Humane Society
Hastings Prince Edward

Foster Care Program
Orphaned Puppy Handbook
(Caring for unweaned puppies without mothers)



We're Connected by Compassion.

Bottle Baby Manual

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Preparing for Orphaned Puppies

You Supply:

- Cotton balls, baby wash cloths, Kleenex/toilet paper
- Time and love

We supply:

- Bottles and nipples
- Syringes
- Puppy Milk Replacer Towels and Blankets
- Heat source (SnuggleSafe or heat pad)
- Small digital scale

What to Expect

Orphaned puppies require the same care that puppies with mothers require, but with no mother to nurture these orphans, it is the Foster Families duty to do everything they can to help the puppies thrive. Before they are eating on their own (4 weeks old), and without a mother present orphans will need around the clock care. The majority of a young puppies' day is spent sleeping and eating.

Puppies should put on weight steadily, doubling in body weight every 10-14 days and gaining 5-10% bodyweight daily.

Caring for Orphaned Puppies

Orphaned puppies that are under 3 weeks of age will not survive without human intervention. They cannot produce enough body heat on their own, and a heating pad is required. Make sure the heating pad doesn't have a shut off feature, and that it is set to the lowest setting. DO NOT place the puppies directly on the heating pad, always ensure there is blanket/towel between a puppy and their heat source.

Keep Them Warm

Keep puppies in a place in your home that is warm, draft-free, and isolated from small children and your owned pets. Puppies are very vulnerable to illness when this young, and they are not receiving antibodies from their mothers' milk. Puppies 3 weeks and younger must have a steady heat source. Infant puppies are unable to regulate their body temperature, and they can quickly succumb to hypothermia. It is of the utmost importance that they be kept warm. Puppies cannot digest food if they are too cold, and must be warmed prior to feeding. Ideally, the puppies can live in a carrier with several layers of towels. Be VERY careful to place adequate padding between the puppies and the heating pad to avoid burns. Be sure to tuck the towel under the pad so the puppies cannot crawl between the towel and the pad. Too much heat can cause injury and has the potential to kill. It can be as dangerous for a puppy to overheat as it would be for them to become chilled so make certain that the heating pad is placed in such a manner that the puppies can move off of the heat.

Elimination

During the first weeks of a puppy's life, they are completely dependent on their mother to stimulate all bodily functions; her licking prompts the release of the bladder/bowels. Just as she tidied the nest at birth, the mother consumes all of her puppies' waste products. Orphaned, infant puppies will need your help in this department! Puppies will need to be stimulated in order to urinate and defecate. Place a cloth in warm water and gently massage the puppies' genitals before, and after a feeding. Your help will be needed until the time that puppies begin to be weaned, and sometimes beyond that point.

Weaning

Beginning at approximately 4 weeks of age, you can start to offer the puppies Puppy Milk Replacer in a shallow bowl or saucer. In the beginning, once you've offered the milk replacer and allowed them to feed on their own, you can offer a bottle to ensure they're receiving adequate amounts of food. Once they've learned to drink from the bowl add wet puppy food in small amounts to the formula to make "gruel". Gradually increase the amount of wet puppy food and decrease the amount of formula. You can encourage puppies to try wet puppy food by putting a small amount on a front paw where they will "clean" it off or, by placing a small amount of food in their mouths. Once they are eating on their own and no longer take a bottle, they are weaned!

Deworming and Vaccinations

Puppies are dewormed at 3 weeks old, and again 10 days later. Please call the HSHPE and schedule a time to come in for deworming, vaccinations and wellness checks. Once the puppies are 4 weeks of age, we can begin routine vaccinations. After the first vaccine is administered, you will need to return the puppies every 3 weeks to HSHPE for booster vaccines. You are responsible for scheduling appointments with the Humane Society Hastings Prince Edward. Vaccination/deworming and wellness checks should only take 15 -20 minutes.

Keep Them Clean

Puppies should be kept clean and free from debris such as food, urine, and feces. Use a damp cloth or baby wipe and dab the areas that need cleaning. If the genital area is soiled, rinse their hind end in warm water - soap isn't usually necessary, and towel dry. You can use water and a little blue dawn dishwashing soap (original), or puppy shampoo if necessary. Wipe gently with a cloth, avoiding the ears and eyes. Rinse thoroughly with warm water. You can blow them dry with the dryer set on low and held a safe distance from their bodies. Make sure to always dry puppies completely or they may develop an illness.

