The Anti-Cruelty Society

NEONATAL FOSTER PROGRAM
Thank you for being a member of this lifesaving fostering program. It can be a very challenging, but very rewarding experience. Chicago is faced with the difficult challenge every spring of making it through kitten season by assisting as many orphaned kittens as we can. A neonatal kitten is any kitten who is under 4 weeks of age and not capable of eating on their own or taking care of themselves. Neonate animals are in need of 24-hour personalized attention and care that we are unable to provide here at the shelter. These young kittens require: a warm living environment, multiple feedings over 24 hours, help with basic hygiene, and development of social skills. The following information is to aid in your understanding and care of these kittens to help provide a successful outcome for both kittens and foster parent. If you have any questions, we are here with you along the way!
Training Required
As you may know, neonate kittens are a vulnerable population that require lots of extra support. We provide you, as a dedicated foster, with as much training and resources as possible. In addition to this manual, you should have also completed the following training:

- Listen to the Neonatal PowerPoint presented by the Foster Services Team
- Watch demonstration videos by Kitten Lady
- Discuss bottle feeding/watch video
- Discuss stimulating/watch video
- Discuss weaning/watch video
(If neonatal kittens are available, there will be a hands-on demonstration for in-person orientations.)
- Discuss general health concerns/Kitten Fading Syndrome/ER
- Pet Loss Support Group
- Reminder about Facebook support, Foster Team support, and Foster Mentors

If you have not completed all of these trainings or if you have additional questions, please contact the Foster Team.

Neonatal Foster Responsibilities
1) Provide round-the-clock care and socialization to assigned foster animal(s)
2) Seek out assistance from the Foster Team and staff as needed
3) Complete a detailed Foster Personality Profile on each foster animal before drop-off
4) Act as a community ambassador for The Anti-Cruelty Society
5) Follow all policies and protocols as specified in this manual and the Foster Manual

Getting Started
1) Housing: Before bringing neonate kittens into the home, there needs to be a dedicated area to house the kittens. Keep in mind that not much is needed for these little ones. This should be a room or area that is free of items that could cause injury to the kittens as they grow and explore, such as; cords that they may chew on, items that could be broken, or small areas where they might hide and you cannot get to them. Ideally, it should also be free of drafts and be maintained at approximately 72° F. Neonates will need special housing at first which is discussed below. Hard floor and hard furniture surfaces (not upholstered) are best as growing kittens may have potty accidents and can be messy when learning to eat solid food. Although kittens have been checked before leaving the shelter, they can sometimes have diseases such as viruses or parasites that are not apparent at that time. You will want to have an area that can be thoroughly cleaned to protect you, any resident pets, and any future fosters.
2) **Cleaning:** During the foster period, the housing area may need to be cleaned several times a day. This is best accomplished with a dilute mild soap solution (such as Dawn dish soap) and a thorough rinse and dry to remove all organic material. Never use commercial cleaners, especially Lysol or Pine-Sol, as the residues can easily be absorbed through neonatal skin or ingested and are toxic to cats.

For disinfection between litters or with sick kittens, a bleach solution of 1 part household bleach to 32 parts water works well with 10 minutes of contact, then a thorough rinse and dry. If ringworm is a problem, then the dilution should be 1:10 but this should not be used when animals are present. See the ASPCA bleach dilution calculator at www.aspcapro.org/resource/bleach-dilution-calculator. This solution must be made fresh daily and all organic material cleaned off of surfaces beforehand with a soap solution. Any kitten bedding laundry should be washed with a cup of bleach added to the cycle.

At the end of the foster period, all surface areas in the foster room, all dishes and litter boxes, all bedding and toys, any scales, clipboards, etc. should be cleaned then disinfected with the bleach solution. Items that cannot be cleaned well should be discarded.

3) **Pets and People:** Neonate kittens are extremely vulnerable. Because resident pets can carry bacteria, viruses, or parasites which are not harmful to them but could be to an immature kitten, it is best to have no contact with neonates. Additionally, this will protect the resident pet from picking up any disease from the foster kitten. Make sure any resident pets are current on their vaccinations. Any pet with an ongoing chronic condition or a young or older pet is more susceptible to viruses from foster kittens. Likewise, we can carry germs on our clothes or body. A good option would be to have a smock or change of clothes to use in the foster area and a careful washing of hands and arms before and after handling fosters is a must.

Disposable gloves are a good option also.

4) **Supplies:** You will be given a neonatal kit containing:
- Bottles and nipples
- Syringes
- Kitten milk replacer (KMR)
- Canned and dry kitten food
- A heating disc
- A litter pan
- Toys

We also recommended having:
- A digital kitchen scale for daily kitten weights
- Non-clumping or paper cat litter (do not use clumping litter or wood shavings)
- Low sided dishes for water and food (small paper plates work well for canned food and can be discarded)
- Karo syrup (not necessary for all kittens, but may be necessary in an emergency)
- A small whisk or fork to mix formula
- Bottle brush
- Plenty of clean towels or similar for cleaning and bedding
- A container to house kittens. Depending on the kittens’ age, a lidless plastic storage bin, new covered litter pan, carrier, or even cardboard box work well for kittens before they are walking well. Remember that any enclosure should have sides that the kittens cannot get their bodies stuck in or fit through and older kittens climb well, so one with a top may be a good choice if there is not an entire room that is being used for their care. Examples pictured right.
We like to provide mom and kittens with a foster home to provide a more comfortable environment while they grow. By being away from the stress of the shelter and proximity to other sick kittens, we can also provide the kittens a safer place to grow. While mom basically does most of the work, you will still need to monitor progress and watch for problems. Kitten foster parents will be provided with a bag of Science Diet kitten kibble and canned food for your foster mom. Note that kitten kibble is higher in calories which makes it a great feeding option for nursing cats. This is the same food that the animals are fed in-shelter, and since they’ll return to this diet post-foster, it’s important to keep them on it. Please follow the feeding instructions that are printed on the back of each bag or even better, feed free choice. Depending on the litter size and amount of nursing, moms can need a large number of calories per day. If the dry food is available the kittens will also investigate it as they grow and get used to the smell and texture. Note that any change in diet, even such a minor one as switching brands of food, can cause GI upset.

