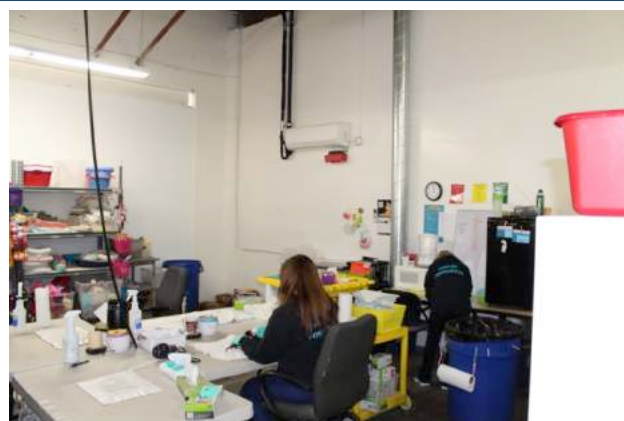
## Protocols

### Intake

Kittens are kept in one of the two quarantine areas in condos for at least 10 days to monitor for disease. After 10 days, if the kittens are at least five weeks old and healthy, they are considered for foster care. If they have health concerns, they will remain in the quarantine area until medically cleared. To avoid "false positives" for panleuk, kittens will not be vaccinated until they are at least seven weeks old.

Each litter gets a number, and each animal an ID number and a name. All of these details are recorded in Shelter Buddy. Identical kittens in the same litter are shaved in different places to distinguish them from each other. Each litter is given a communication form (to communicate any important details between caregivers, supervisor, manager or the medical team), a weight chart (volunteers enter the weights into Shelter Buddy), and a feeding form (when fed, amount consumed, urine output, fecal output, and comments, e.g., if the kitten had a bath, or it is losing weight, etc.).

SDHS uses Shelter Buddy to record a wide range of detailed information for each kitten, including the exact geographic location from where the litter came (to help target spay/neuter programs); the kitten's age at intake (which is different than its date of birth); the length of time it stayed at SDHS until adopted; how it left SDHS (e.g., adoption, transfer, natural death, euthanasia (including why)); medications received; names of litter mates and mother; and the kitten's movements from kennel to kennel through the shelter (to help identify the source of disease or disease exposure).



**Bottle baby feeders at stations at San Diego Humane Society kitten nursery**



## Feeding

Bottle babies are fed by staff or volunteers wearing gloves at feeding tables set up with a heating pad. The heating pad is covered with a clean pillow case (laid over the top of the pad; the pad is not inserted inside the pillowcase). Feeders prepare what they need before they take the kittens out of their condo. The same bottles are kept with the same litter for the duration of its need of bottles.

*Feeders do not snuggle the kittens.*

*Gloves must be work at all times.*

Kittens with a queen are weighed one time a day, unless they are losing weight, in which case they will be weighed two times a day. Bottle babies are weighed one time a day.

*Gowns are worn when signage indicates they are needed...*

Wet food may be offered to kittens at 3.5 weeks. SDHS does not typically use gruel to transition kittens to wet food. They may also supplement the weaning process with bottles. Once kittens are eating wet/dry food reliably, they can be fed in their condo as long as they are gaining weight; if they stagnate or lose weight, they will be fed on a table with staff/volunteer supervision again. The nursery uses ProPlan, but if kittens will not eat it, they may be offered Fancy Feast, or Royal Canin Babycat.

SDHS uses Fox Valley Milk Replacer. It is less chunky when mixed than Kitten Milk Replacer and open canisters do not have to be refrigerated. They are considering using Breeders' Edge because of reports that there is less diarrhea associated with it which, if that proves to be the case in the nursery, will be a cost savings with reduced medical expenses. This will certainly help to offset the higher cost of Breeders' Edge compared to Fox Valley (SDHS plans to add it to its Wish List for donors to consider purchasing for the nursery).

## Sanitation

When kittens are healthy, staff and volunteers wear gloves only (no other protective clothing when handling kittens), and change gloves between litters. Booties and gowns are only used when disease is present or suspected. Staff and volunteers do not move between Quarantine A and Quarantine B sections during a shift – they are assigned to one area and they stay there for their entire shift. Staff assigned to a Q section may, however, work in the Queens and Kits area during the same shift, which is where they will “gown up” before caring for the moms and babies in there, even if there is no known illness. This is because they are crossing between sections.

Accel/Rescue is used to clean everything, in a concentration to work in one minute of soaking time. Floors are cleaned every day with Accel/Rescue. Cages are cleaned daily, often several times a day, with soap (Dawn) and water, then Accel/Rescue when the litter moves out. When a kitten moves to a new location, the condo is thoroughly cleaned and disinfected before the next litter moves in. The condo is cleaned with soap and water, then disinfectant. Bleach is used when needed, such as after a suspected ringworm case has been cleared and moved out. A “clean” tag is placed on the condo. Supervisors check the condo with a flashlight. Bleach is used to deep clean condos if panleuk or ringworm are suspected. Staff takes the cages apart at the end of each season to clean them thoroughly with bleach.

Towels and blankets used in each space stay in (and are returned only to) that space. When laundry is done, a magnet identifying the source of the laundry is placed on the washer or dryer until the laundry is returned to the correct space. The nursery makes its own laundry detergent, composed of Fels Naptha (grated), Borax, and Arm & Hammer washing soda. Towels and blankets used with confirmed cases of ringworm and panleuk are trashed; towels and blankets used with suspected cases of ringworm and panleuk are washed.