Preparing the Bottle Baby Formula Mixture

The easiest way to prepare formula for your orphaned puppies is to make a large batch of formula that you will pull from throughout a 24-hour period. The amount depends on how many puppies you have and how much they are eating, you will need to increase the amount you prepare as they get older and require increased amounts of Puppy Milk Replacer.

- Find a mason jar or medium size Tupperware container; make sure the container has a lid that prevents spilling.
- Mix one part PMR (Puppy Milk Replacer) to two parts water. The amount you make should reflect how many puppies you have and how much they eat. Keep in mind whatever you do not use after 24 hours will need to be thrown away. Mix the PMR and water thoroughly until all the clumps are gone.
- DO NOT use boiling water! This will destroy nutrients in the milk.
- The opened powdered PMR container must be refrigerated as well.
- DO NOT USE COW'S MILK! (or anything other than the specified formula provided by HSHPE)

- Young puppies generally do NOT wake up and cry to be fed. You must wake them up.

Stimulating Your Puppies to Eliminate Before & After Feeding

Before and after each meal, use a cotton ball, facial tissue or soft towel- wet with warm water, and gently massage genitals to stimulate urination and bowel movements. DO NOT RUB; this will cause the area to become raw and sore.
Puppies should (and almost always will) urinate during each stimulation. You may need to use several cloths or cotton pads on each puppy as you assist them in elimination of feces and urine. They should defecate once a day, but some puppies go several days before they have a bowel movement. Slowly count to 60 while you're stimulating a puppy; at that point, you'll know if they've gone, or are about to.

Feeding Steps

We recommend two types of feeding for orphaned infant puppies: bottle and syringe feeding. Bottle feeding takes longer but probably provides more satisfaction to the puppy. Syringe feeding is somewhat faster but can be messy at times. Syringe feeding is recommended with really young puppies. A start up of puppy formula of PMR will be provided. Mix only enough to use within a 24-hour period. Discard any remaining formula after 24 hours.

Keep the formula mixture in the fridge until you are ready to feed your puppies.

A detailed feeding guide follows. For an online course on bottle feeding kittens and puppies, visit:
https://www.maddiesfund.org/how-to-bottle-feed-kittens-and-puppies/presentation_html5.html
or go to our website (www.humanesocietyhpe.ca) and visit the Foster Portal (under the Volunteer > Foster Program tab) for more resources.

Formula Prep Steps

1) Use the Feeding Guide below to determine how much to feed and how often. Find the stomach capacity for the related weight. Overfeeding PMR can cause diarrhea, as well as regurgitation and aspiration of milk into the lungs, resulting in life-threatening pneumonia.
2) Pour the formula mixture into nursing bottle, or syringe. Place the rest of the formula (that is in a mason jar or similar container) back in to the fridge.
3) Fill a coffee cup up with water and place in the microwave for about 1 ½ minutes or until the water is hot (time depends on power of microwave).
4) DO NOT microwave the formula; although you may microwave the water in a glass cup before placing the bottle or syringe in the water. DO NOT ALLOW THE FORMULA TO BOIL. Any formula that boils must be thrown out, HIGH HEAT WILL DESTROY THE PROTIEN IN THE MILK REPLACER.
5) Place the feeding bottle, or syringe - full of formula mixture into the coffee cup with hot water. Allow the formula to warm up for a few minutes. Test formula temperature by squeezing a small amount on the inside of your wrist. The formula should be warm NOT hot!
6) While waiting for the formula to warm up, you can stimulate the puppies to urinate/defecate prior to feeding.
7) The formula should feel warm when tested on your wrist, warm formula will encourage a puppy to nurse.
If you are using a syringe—fill the syringe to the amount you want to feed EACH puppy (each puppy should have their own syringe), then pull up a little air into the syringe. Place a nipple on the end of the syringe and place the syringe in the cup of warm water to heat. The formula will expand as it heats—that's why we leave an air space. The syringe tip prevents formula from mixing with the water and becoming diluted. Express any excess air prior to feeding the puppies.