If the kittens are with their mother, and under four weeks of age, the mother should take care of the feeding, elimination, and cleaning. Once the kittens are about four weeks of age, you should start to notice them showing interest in their mother’s food. This is an indication that they are ready to start the nutritional weaning process. Even though there is a mom present, it is still best if all kittens are weighed daily. This helps keep track of their health and also gives them some daily human contact. Some kittens may not be getting the nutrition they need from mom and will need to be supplemented with milk replacer as described below. It is best to provide a nest box that is big enough for mom and her body heat will keep it the correct temperature. A covered litter box or a cardboard box with a door cut a few inches above the floor line lined with bedding works well. This way mom can go in and out but kittens can’t accidentally crawl out. As kittens grow it is nice to have a perch or area where mom can separate herself if she chooses.
The majority of foster neonates will be orphan kittens who are dependent on the foster parent for most, if not all, of their needs depending on their age. The following is a guide to their care. It is important to keep daily notes on weights, feeding quantities, and stool and feces so that we can catch any potential problems early and hopefully correct them. Kittens should always be weighed at the same time each day to better track progress. A kitten usually weighs about 90-110 grams (3.2 - 3.8 ounces) at birth and gains 10 grams (0.3 ounces) per day. Usually, birth weight is doubled at 10 days with mother reared kittens and with bottle fed kittens doubling at 14 days. They will then gain about 3- 4 ounces per week. Bottle fed kittens grow at a slower rate than mom reared kittens no matter how good the foster care, but usually catch up in growth once weaned. There is a template for tracking that can be used in the packet.

**Basic Routine for Neonates**

1) Keep kitten warm  
2) Bottle feed kitten formula  
3) Gentle stimulation to pee and poop until they can do themselves  
4) Wipe down face and genitals  
5) Monitor the kitten’s weight and take observational notes  
6) Clean and sanitize housing and feeding items

**Keeping kittens warm**

One of the most important requirements for neonatal health is a warm environment. Neonates rely on the environmental temperature to help keep them warm as body warming reflexes are not developed for several weeks. If a kitten is not active or nursing normally, it is a good idea to check the body temperature. The body temperature of a kitten can be taken rectally with a digital thermometer with water soluble lubrication such as KY jelly. Thermometers should be cleaned of organic matter, disinfected with bleach solution, and then rinsed between kittens. Apply a small amount of the KY jelly to tip of thermometer and insert the metal tip gently into the anus. If the body temperature is not in the appropriate range for the kitten, then it should be warmed before attempting to feed. A body temperature lower than 94o F causes gastrointestinal inactivity and food will not move through the intestinal tract. The kitten should be slowly warmed no faster than 2 degrees per hour via a warm nest box. If the kitten is not active, it should be rotated every 30 minutes to ensure even warming. Once the body temperature is in the normal range the kitten should be more active and feeding can be attempted.
A warm nest box can be made using a 4-sided container with towel bedding and a heating device. The container should have sides high enough and should be of a small enough size that a kitten cannot accidentally crawl away from the litter and not be able to find its way back. The size of the nest box can be increased as kittens gain mobility. See examples under supplies. Overhead radiant heating is not recommended as it can decrease the needed humidity and dry the skin and respiratory passages. Ideally, the humidity of the air should be 55-65%. Usual home humidity is 40-50%. Humidity generally increases with radiant heat and reduction in any drafts, especially from air ducts.

A nest box can also be partially covered with a towel (make sure it will not fall in) to hold in heat and humidity. Good options to provide heat include an electric heating pad - no automatic shut off, a microwavable heating disk, or rice socks. All heat sources should be covered with 2 layers of bedding and only cover ½ of the nest box so that kittens can move away if they become too warm. A waterproof layer such as a pee pad is a good option also as it keeps any fluid away from the heating element which could then transmit heat more easily and cause burns. Bedding should be checked frequently and changed as needed. As kittens grow, start to walk, have access to solid food and a litter box, they will need more room but should still have a nest area where they can sleep together.

**Electric heating pad**: Keep covered with bedding, make sure cord is not accessible by kittens, use low setting but still make sure it is not too hot. Potential fire hazard.

**Microwavable heating disk (Snuggle Safe)**: Microwave according to directions and wattage of microwave. Must be totally cool before rewarmed in microwave so sometimes good to have two to trade out, cover with bedding, can be very warm at first, usually lasts 8-12 hours. Good to lay kittens next to instead of on the disk to prevent burns.

**Rice socks**: Rice socks can be made by filling a tall sport sock with white rice and tying the end on itself. These can then be placed in the microwave for about one to two minutes to warm the rice which will hold the heat for about 2-3 hours. Rice socks can be rewarmed repeatedly in the microwave until it smells like the rice is burning. The rice should then be replaced. Cover with bedding.