After feeding, the pillow case used to cover the heating pad is changed out between litters, and before putting the next clean pillow case down, the heating pad and surrounding area (including the pen used to take notes about the last litter) are sprayed down with Accel/Rescue. Feeding bottles are washed with hot water and soap, followed by a

trip through a steam sterilizer intended for use with human baby bottles. However the process has its flaws so SDHS expects to change the manner of sterilization again before the next season. It may, for example, use those units that steam sterilize in the microwave – also designed for use with human baby bottles.

Feeders do not snuggle the kittens (again, they *do* socialize the kittens with petting and play; just not holding them against the feeder's body). Gloves must be worn at all times. Gowns are worn when signage indicates they are needed (e.g., ringworm suspected). Gloves (and gowns when disease is present or suspected, or when working with queens and kittens) are changed between handling litters. Gloves must be removed when handling communal items located outside of the individual kennel areas (spray bottles, food scoops, milk shaker, etc.).

### *Routine Treatments*

All orphaned kittens under two weeks receive one plasma injection subcutaneously. At two weeks, and every two weeks until adoption, kittens get Pyrantal and ponazuril. At five weeks they get a FVCRP vaccine (and every two weeks thereafter). A microchip is placed at five weeks. A FeLV test is done after five weeks. If the result is positive, the kitten is held for two weeks and retested. If positive for a second time, SDHS believes the kitten cannot be adopted to the general public, and “exit options” are explored. If none are found for placement, the kitten is euthanized.

### *Medical*

#### *Diarrhea*

Diarrhea issues are supported with subcutaneous fluids and probiotics while also trying to determine the cause. Sometimes it is food-related and the kittens' feeding can be adjusted; other times additional dewormers must be administered or metronidazole. Severe cases of diarrhea may warrant sending a fecal sample to a laboratory for additional testing. Dextrose is given orally every eight hours to kittens under 48 hours old and to those who have not eaten for more than 12 hours or who seem weakened or less responsive.

#### *Panleukopenia*

If panleuk is suspected a Snap test will be performed. If positive, the kitten and any others in the litter (who will be considered exposed) are quarantined and monitored for clinical signs for 14 days. If no symptoms show during the 14 days, the kitten(s) will be bathed and released from quarantine. If symptoms develop and are manageable, the kitten(s) will be treated with supportive therapy (fluids, etc.), and remain quarantined from the rest of the nursery population (this could include sending them to an approved foster; if no quarantine space is available, they may be euthanized). Once treated and healthy, indicated by two negative snap tests 48 hours apart, the kittens are bathed and put back into the general population.

The nursery had an outbreak of panleuk in 2016 that forced it to shut down for a few weeks. No kittens were accepted into the nursery for 20-25 days. All new kittens went immediately into foster care. All kittens in the nursery were considered panleuk-exposed. Staff and volunteers wore gowns when caring for every litter in the nursery – until they ran out of gowns, when they creatively wore trash bags instead!

#### *Upper Respiratory Infections*

Upper respiratory infections are treated with antibiotics and eye medications as needed, and/or nebulization. For calici infections with active oral ulcers or arthritis, pain medications may also be prescribed.

### *Euthanasia*

Euthanasia will be performed if the kitten is found to be suffering and not responding to treatment plans. These kittens would have a guarded, poor or grave prognosis and be considered “Unhealthy/Untreatable.” Some kittens may “crash” between feedings and pass away unassisted. In this situation, nursery staff will post the news on the communication board, the communication sheet and send an email to the Kitten Information Group.



## Budget and Funding

The SDHS nursery's fiscal year budget for 2016/17 (July/June) is estimated to total about \$641,600, not including medical expenses or the value of donations. Nearly 64 percent this cost is salaries and related costs; 7 percent is supplies and about 2 percent is food.

The cost per kitten is \$580 – but again, this estimate does not include the value of donations, including volunteer time (the value of volunteer time alone would add over \$122,000 to the total).

The SDHS nursery receives no government funding. It has no financial arrangement with the Department of Animal Services or other shelters from which it pulls kittens. It began with a bequest of money, and its expenses since are funded primarily through a sophisticated and active SDHS team that raises money for the SDHS generally.

A “kitten shower” held in the spring is the only fundraising activity that is specific to the nursery.<sup>1</sup> It brings in donations of much-needed supplies and sometimes money as well. The nursery also uses some supplies, primarily food and litter from Purina, that are donated to SDHS under contract. Going forward, SDHS plans to hold a virtual kitten shower using its Amazon Wish List. This will allow people to donate items remotely and will not require them to go to the shelter unless they want to. They will continue to offer tours for people who donate to the shower.

The SDHS team makes sure that donors to the organization with a passion for kittens are apprised of what is happening in the nursery and of any special needs it has. They try to ensure that donors understand exactly what the kitten nursery does with individual tours, and they pull together kitten stories that explain how the nursery saves lives. Some individuals make donations that are restricted for nursery operations. SDHS will also ask major donors to endow specific kitten nursery positions (e.g., the Director of the nursery). The kitten cam on one of the cages is also a useful way to engage the community in the nursery.

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Jennifer Brehler, Chief Operating Officer, [jbrehler@sdhuman.org](mailto:jbrehler@sdhuman.org)

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<sup>1</sup> SDHS held the shower on one day and it was too much time and work for one day: it included tours.