Feeding Steps

1) Be sure the babies are warm to the touch. If they are cool to the touch, DO NOT try to feed them. Wait until they are warmed up and active. Cold puppies will be lethargic and cannot digest properly.
2) All nipples except, the Miracle Nipples, come without holes. Take care in creating a nipple hole if needed. Use the smallest cuticle scissors you have and start small, making a crisscross; once the hole is cut too big, it cannot be corrected. The hole is perfect when you hold the bottle upside down and has a slow, steady drip – drip – drip. Gushing out might cause the puppy to aspirate the formula; a hole too small will keep the puppy from getting adequate amounts of formula.
3) To feed your puppy, place them stomach down on a towel or other textured surface, such as in a blanket, to which it can cling. This is similar to the position when nursing on the mother. Puppy positioning for feeding is very important; this is where the crucial surrogate-mom bonding happens.
4) Grasp the puppy gently under their armpits. Gently open their mouth with the tip of your finger, then slip the nipple between their jaws. You may have to wiggle it, and squeeze out a bit of milk so the puppy gets the idea. You may also find that gently holding their head steady is helpful. Puppies have a nursing reflex – if you gently place your finger over the muzzle/nose, they will push into it and search out the nipple.
5) Puppies should NOT be laid on their backs to nurse but should nurse with tummies facing down. This will help prevent aspiration of the formula into the lungs, a situation that could easily cause the death of or serious illness in a puppy. NEVER TURN THE PUPPY ON THEIR BACK TO FEED. KEEP BOTH THE PUPPY AND THE BOTTLE IN AS UPRIGHT A POSITION AS POSSIBLE. Hold the bottle at 45-degree angle, keeping a light pull on the bottle to encourage vigorous sucking.
6) Draw up the appropriate amount in an (ideally) slip tip syringe or baby bottle with nipple and insert just the tip into the puppy's mouth—you are NOT syringing in the formula, most puppies will start to lap at it and very quickly will actually suckle. Don't force it! If the puppy isn't eating well, drip formula into their mouth.
7) NEVER SQUEEZE THE BOTTLE OR SYRINGE TO FORCE MILK DOWN THEIR THROAT! This could force the formula into the lungs and causing the puppy to aspirate.
8) If the puppy does not start nursing right away, or if it seems to have trouble getting the milk, check the nipple again. It may also be helpful to stroke their head gently or pet their back to start their nursing reflexes. Pulling lightly on the bottle or twisting the nipple while in their mouth can also encourage the puppy to suckle.
9) Take your time; some puppies nurse slower than others.
10) The puppy will let you know when they have had enough simply by refusing more, or bubbles will form around their mouth.
11) Once babies are fed, they must also be stimulated again to urinate and defecate. Note: it is VERY normal that they don't defecate at every feeding. If they are eating and sleeping they are fine. If they are constipated they will be cranky and not eat well. You should encourage the puppies to urinate/defecate prior to feeding, once again once the feed is complete.
12) After feeding your puppies if you have any leftover formula mixture in the nursing bottle discard it immediately. Wash the bottle and all its parts thoroughly with warm soap and water.
13) At the next feeding repeat the feeding steps listed above. Continue this process until you have used all of your pre-made formula or it has been past 24 hours since you made the formula mixture.

*Never reheat formula that has already been heated up once. ANY HEATED FORMULA REMAINING SHOULD BE DISCARDED. Reheated formula can harbor bacteria.

*It helps to write the date and time on the container, or a notepad listing the time the formula was prepared. This way you'll know exactly when to discard it at the 24-hour mark.

**OVERFEEDING A KITTEN CAN LEAD TO DIAHRREA WHICH CAN CAUSE DEHYDRATION AND BECOME FATAL. UNDERFEEDING CAN ALSO CAUSE DEHYDRATION AND CHILLS WHICH CAN BECOME FATAL. REMAIN ALERT TO EACH KITTENS NEEDS. **