<table>
<thead>
<tr>
<th>Kitten Age</th>
<th>Body Temperature (Degrees F)</th>
<th>Nest Box Temperature (Degrees F)</th>
<th>Room Humidity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–1 week</td>
<td>95–97°</td>
<td>85–90°</td>
<td>55–65%</td>
</tr>
<tr>
<td>2–3 weeks</td>
<td>98–100°</td>
<td>80–85°</td>
<td>55–65%</td>
</tr>
<tr>
<td>4 weeks</td>
<td>99–101°</td>
<td>75°</td>
<td>55–65%</td>
</tr>
<tr>
<td>5 weeks</td>
<td>99–101°</td>
<td>72°</td>
<td>55–65%</td>
</tr>
</tbody>
</table>
Bottle-feeding neonatal kittens requires an around-the-clock commitment for the first 3-4 weeks of life. Fosters should only utilize a feline formula as it is made to match the components of the mother’s milk as closely as possible. This is either a liquid or powder formulation. Never use cow’s milk with your kittens as it can cause diarrhea or stomach upset. Please do not supplement your kitten’s formula with other foods until it is time for nutritional weaning at about 4-5 weeks old. They have a very sensitive intestinal system that can easily get out of balance if introduced to other foods too soon. When determining quantity and frequency of formula, a baseline determined by age and weight can be estimated from the following chart. Never feed a kitten who is not active or who is cool to the touch. Check the body temperature first and warm, if needed. Neonates should show suckling and rooting behavior and be able to right themselves. Also, remember that all kittens are individuals and some may eat more or less than indicated. As long as they are gaining weight daily and stools and urine are normal, they are on the right path.

*Always make sure all equipment for feeding is clean and sanitized and your kitten is warm and active.

1. **Nipples:** There are several types of nipples that can be used to feed kittens. Some nipples will need to have a hole made in them before using for the first time. This can be done by cutting a very small bit off the tip with scissors, cutting an x shape into the tip, or taking a hot needle and poking a hole through the tip. Try to center the opening as much as possible. It should be large enough that milk will drip slowly through the hole, but not a stream. Miracle nipples are another type with a hole already placed and work very well for feeding.

2. **Prep formula:** Milk replacer will either be in a liquid or powder formulation. Check to make sure the formula is within date and safe for use. Once formula is opened it should be stored in the refrigerator. Opened liquid formula will keep in the refrigerator for 48 hours while powder will keep for 3 months. It is best not to switch between the two. Powdered formula is easy to mix and more economical. Powdered formula can also be kept in an airtight container in the freezer for up to 6 months.

Mix formula according to directions on the can for the appropriate age of kittens except for the first 3-4 feedings dilute the formula an additional 25-50% with water or an electrolyte solution such as Pedialyte Classic non-flavored or Pedialyte Electrolyte Water No Sugar. This helps the GI system adjust from mother’s milk to formula and also helps rehydrate. This may have already been done depending on how long the kitten has been at the shelter, in which
case, mix the formula as directed. A small whisk helps to prevent the powdered formula to prevent nipple obstruction. Only mix enough formula for 24 hours and store in a glass jar in the refrigerator. When it is time to feed, place the bottle with formula in a cup of hot water to warm to around 101 degrees. Test it on your wrist and it should feel slightly warm. Never heat formula directly in the microwave as it can leach toxins from plastics, heat unevenly, or overheat and cause burns. Never feed cold food as it can lead to slowed GI movement and hypothermia.

3. Prep Kitten: Wrap the kitten in a towel or blanket and position him so that his belly is toward the floor. Kittens should not be fed on their backs or in an upright position. Think of how they lay next to mom in a natural feeding position. You can even bunch the end of the towel to give them something to knead against.

4. Feed: Turn the bottle upside down and allow a drop of formula to come out. Place the nipple in the kitten’s mouth and gently wiggle it, holding the bottle at a 45-degree angle to keep air from getting into the kitten’s stomach. This movement should encourage the kitten to start eating. The kitten’s tongue should cup around the nipple and make a tight seal. Little mouth bubbles and twitching ears are a good sign that feeding is going well. Try to keep the bottle close so the kitten does not overextend the head as this increases the chances of aspiration. Formula should always be sucked and never squeezed from the bottle. If at first you don’t succeed, wait a few seconds and try again. Usually, the kitten will latch on and begin to suckle. You can vigorously stroke the kittens head or back similar to a mother licking it which may help stimulate the suckling response.

Some kittens have difficulty getting the milk from the bottle. If the nipple hole size is correct and there is no other reason for problems, you can try loading a syringe with formula, placing the nipple on the end, and very slowly assist the kitten with taking the formula. Be very careful not to force fluid into the mouth as this can cause aspiration and pneumonia. Kittens do not have a gag reflex until about 10 days old so are at increased risk of aspiration. When a kitten is full, it will start chewing on the nipple or turning its head. You will also notice a little bulge on the left side of the abdomen just below the ribs where the stomach lies. If a kitten did not eat much, give it another go after the other kittens are fed and you have stimulated bladder and bowel function. If a kitten seems satisfied at individual feedings but is not gaining weight, it is best to increase the number of feedings a day to increase the caloric intake. Overfeeding at any one meal can lead to diarrhea, vomiting, or aspiration. A hungry kitten will be restless and cry. After each feeding, thoroughly clean and sanitize the feeding equipment.

