



## **Bottle Baby Care-in-Place Manual**

Thank you for choosing to care for the tiniest of kittens. The Bottle Baby Kitten ICU is the temporary home to kittens ranging from newborn to four weeks old and are our most fragile patients. While they receive remarkable one-on-one, 24-hour care in our ICU, they will benefit most from being in a quiet home where there is less stress and less exposure to disease.

Caring in place truly saves lives, and not only are you helping to save the kittens you take in, you are also allowing us to free up kennel space for other incoming kittens. Last year alone, we were able to care for more than 1,100 bottle baby kittens!










As you open your heart and home to neonate, or newborn kittens, you will be responsible for their well-being. You will feed them, help them go to the bathroom, keep them warm, and clean up after them while also helping to socialize them through enrichment and playtime.

Initially these kittens will need round-the-clock care, and depending on their age, will need to eat every two to four hours. Once they reach eight weeks old and weigh two pounds, they will be ready to be spayed/neutered and then adopted into their forever home, which is a truly rewarding experience that makes those late night feedings so worthwhile.

When caring for a neonate kitten, food, warmth and cleanliness are the most important factors. Also, please remember to keep these kittens isolated from your own household pets for at least the first 10 days, depending on age, and never leave the kittens unattended with your pets.

We are here to support you! If you have any questions about kitten care, our Pet Resource Center is available daily from 8am – 5pm. You can reach the Pet Resource Center at 602.997.7585 Ext. 3800

## Kitten Development

	AGE	WEIGHT	MILESTONES
	Birth	2-4 ounces	Eyes and ears are closed. Sleeps 90% of time. Minimal handling.
	2-3 days		Umbilical cord falls off.
	4 days		Begins to purr.
	10-14 days	8 ounces	Eyes and ears should be open. Healthy kittens will be round and warm with pink skin and will rarely cry.
	2-3 weeks	12 ounces	Baby incisors erupt, can begin to eliminate without help. Will start crawling, standing and playing with littermates. Begin regular handling. Ready for deworming.
	4 weeks	1 pound	Baby canine teeth erupt, beginning to walk but do not have great balance, will begin to groom themselves, able to thermoregulate. Continue daily handling. Ready for their first vaccine. Ready for gruel and may be ready for introduction to kitten food.
	6 weeks	1.5 pounds	Baby premolars erupt. Running, playing, using the litterbox, grooming themselves. Should be eating dry kitten food, supplemented with canned. Ready for surgery and adoption? Find out!
	8 weeks	2 pounds	The kittens are now "mini" cats. Definitely ready for surgery and adoption.

## Kennel Set Up

An appropriate kennel set up for a kitten from birth to three weeks of age is rather simple. They will need bedding to sleep on and a cover over the top their heat pad to prevent the possibility of burns. Remember to keep a cozy area for them to move off the heat pad if they become too warm. At this age, do not give the kittens too much space to roam as it could be difficult for them to locate their heat pad.

Around three weeks of age, the kittens will start crawling, walking and even start to play. However, they still should not have free roam of the house. A small bathroom or bathtub will give them the space they need. At this age, introduce a litterbox as well as hard kibble and fresh water. The hard kibble will help deter them from chewing on the litter.



## Daily Care Log

While caring for a neonate kitten, it is important to document their progression. The Daily Care Log will help you keep track of the times the kitten has eaten, if they are gaining/losing weight, and if they are urinating/defecating regularly. A healthy kitten will gain 10-14 grams daily. Keeping such detailed records of your kitten's habits will help ensure it is progressing at the correct rate or if there are any health issues developing. It is extremely important to weigh your kitten before and after each feeding, and to record that information. It is also important to keep accurate records of bowel movements as changes in color and consistency can be useful in diagnosing health issues.

## Feeding

When feeding, never recline the kitten on their back. This will cause aspiration where formula gets into the kittens lungs. Place the kitten on their stomach when it is time to eat. This is the same way they would feed from their mother. Hold the bottle at a 45-degree angle, and then place the nipple in their mouth. It may take a little while for them to find the 'sweet spot',



where the kitten latches on properly to the nipple. Remember to be patient. When feeding, slightly pull back on the bottle to help promote suckling. You will know the kitten is fully invested in the food when their ears begin to twitch. You may need to gently support the kitten's head. Do not squeeze the bottle as this can cause too much formula to flood the kitten's mouth. Doing this could also cause the kitten to aspirate and you will see milk coming out of the kitten's nose. If this does happen, hold the kitten's head down and gently pat their back. Do not resume feeding until you are sure that there is no more formula coming from their nose. If you believe the kitten has aspirated and is exhibiting labored breathing, seek guidance from your local veterinarian.