### Table: Kitten Feeding Guide

<table>
<thead>
<tr>
<th>Kitten Age (weeks)</th>
<th>Kitten Weight (lbs, oz)</th>
<th>Kitten Weight (grams)</th>
<th>Daily Caloric Requirement*</th>
<th>Amount of Formula Per Day (ml)**</th>
<th>Amount Per Feeding (ml)*</th>
<th>Approximate Number of Feedings Per Day***</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1 week</td>
<td>2 oz</td>
<td>57 g</td>
<td>11 kcal</td>
<td>15 ml</td>
<td>2 ml</td>
<td>7–8</td>
</tr>
<tr>
<td></td>
<td>3 oz</td>
<td>85 g</td>
<td>16 kcal</td>
<td>23 ml</td>
<td>3 ml</td>
<td>7–8</td>
</tr>
<tr>
<td></td>
<td>4 oz</td>
<td>113 g</td>
<td>23 kcal</td>
<td>31 ml</td>
<td>5 ml</td>
<td>7–8</td>
</tr>
<tr>
<td>1 week</td>
<td>5 oz</td>
<td>142 g</td>
<td>28 kcal</td>
<td>38 ml</td>
<td>6 ml</td>
<td>7–8</td>
</tr>
<tr>
<td></td>
<td>6 oz</td>
<td>170 g</td>
<td>34 kcal</td>
<td>46 ml</td>
<td>7 ml</td>
<td>7–8</td>
</tr>
<tr>
<td></td>
<td>7 oz</td>
<td>198 g</td>
<td>40 kcal</td>
<td>54 ml</td>
<td>8 ml</td>
<td>7–8</td>
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<tr>
<td></td>
<td>8 oz</td>
<td>227 g</td>
<td>45 kcal</td>
<td>61 ml</td>
<td>9 ml</td>
<td>7–8</td>
</tr>
<tr>
<td>2 weeks</td>
<td>9 oz</td>
<td>255 g</td>
<td>51 kcal</td>
<td>69 ml</td>
<td>10 ml</td>
<td>7</td>
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<tr>
<td></td>
<td>10 oz</td>
<td>283 g</td>
<td>57 kcal</td>
<td>77 ml</td>
<td>11 ml</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>11 oz</td>
<td>312 g</td>
<td>62 kcal</td>
<td>84 ml</td>
<td>12 ml</td>
<td>6–7</td>
</tr>
<tr>
<td>3 weeks</td>
<td>12 oz</td>
<td>340 g</td>
<td>68 kcal</td>
<td>92 ml</td>
<td>14 ml</td>
<td>6–7</td>
</tr>
<tr>
<td></td>
<td>13 oz</td>
<td>369 g</td>
<td>74 kcal</td>
<td>100 ml</td>
<td>15 ml</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>14 oz</td>
<td>397 g</td>
<td>79 kcal</td>
<td>107 ml</td>
<td>16 ml</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>15 oz</td>
<td>425 g</td>
<td>85 kcal</td>
<td>115 ml</td>
<td>17 ml</td>
<td>5</td>
</tr>
<tr>
<td>4 weeks+</td>
<td>16 oz/1 lb.</td>
<td>454 g</td>
<td>91 kcal</td>
<td>123 ml</td>
<td>18 ml</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>1 lb/1 oz.</td>
<td>482 g</td>
<td>96 kcal</td>
<td>130 ml</td>
<td>19 ml</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1 lb/2 oz.</td>
<td>510 g</td>
<td>102 kcal</td>
<td>138 ml</td>
<td>20 ml</td>
<td>4</td>
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<tr>
<td></td>
<td>1 lb/3 oz.</td>
<td>539 g</td>
<td>108 kcal</td>
<td>146 ml</td>
<td>22 ml</td>
<td>4</td>
</tr>
<tr>
<td>5 weeks+</td>
<td>1 lb/4 oz.</td>
<td>567 g</td>
<td>113 kcal</td>
<td>153 ml</td>
<td>23 ml</td>
<td>4</td>
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</tbody>
</table>

**References**

* The daily caloric requirement was calculated using 20 kcal/100 g body weight and the amount per feeding using 4 ml/100 g body weight. The energy requirement is ~20–26 kcal/100g body weight and the maximum comfortable stomach capacity is ~4 ml/100 g body weight.

** Concentration 0.74 kcal/ml. (KMR) Most commercial kitten milk replacers in the US provide less than 1 kcal/ml (0.74 kcal/ml), acting to increase the volume of milk required to meet caloric needs. This can be problematic in terms of the number and size of feedings given relative to stomach capacity and more likely to result in gastrointestinal disturbances. This may also account for why bottle fed kittens grow slower than kittens that nurse off a mother.

*** As the kitten is adjusting well to the milk and the feeding volume, you may be able to increase the number of feedings per day. Be aware that exceeding the stomach capacity (amount per feeding) may put the kitten at risk of aspiration, vomiting, diarrhea, and gas build-up in the stomach and intestines. Overfeeding at any one meal can lead to diarrhea, vomiting, or aspiration. A hungry kitten will be restless and cry. After each feeding, thoroughly clean and sanitize the feeding equipment. If a kitten did not eat much, give it another go after the other kittens are fed and you have stimulated bladder and bowel function. If a kitten seems satisfied at individual feedings but is not gaining weight, it is best to increase the number of feedings a day to increase the caloric intake. Overfeeding at any one meal can lead to diarrhea, vomiting, or aspiration. A hungry kitten will be restless and cry. After each feeding, thoroughly clean and sanitize the feeding equipment. If a kitten did not eat much, give it another go after the other kittens are fed and you have stimulated bladder and bowel function. If a kitten seems satisfied at individual feedings but is not gaining weight, it is best to increase the number of feedings a day to increase the caloric intake. Overfeeding at any one meal can lead to diarrhea, vomiting, or aspiration. A hungry kitten will be restless and cry. After each feeding, thoroughly clean and sanitize the feeding equipment.

Cited reference: MaddiesFund.org

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Neonatal Feeding (Cont.)

Burping Kittens
Always burp the kitten after each feeding. Do this by gently rubbing and patting the kitten's back. There may not be an audible burping sound and if the kitten had a good seal on the nipple, there may not be much air to burp.

Kitten Stimulation
After each meal, kittens must be stimulated to urinate and defecate until they are able to do so on their own which usually occurs between 3 and 4 weeks of age. When kittens are with their mom, she takes care of this by licking the kittens in order to stimulate their bowels and bladder. For motherless kittens, use a cotton ball or tissue dampened with warm water to gently stroke the area around the kitten's rectum and genitalia while holding them upright or on their side. This process is necessary after each meal until the kitten can eliminate on its own. Urine should be virtually colorless and produced every time after feeding. Any strong color to the urine indicates dehydration. Continue to stimulate to urinate until there is no more urine produced. Stool should be mustard yellow to brown soft formed logs and be produced at least once a day. Once a kitten has reached 3-4 weeks of age and is starting to urinate and defecate with little stimulation, hold it in or over a litter pan filled with paper or non-clumping litter. This will help it get used to the texture of the litter also. Do not force its feet into the litter or move their paws back and forth. It is not necessary and may cause them to dislike the litter box. Using the litter pan is an innate ability and really doesn’t require much training. If kittens are going outside the box and the stool is normal, you can place some of the stool in the litter pan to encourage them to go there. Make sure the litter pan has low sides that the kitten can get into easily. A foil brownie pan or cardboard lid works well and again, never use clumping or wood chip litter.
Caring for independent eaters

By six to seven weeks old, your kittens should be independent eaters. Dry kibble should be their primary source of food, since it has a higher calorie content than canned or adult kibble. Feeding free choice is the best option. Offer wet food frequently as well to encourage eating and maximize growth. Replace the water in their water dish daily or more often and wipe out the dish, if needed. Clean litter box 1-2 times a day paying attention to stool form. Provide a safe play space and soft nesting options in your foster areas as well as toys for development of social skills.

Kitten Cleaning

Kittens can be very messy, especially during the weaning stage, and it is important to keep them clean to prevent infection. After every feeding, the mouth and genital area should be wiped with a barely damp warm cloth. The entire kitten can be wiped down using short strokes similar to a mother grooming the kitten. Also make sure the kitten is dry before replacing in the nest box. When the kittens are in the weaning stage, they may need a bath if they get food or excrement on them. If you find fleas on your foster kittens, they also will need a bath. Have all your equipment ready to go: some mild dish soap (Dawn), pre-warmed towels for drying, and gloves, if you like. The entire process should be quick. Run water from the tap at a comfortable temperature. Holding the kitten in your hands, place from the neck down under the water stream to wet, then add a drop or two of dish soap and lather the dirty areas. Once all debris appears to be removed, place back under the water and rinse quickly until all soap is removed. Immediately place in the towel and dry and then return to nest box. Make sure kittens do not become chilled. If there is material on the head use a damp cloth. Do not immerse the head. There is no rule on how frequently kittens can be bathed other than when it is necessary. Food or fecal debris needs to be removed when present. A spot cleaning just on the dirty areas also works well. Just make sure they are as dry as possible before returning to nest box.
Kitten Socialization

Socialization is a very important part of kitten care. As with human babies, kittens are not born understanding the world and how to behave. The best time to teach them is during the primary socialization period, which is roughly from 3 to 12 weeks of age. This is when kittens are most open to new experiences and are thirsty to learn. Kittens also have a “sensitive” period where a small amount of interaction has a big impact. This is about 2-7 weeks of age. After this time, they become more cautious of new people and situations and their behavior is less malleable. Well-socialized kittens are more likely to grow up to be friendly adults who are easy to handle and not overly frightened or stressed. Lessons not learned by 12 weeks of age can be partially, but never fully, recovered. It is best for kittens with mothers to remain with their mothers until they are at least 7 weeks old. This may not be possible if the mother has her own socialization issues that we do not want the kittens to learn in which case they may be separated earlier. It is also best if kittens are raised in the company of at least one other kitten to help learn proper cat behavior. If this is not possible and you are fostering a healthy singleton kitten that has been in your home for at least 2 weeks and there is a resident cat who is gentle, healthy, and current on vaccinations, supervised interactions may start around 4–5 weeks of age. Some kittens are more difficult to socialize than others due to maternal stress or malnutrition during pregnancy, often seen in our feral or hoarder populations, but early intervention can help.

Begin lightly handling your foster kittens as soon as possible. For mother and kitten foster groups, there is no truth to the idea that a mother will reject her babies if they are touched by people. However, mom needs to be okay with you petting the babies in order to avoid accidentally teaching them to be stressed by petting (if mom does seem to be too anxious for the first few days, try petting them while she is out of the room or sleeping). Offer mom special treats when handling the babies so she will look forward to the experience also. Cat pheromone (Feliway) can also be used in the environment to relieve stress. It should be sprayed on towels or bedding and allowed to air a bit before exposing to kittens. Gentle petting and holding for just a few seconds several times each day is ideal for newborns. As they get older, it is okay to handle them more frequently and for longer periods of time. Studies say that kittens over 4 weeks who are handled for a minimum of 15 minutes a day are more adaptable, friendlier, more playful, and able to relax in new places.

Socialization should intensify starting around 4 weeks of age by:

- Introducing new textures by playing with the kittens on carpeting, tile, wood, blankets, rugs, concrete, etc.
- Exposing them to household noises such as blenders, doorbells, banging pots, washing machines, alarm clocks, stereos, etc. If there are no children living in or visiting the home, find a television program with young children’s voices.
- Singleton foster kittens ONLY: limited, supervised exposure to gentle, healthy, fully vaccinated resident pets if singleton foster kitten is healthy and has been in your care at least two weeks.
- Placing household items safely on the floor for the kittens to investigate.
- Offering a variety of objects for the kittens to play with, including empty plastic bottles, paper towel cores, and cardboard boxes in different sizes, as well as commercial pet toys.
- Continuing to handle the kittens daily, including touching every part of their bodies and inviting other people to handle them also. Continue good hygiene practices with all visitors taking care to wash well before and after handling kittens.
- At this age, independent play away from the foster parent should also take place with play focused on predatory behavior with toys. Never allow play with human hands or feet. If the kitten uses claws or bites, you should emit a high-pitched sound like a kitten would make and end the play. If the kitten needs a moment to settle down, remove it from the area for a minute or two. If the kitten continues to play in this way, it will likely need a highly enriched environment with a lot of toys or another cat.
- When the kittens are eating solid food well with normal stools, new treats and food textures can be offered.
One behavior that kittens may have that should be discouraged is nonproductive sucking if done on themselves, littermates, or people. It can be stimulated by anxiety or genetics. It will often resolve on its own but care should be taken that any other kittens are not injured by this behavior. If this is causing harm to another kitten, the sucking kitten will need to be separated unless supervised. Additional stimulation may be needed for this kitten or an appropriate item provided for the sucking that is acceptable.