With kittens that are difficult to feed, you can gently wrap their legs and body in a cloth, like a little burrito, to make them easier to control. If they do not seem to be hungry or are refusing to feed, ensure that they are warm (cold kittens will not eat and cannot digest food) and that they do not need to urinate or defecate. Kittens can only eat a small amount at a time, which is why frequency of feeding is so important. After the feeding has been completed, remove any excess formula or gruel left on the kitten with a baby wipe.



When kittens are fed formula, they will need to be burped to release any built-up excess gas. To burp them, take two fingers and gently tap on their back while holding them. You will hear and feel when the gas has been released.

## Formula

In your kit you will receive Kitten Milk Replacement (KMR), additional supplies are easily purchased at your local pet store or large retailer. The formula is mixed in a blender bottle at a ratio of two parts warm water to one part formula powder. Put any unused, mixed formula in the refrigerator to prevent spoiling. Mixed formula is good for 24 hours when refrigerated. Any unused formula is to be discarded after this time frame.

Formula must be warmed before feeding to the kitten. To reheat mixed formula, place the bottle in a large bowl of warm water or in a baby bottle warmer. Never warm the formula in a microwave. This will cause the nutrients to breakdown, will heat unevenly and can cause burns in the kitten's mouth. Once the bottle is warm, check the temperature of the formula by squeezing some on the inside of your wrist. It should be lukewarm. If it is too hot for you, it will



be too hot for the kitten. Wash the bottle and nipple thoroughly after each feeding with soap and water. Rinse each thoroughly.

## **Gruel**

Around four weeks of age, the kitten's canine teeth will start to erupt and at this point, the kittens can be transitioned onto gruel with supplemental bottle feedings. Gruel is two parts Royal Canin Mother and Baby Cat food (high-quality canned kitten food) and one part water (example, one can of Baby Cat food to one-half-can of water). Initially, give the kittens the chance to eat independently. Place some warm gruel on a shallow plate. You may need to guide the kittens to the gruel. It may help to place the kittens in a large tub with the plate. If the kittens do not start to lap, you can place a small amount in the kitten's mouth with your finger or gently spoon-feed the mixture up to the kitten's mouth to help teach them to lap it up.

Just because you may see your kittens eating on their own, this does not necessarily mean they are eating enough to survive. It is very important to continue weighing the kittens before and after each feeding. They must still consume five percent of their body weight each feeding. To determine this, take the first two digits of their body weight and divide by two (see determining feeding amounts below). If they are not eating the required amount on their own, you will need to supplement their feeding using a syringe to feed the gruel. With the kitten in an upright position, gently open the kitten's mouth and syringe the gruel very slowly into the side of the mouth. Allow the kitten to swallow and do not force too much in at once. Make sure to clean the gruel off the kitten's fur after feeding and make sure the kitten is dried off. At this stage, water and kibble should always be available to the kittens.

## **Determining Feeding Amounts**

Typically, kittens weigh 90-110 grams at birth and should gain around 10-14 grams per day. The only way to know if a kitten is eating enough and gaining weight is to weigh the kitten regularly. Once you have weighed your kitten (in grams), you will take the first two numbers of their weight and divide it by two. This will determine the amount that you need to feed your kitten (e.g., kitten's starting weight is 120 grams,  $12/2=6$ , with 6 grams being the amount to feed and the end weight will equal 126 grams). You will know when to stop feeding when your kitten's weight equals their starting weight plus the amount to feed. This method will be used until they have been weaned onto a hard food diet. Once on a hard food diet, you can free feed them hard food, one-quarter of canned food per kitten twice a day as well as fresh water at all times.



The following feeding chart can also be used when figuring out the proper feeding amount:

Weight of Kitten Before Feeding	Weight of Kitten After Feeding	Amount of Food Consumed
60	63	3
80	84	4
100	105	5
120	126	6
140	147	7
160	168	8
180	189	9
200	210	10
220	231	11
240	252	12
260	273	13
280	294	14
300	315	15
320	336	16
340	357	17
360	378	18
380	399	19
400	420	20
420	441	21
440	462	22
460	483	23
480	504	24
500	525	25
520	546	26
540	567	27
560	588	28
580	609	29
600	630	30
620	651	31
640	672	32
660	693	33
680	714	34
700	735	35

**Step 1:** Find your kitten’s weight in the column labeled “Weight of kitten before feeding”. If your kitten’s weight is not labeled, round to the next highest number.

**Step 2:** Once a weight is identified on the chart, look to the “Amount of Food Consumed” column. This will tell you how much formula/gruel the kitten should be consuming at each feeding. Remember this can differ for each feeding depending on the kitten’s weight.

**Step 3:** After the amount of formula/gruel the kitten should consume has been found, add that amount to the kitten’s current weight. This number will be what the kitten needs to weigh before feeding is considered complete.



**Example:** A kitten weighs 209 grams, round that number to the next weight supplied on the chart, which is 220. Follow that row over to “Amount of Food Consumed” which will tell you the kitten needs to consume 11 grams. Add original weight to the amount of food to consume to find what the kitten should weigh at the end of the feeding. Once the task is complete, the kitten will weigh 220 grams.

Kitten Weight = 209

Amount of food to consume = 11

Ending weight = 220

## Feeding Frequency

It’s extremely important to make sure kittens are staying on their appropriate feeding schedule. The Feeding Schedule column will tell you how often your kittens will need to eat. If you strictly adhere to their daytime feeding schedule the kittens are able to go longer without food through the night (found in Overnight Hours column). However if your kitten’s feeding schedule falls behind during the day or a feeding is missed, the overnight hours will not apply and will need to be fed according to the Feeding Schedule column.

Age Range	Feeding Schedule	Overnight Hours
0-2 weeks	Every 2 hours	4
2-4 weeks	Every 2-3 hours	6
4-6 weeks	Every 3-4 hours	8
6+ weeks	Every 4-6 hours	8

## Weaning

As the kittens become more independent eaters, and you can see from their weights that they are eating sufficient gruel, you can start to reduce supplemental bottle feeding until they are on

an all gruel diet. Around five to six weeks, your kitten will no longer need supplemental bottle feedings. At six weeks, their molars will come in and at this point, they are ready to begin eating hard food. When a kitten has been weaned onto a hard food diet, feed one-quarter can wet food twice daily, have dry food available at all times, and ensure kittens have access to fresh water.

Some kittens move quickly through the gruel and weaning stages and others take longer. Kittens will progress at their own pace but make sure you meet each kitten's needs. Be patient with them and know that they will all soon be eating on their own but do need time to adjust.

## Stimulating/Litter Box

Neonatal kittens are unable to relieve themselves on their own until around three to four weeks of age. To stimulate a kitten, gently rub/dab the genital area in one direction. Use a warm unscented baby wipe to dab the genital area until all urination and defecation stops. If you stop, the kitten will too. If baby wipes are not available, you may use a soft cloth or gauze. Be sure to be gentle and not use too much pressure or speed. It can cause irritation leading to other health problems. Refrain from using cotton balls or paper towels to stimulate as they tend to fall apart.



Stimulation is to occur after each feeding.

Do not panic if a kitten does not defecate after each feeding, but they should do so once daily. To prevent irritation, ensure the kitten is free from excess debris before returning them to their kennel. Document the task on the Daily Care Sheet.

It is a good idea to check the genital area regularly for evidence of redness, sores or swelling since kittens often suckle on littermates. While this is usually harmless, damage can be done to the genital area. If you notice evidence of harmful suckling, the kittens will need to be separated and the injured kitten seen by a medical professional. If you have any concerns please contact your local veterinarian.





At times, kittens may have a full bladder from the previous feeding. If a kitten is not wanting to feed, try and stimulate them before their feeding. Once their feeding is complete, be sure to stimulate again before returning them to their kennel.

When you notice the kittens are starting to defecate on their own (at roughly three weeks of age), introduce them to a litter box with non-clumping litter. The litterbox should be around 10 inches wide, 12 inches long, and one inch high. Place a small amount of their feces in their box to teach them where to go. It may take them a few days to understand how to use it. Once they do, stimulation assistance is no longer needed. When a litter box is introduced, also provide kibble (hard food) to prevent them from chewing on the litter. Litter boxes should be cleaned regularly.



## Heat Source

Kittens are unable to regulate their body temperature until four weeks of age and will need some type of heat source. Remember, a cold kitten will not be as inclined to eat and if their body temperature drops too low they will become hypothermic and soon fade. In your foster care kit you will be provided with a microwave heat disc (microwave for five minutes, stays warm for roughly five to six hours), or a non-timed heat pad. Use caution when removing the heat disc from the microwave as it will be hot. With the non-timed heat pad, you will always use it on the low setting. Regardless of what heating device was given to you, it is important to cover it up with some type of bedding to avoid burning the kitten but to also allow the kitten to feel the warmth from the device. It is also important to leave an area of the kennel unheated so the kitten can cool down by moving to another area if needed. Your heat source should be thoroughly cleaned when soiled and any damp or soiled bedding should be replaced promptly.