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<tr>
<th>Age</th>
<th>Weight</th>
<th>Milestones</th>
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| Birth     | 3–3.7 oz/90-100 gm | - Eyes and ears are closed  
- Sleep 90% of the time  
- Minimal handling |
| 2–3 days  |              | - Umbilical cord falls off  
- Purring starts |
| 10–14 days| 8 ounces/227 grams | - Eyes and ears should be open  
- Healthy kittens will be round and warm with pink skin and will rarely cry  
- Orient to sound |
| 2–3 weeks | 12 ounces/340 grams | - Deciduous incisors erupt, can begin to eliminate without help. Vision improves – follows objects  
- Will start crawling, standing, and playing with littermates. Starts grooming. Play 4 times a day  
- Begin regular handling approximately 15 minutes a day |
| 4 weeks   | 1 pound/454 grams | - Deciduous canines erupt, beginning to walk but do not have great balance, able to thermoregulate. Solitary play declines and more group play  
- Continue daily handling  
- Ready for gruel and may be ready for introduction of dry kitten food |
| 5 weeks   | 1.25 lb/550 grams | - Hides while playing  
- Begins to cover waste in litter box |
| 6 weeks   | 1.5 pounds/680 grams | - Deciduous premolars erupt  
- Running, playing, using the litterbox, grooming themselves. Adult like response to threatening stimuli – raised hair, arched back  
- Should be eating dry kitten food, supplemented with canned food, milk replacer if needed |
| 8 weeks   | 2 pounds/907 grams | - Adult sleep patterns. Paired play  
- Ready for surgery and adoption |

Partial reference: University of Wisconsin School of Veterinary Medicine, Shelter Medicine
The first two weeks of a kitten’s life are the most precarious. Typically, 15-40% of all full-term neonates die within this time with the majority dying in the first three days of life. Neonatal death can be from infectious diseases caused by viruses, bacteria, or parasites or noninfectious causes such as hypothermia, malnutrition, dehydration, congenital or genetic defects, and more. Malnutrition and dehydration are much more common than infectious disease at this age. If kittens have a lower-than-normal birth weight, which can certainly happen with our feral moms, they are already at risk. Our goal is to prevent these losses as much as possible by diligent care and observation so that both the neonates and fosters have a pleasant experience. By documenting body weight, food intake, and stool consistency, we may be able to detect problems early on and treat accordingly. A few specific problems to watch out for are as follows:

1) **Dehydration**: This can occur if a kitten does not have enough fluid intake or too much fluid loss as in the case of diarrhea. A good method of assessment is the color of the urine. The urine should be colorless. If you are starting to see yellow or dark yellow, this could indicate dehydration. The muzzle and belly are also a pink color and with dehydration they will become a darker pink although this can be very subjective. Neonates who are dehydrated can decline very quickly. If you suspect your neonate is slightly dehydrated, try to give more frequent feedings of formula diluted 25-50% with water or an electrolyte solution such as Pedialyte. This will only work if the kitten is still eating well. If this does not seem to fix the dehydration, please contact the clinic.

2) **Diarrhea**: Normal kitten stool should be soft formed logs. There are many causes for diarrhea including overfeeding, diet change, parasites, and infections among others. Any case over 24 hours of very watery stool should have some form of veterinary attention. If your kitten is still eating well and active, try giving less formula per meal and increasing meal frequency. If your kitten is eating solid food, make sure the diet consists of the same food all the time. Normally, there is a stool produced once a day but constipation can occur. If there has not been stool for 3 days, please contact the clinic.

3) **Fleas**: If you notice fleas or flea dirt – little black specks – on your foster, please give a bath as described on page 11 as this will drown the fleas. Clean any fleas off the face manually. Fleas suck the blood of kittens and can cause anemia as well as spread tape worms and other infectious diseases. Never give a kitten flea treatment. If you have any problems doing this, please contact the clinic.

4) **Intestinal parasites**: The two visible intestinal parasites that you may see in the stool or protruding from the rectum will be either round worms or tape worms. Round worms are more spaghetti like and can be infectious to people while tape worms are more similar to grains of rice. If you see either of these, please contact the clinic.

5) **Failure to eat**: If your kitten does not eat well for more than 2-3 meals and is losing weight, please contact our clinic as soon as possible.

Before or After Hours: Unfortunately, there is not much emergency clinics can do with these very young animals because of rapid progression of clinical signs and poor response to treatment. The prognosis is poor and most likely they are going to die. We strive to be proactive in our care and detect problems early. Neonates can decline quickly though so your goal is to stabilize the animal until they can be brought into our clinic. To do this, please refer to the attached Neonatal Emergency Triage Chart.
Unfortunately, problems do arise that are not treatable or progress too quickly and our neonates sometimes die. Some kittens can have an underlying metabolic problem or birth defect, while kittens who were born underweight sometimes just do not thrive. Please know that everyone does their best and we truly appreciate the care you provide. You are giving these kittens a chance they would not have otherwise. If your foster circumstances change, foster care becomes too demanding, or you need a break, please contact our Foster Team. If you have any urgent concerns regarding your foster’s health or behavior, please contact the Anti-Cruelty Society as soon as possible. Please see our contact list on page 16.