## Bathing

Typically, it is not necessary to completely bathe a kitten since most of the time it should be sufficient to use baby wipes or a damp washcloth to remove excess formula, gruel, or feces from its rear end. However, there are occasions when a kitten may require a more thorough bath. If possible, limit the bathing process to a 'butt bath' and just wash the dirty area. Occasionally a full body bath may be necessary. The easiest way to do this is to hold the kitten in one hand firmly but gently over the sink and to run warm water (warm to the touch) from



the faucet and use your other hand to wet the kitten's fur ensuring that you don't get water in the kitten's ears or nose. Gently lather the body of the kitten using kitten shampoo or Dawn dish soap. Be sure to rinse the kitten's fur thoroughly. It is imperative that the kitten is dried completely before being returned to their kennel. Towel dry the kitten initially and then finish using a hairdryer on a low, warm setting. Be careful not to get too close to the skin to prevent from burning them. A kitten that is not properly dried can quickly become hypothermic which can,

sadly, lead to death.

## Disinfecting Supplies

Keep your foster supplies clean from any germs as that will help keep your foster kittens free from any disease or illness. It is extremely important that your supplies be disinfected between litters. To disinfect your supplies, use a bleach mixture (one part bleach to 32 parts water). With your bottles, miracle nipples, and food bowls, you will want to clean them similar to how you clean your dishes at home. Once this is done, submerge these items in the bleach/water mixture for five minutes, rinse, and then set out to dry. To disinfect your heat pad and scale, you will first want to make sure they are free of any type of debris. Fill up a spray bottle with one part bleach and 32 parts water, spray down both sides of your heat pad (including the cord but not the prongs), scale, and bowl that you weigh them in. Let sit for five minutes ensuring the surfaces stay damp. After the five minutes has passed, wipe all surfaces completely dry.



## Medical Symptoms

### Non-Urgent Medical

If your kitten starts to show any of the signs below, please contact your local veterinarian or AHS' Pet Resource Center at 602.997.7585 Ext. 3800 for more options.

- Hair loss
- Irritated or inflamed skin
- Fleas
- Moderate weight loss (less than 10g loss)

### MEDICAL EMERGENCIES

Please contact your local Emergency Animal Clinic.

## Constipation

Kittens should defecate at least once every 24 hours and the stool should be a toothpaste-like consistency. If the stool is firm or hard, dilute their formula for the next three feedings (one part formula powder to four parts water). If the kitten has not had a bowel movement after their third feeding we recommend contacting your local veterinarian.

## Fading Kitten Syndrome

### Symptoms:

- Low body temperature (the kitten feels cool or cold to the touch)
- Extreme lethargy
- Not getting up, unable to stand, not responding when pet
- Gaspings for breath
- Meowing/crying out

### Cause:

- Hypothermia (too cold)
- Hypoglycemia (low blood sugar)
- Failure to thrive

### Treatment: (both steps are to be followed)

1.) Get them warm:



- Immediately wrap the kitten in a towel like a burrito. Their entire body, tail, ears and paws should be in the towel, with only their nose and mouth exposed. Do not take the kitten out of the towel to adjust them, check on them, etc. - this is very important! Every time you take them out you will make them cold again, even if it is only for a second.
- Wrap a heating pad turned onto \*low\* around the burrito towel (to avoid burns) as an extra source of heat. Secure it around the towel so it stays in place.

## 2.) Get their blood sugar up:

- Give three drops of dextrose by mouth with a syringe/finger every three minutes
- Set a timer to make sure you are doing this at least every three minutes.
- If dextrose is not available, Karo syrup can be used in its place. Homemade simple syrup can also be used.
- If the kitten is not swallowing, try not to flood the mouth, instead get it on the tongue or gums.

## **Results:**

Sometimes this process takes hours before improvement is seen. Keep in mind, even with all the love, attention and treatment that we give to these fragile kittens, some of them may not make it. It is important to remember that you have done everything you could to help this kitten and any kitten you have ever fostered was given a second chance at life because of you!

## **Additional Resources**

National Kitten Coalition ([www.kittencoalition.org](http://www.kittencoalition.org))

Kitten Lady ([www.kittenlady.org](http://www.kittenlady.org))

**Contacts** Pet Resource Center 602.997.7585 ext. 3800