If a kitten passes away while in your care, please separate them from the rest of the litter, wrap the kitten in a towel, and bring them into our Intake Department at your earliest convenience. Losing a kitten is never easy, so please reach out to the Foster Team for support. You are not alone in this fight.
We thank you again for your decision to become a neonate foster volunteer with us and for choosing to help the animals in our care. Your efforts make a significant difference in The Anti-Cruelty Society’s work and our mission to find loving homes for shelter pets. Please keep in mind that you are taking on a momentous task by caring for these young kittens. Due to their sensitive nature, there is a chance your neonate foster may not survive. Still, these fragile kittens have a much smaller chance of survival here at the shelter than in your home, where they will receive the care, love and attention they need. We hope you find your foster volunteer experience at The Anti-Cruelty Society enjoyable and rewarding. If you have any questions or concerns at any time, please contact the Foster Team.

**Foster Support Team:**
foster@anticruelty.org
Elizabeth Lopez, Manager of Foster Services
Lizzie Sebastian, Coordinator of Foster Services

**Clinic:**
The most efficient method to contact the clinic is to submit a Clinic Request Form

**Main Phone Number:** 312-644-8338

**General Operator** (9 a.m. – 6 p.m.)
ext. 8220

**Veterinary Clinic** (Mon–Fri: 9 a.m.–5 p.m., Sat–Sun: use the Foster Clinic Request form or call the General Operator at ext. 8051)

In the event of an emergency, call the General Operator and they will direct your call. After hours, please refer to the Neonate Emergency Triage Chart for guidance on specific concerns!
Orphan Neonatal
FAST FACTS

0–1 WEEKS OF AGE

**Feeding:** Bottle or syringe feed every 2–3 hours.

**Stimulate after every feeding**

**Clean face and rear +/- entire body after each feeding**

**Environment:** The temperature of the nest box should be nice and warm: 85–90°F. Body temperature 95–97°.

**Development:** At one week of age, the kittens should weigh around 4 ounces and should be handled minimally although please weigh once a day. Kittens will sleep 90% of the time and eat the other 10%.

1–2 WEEKS OF AGE

**Feeding:** Continue bottle feeding orphans every 2–3 hours.

**Stimulate after every feeding**

**Clean face and rear +/- entire body after each feeding**

**Environment:** Floor temperature of the nest box should be nice and warm: 80–85°F. Body temperature 98-100°.

**Development:** Kittens at 2 weeks of age will weigh around 8 ounces. Ear canals open between 5 and 8 days. Eyes will open between 8 and 14 days. Healthy kittens will be round and warm, with pink skin. Healthy kittens seldom cry.

2–3 WEEKS OF AGE

**Feeding:** Continue bottle feeding orphans every 2–3 hours. May be able to go a little longer between feedings with some kittens.

**Stimulate after every feeding**

**Clean face and rear +/- entire body after each feeding**

**Environment:** Floor temperature of the nest box should be nice and warm: 75-80°F. Body temperature 98-100 degrees.

**Development:** Kittens will weigh around 10–12 ounces. Their ears will become erect. Kittens begin to crawl around day 18 and can stand by day 21. Kittens will begin to play with each other, biting ears, tails, and paws, even before their teeth have come in. Kittens learn to sit and touch objects with their paws.

3–4 WEEKS OF AGE

**Feeding:** Continue bottle feeding orphaned kittens every 4 hours.

**Stimulate after every feeding:** May be starting to urinate and defecate on their own. Offer litter box with nonclumping or paper litter.

**Clean face and rear +/- entire body after each feeding:** Will be starting to groom on their own but help keep clean.

**Environment:** Floor temperature of the nest box should be 75°F. Body temperature 99–101°.

**Development:** Kittens will weigh around 13 to 16 ounces.
**Orphan Neonatal FAST FACTS**

**4–5 WEEKS OF AGE**

**Feeding:** Offer gruel in shallow dish. Weaning should be done gradually and bottle feeding should be continued every 4 - 6 hours while they are learning to eat solid foods. Introduce dry food and water.

*Should be urinating and defecating on own in litter box.*

**Clean as needed. Can give bath if needed.** Weaning kittens are very messy.

**Environment:** Floor temperature of nest box should be 72° from now on. Should have cozy nest to sleep in.

**Development:** Group play developing, vision improving. Starting to “hunt”.

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**5–6 WEEKS OF AGE**

**Feeding:** Feed gruel 4 times a day and thicken it gradually. Continue to weigh daily as some kittens continue to need milk supplementation during the weaning process. Supplement if needed. Dry food and water should be available at all times.

*Clean as needed. Kittens should be grooming themselves.*

**Environment:** Kittens will be more active. Make sure the living area and play spaces are safe.

**Development:** At about five weeks, kittens can start to roam around the room. Running and hiding starts.

**Play with your kittens daily!** They may have very sharp claws so wear long sleeves and pants. Start getting them accustomed to the household noises.

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**6–7 WEEKS OF AGE**

**Feeding:** Kittens should be eating canned and dry food well. Feed the kittens at least three meals daily and preferably leave dry out all the time. Provide plenty of fresh water. Continue to monitor weight.

**Development:** By this time, you have “mini-cats.” They will wash themselves, use scratching posts, play games with each other, their toys, and you, and many will come when you call them.

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**7–8 WEEKS OF AGE**

**Feeding:** Offer wet food 2-3 times a day. Leave down a bowl of dry kibble and water for them to eat and drink at will.

**Development:** By the end of the 8th week, kittens should weigh 2 pounds each and are now miniature cats and ready for surgery and adoption.
**NEONATE EMERGENCY TRIAGE CHART**

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<tr>
<th>Concern</th>
<th>How to Assess</th>
<th>How to Treat</th>
<th>When to Call</th>
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</table>
| Hypothermia      | • Pads of feet and/or ears are cold to the touch. They should be about the same temperature as your hands.  
                   • Place your finger in the kitten's mouth. It should also feel close to your body temperature.  
                   • Take the kitten's temperature using KY Jelly, a thermometer, and the chart and instructions provided on the Neonate Foster Manual | • Warm hypothermic kittens slowly over the course of 1–3 hours.  
                   • Use a heating disk, which typically stays warm for approximately 12 hours. Cover in a cloth or towel to ensure no direct contact.  
                   • You can also use a heating pad. Ensure the heating pad is not on auto shut off. Again, make sure to wrap the heating source in a towel to avoid direct exposure  
                   • You may also use rice in a sock with the end tied close after being heated in the microwave. Please remember to always leave space with no heat to ensure the kitten can get away from the heat if too warm. | • If the kitten's temperature does not increase within 1–3 hours' time, fill out the clinic request form.  
                   • If it is past the Society's open hours, continue trying to maintain body heat. Take notes on any response to attempts to warm the kitten, and fill out the clinic request form. |
| Dehydration      | • Kittens younger than 4 wks – assess urine color. Light yellow or colorless = Proper Hydration  
                   Dark yellow = Dehydration  
                   • Open the kitten's mouth gently. Gums should be pink, moist and slippery. If gums are tacky, dry, or white, the kitten is dehydrated | • Formula is a kitten's main source of hydration. If the kitten has not yet had formula, attempt to feed. Dilute formula with an additional 25-50% water or original Pedialyte for 3–4 feedings to increase hydration. If the kitten will not eat after 2–3 hours and hydration is poor, call the clinic.  
                   • Oral remedies (such as Pedialyte) are often ineffective in already dehydrated kittens, however if the clinic is not open, it may be attempted in a pinch. | • If hydration does not improve within 1 hour after eating or the kitten is not eating after several attempts over the course of 1–3 hours and is dehydrated, fill out the clinic request form.  
                   • If the clinic is closed, continue the treatments every 3 hours until the clinic has opened and has responded to your form request. |
| Diarrhea         | • Should be – yellowish/brown and formed or semi-formed | • Bottle babies (less than 3 wks) – give less formula during feedings, but increase frequency of feedings.  
                   • Mushroom babies (4–5 wks) ensure the kitten's diet is consistent. Do not switch types/brands of food or flavors. Do not feed treats or human food. Kittens should never receive cow's milk in any circumstance. If you are feeding any cow's milk, replace with kitten formula and assess. | • If diarrhea lasts more than 3–4 feedings, fill out the clinic request form.  
                   • If diarrhea contains blood or obvious parasites, fill out the clinic request form.  
                   • If diarrhea is watery, fill out the clinic request form.  
                   • If the clinic is not open, continue attempted care until the clinic is open and responds to your request form. |
| Constipation     | • A kitten's tummy should be soft and full. If the tummy is hard and protruding, the kitten may be constipated.  
                   • If you just received the kitten, the kitten may not have been eating much when found. If the kitten does not defecate by the 2nd day, the kitten may be constipated. | • Dip the kitten's rear end in warm water for a few seconds. Gently massage the kitten's belly and continue trying to stimulate.  
                   • Place the kitten in different positions and continue trying to stimulate  
                   • Attempt new motions or using different materials to stimulate. Still gently! | • If the kitten has not defecated the day after eating and attempting these remedies, fill out the clinic request form. |
| Hypoglycemia     | • A kitten's gums should be pink. If they are white or pale, it could mean that the kitten is hypoglycemic.  
                   • While kittens don't move quickly, they should be active and moving when awake. If you find it hard to wake a kitten or notice the kitten is less active than normal, the kitten could be hypoglycemic (this will usually only happen if they have missed regular feedings or haven't been eating well or have suddenly started having vomit or diarrhea) | • Mild hypoglycemic – provide extra nutrients (a bit more of the food you are already feeding – age appropriate)  
                   • Medium/Severe – Warm the kitten if the kitten is cool to the touch. Raise the blood sugar by rubbing Karo on the kitten's gums. | • If the kitten has symptoms of being hypoglycemic, fill out the clinic request form while continuing care listed in this chart. |
| Flea Infestation/Anemia | • One cause of anemia can be from fleas sucking the kitten's blood. You may find specks of dirt on a kitten. These could be from fleas if they turn brownish-red on a wet paper towel. | • Flea treatments are dangerous for kittens and therefore should not be administered without a vet's permission. To remove fleas from a kitten, give them a gentle, warm bath with a little dish soap such as Dawn or Palmolive. Wash from the neck down, avoiding the face. You may need to pick any fleas off the face. Use a flea comb to remove any flea dirt. Dry with a towel as soon as possible and place on a heat source. | • If you notice that flea dirt continues to return or will not go away, fill out the clinic request form. |

**A Word on Fading Kitten Syndrome**

Fading Kitten Syndrome is a harsh reality. It still remains unclear why some kittens thrive and some do not. It can be linked to birth defects or infectious disease that the kitten has been exposed to at one point or another or even to the mother's health during pregnancy. While these are often very stressful situations, it is important to remain steadfast and calm. Because these situations are often due to unforeseen issues and due to the kitten's age, there are few options for care. When you are experiencing fading kitten syndrome;

- Fill out the clinic request form, wait for a response. If the clinic is closed, we may not be able to respond until the morning.
- Continue attempting treatment options until the clinic has opened.
- Take a deep breath and try to remain calm.
- Keep the kitten as comfortable as possible. Please know that The Anti-Cruelty Society recognizes the difficulty and emotional nature of these fosters. In some cases, kittens may fail to thrive despite all of our best efforts. This is not your fault. Please know that you provided a kitten with warmth and comfort that they otherwise would not have had.