Puppy Bottle Feeding and Stomach Capacity Chart

Puppy Weight (lbs, oz)	Puppy Weight (grams)	Daily Caloric Requirement*	Amount of Formula Per Day (ml)**	Amount Per Feeding (ml)*	Approximate Number of Feedings Per Day***
2 oz	57 g	11 kcal	13 ml	2 ml	6
4 oz	113 g	23 kcal	25 ml	5 ml	6
6 oz	170 g	34 kcal	38 ml	7 ml	6
8 oz	227 g	45 kcal	50 ml	9 ml	6
10 oz	284 g	57 kcal	63 ml	11 ml	6
12 oz	340 g	68 kcal	76 ml	14 ml	6
14 oz	397 g	79 kcal	88 ml	16 ml	6
16 oz (1 lb)	454 g	91 kcal	101 ml	18 ml	6
2 lb	907 g	181 kcal	202 ml	36 ml	6
3 lb	1,361 g	272 kcal	302 ml	54 ml	6
4 lb	1,814 g	363 kcal	403 ml	73 ml	6
5 lb	2,268 g	454 kcal	504 ml	91 ml	6
6 lb	2,722 g	544 kcal	605 ml	109 ml	6
7 lb	3,175 g	635 kcal	706 ml	127 ml	6
8 lb	3,629 g	726 kcal	806 ml	145 ml	6

* 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 daily and the maximum comfortable stomach capacity is ~4 ml/100 g body weight.[1]

** Concentration 0.9 kcal/ml. Most commercial puppy milk replacers in the US provide less than 1 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 puppies grow slower than puppies that nurse off a mother.

*** As the puppy is adjusting well to the milk and the feeding volume, you may be able to increase the volume fed to help reduce the number of feedings per day. Be aware that exceeding the stomach capacity (amount per feeding) may put the puppy at risk of aspiration, vomiting, diarrhea, and gas build-up in the stomach and intestines.

Puppies at that are between 3 ½ -5 weeks of age are usually eating some solid food, decreasing the amount of milk replacer required to meet daily caloric requirements. This may result in less frequent milk feedings.

[1] Lawler, D. F. "Neonatal and pediatric care of the puppy and kitten." *Theriogenology*, vol. 70, no.3, 2008, pp. 384-392.

Orphaned Puppy Quick Reference Guide

Situation	What to Do
Puppies are lethargic.	Ensure the puppies are warm to the touch. If they are too cold they may be lethargic. It is very important to warm them up. Call the staff at the HSHPE ASAP if the lethargy does not improve within an hour.
• Puppies are acting normal, are not losing weight but are having diarrhea or are constipated. • Feces is white or very pale. • Puppies have not defecated for several days, but are acting normal	The most common cause for all of these is overfeeding or intolerance of the PMR. Try diluting the PMR mixture in half with water for 24 hours to see if the issue resolves. Call the HSHPE if it persists longer than 2 days or worsens. If there is weight loss call the HSHPE to schedule an appointment to have the puppies seen.
Puppies are losing weight, have diarrhea, AND are not acting normal or no longer gaining weight.	Call the HSHPE to schedule an appointment to have the puppies seen ASAP. Orphaned puppies are so fragile, any weight loss is significant.
Puppy isn't interested in eating.	Check the nipple again. It may also be helpful to stroke their head gently or pet their back to start their nursing reflexes. Pulling lightly on the bottle or twisting the nipple while in their mouth can also encourage the puppy to suckle. You may have to wiggle it, and squeeze out a bit of milk so the puppy gets the idea. Take your time; some orphans nurse slowly. Puppies that come into care with their eyes open are sometimes a bit slower t otake to bottle feeding.
Puppy feels cold to the touch.	Wrap them up in a towel like a burrito, leaving their faces exposed. Wrap the heating pad turned onto low around the towel–duct tape it or secure it around the towel so
Puppy feels hot.	Remove heating pad and continue to monitor, call HSHPE if you require further guidance.

PROCEDURE FOR EMERGENCIES

If your foster is having a Medical Emergency call the HSHPE between 8:00am-5:00pm 613-968-4673.

When you call be prepared to:

- describe what's happening, condition, etc.
- Give age of the puppy

Staff will advise if you should bring your animal(s) to the HSHPE for a wellness exam, or a local Veterinarian.

General Criteria for Emergencies

- Continuous weight loss
- Continuous diarrhea
- Continuous vomiting
- Bleeding of any kind — nose, urine, more than 2 days in the stool, any unclear discharge
- Any trauma — hit by a car, dropped, limp, stepped on, unconscious
- Difficulty breathing/blocked airway – open mouthed breathing/struggling to breathe
- Lethargy
- Dehydration
- If the animal has vomiting or diarrhea, but is still active, eating and drinking, please call the QHS to advise
- Mild coughing or sneezing should pose no immediate problems unless accompanied by blood or symptoms such as lethargy or dehydration

When possible, it's better for us to know of any issues that arise Monday-Sunday between 8:00am-5:00pm, during our hours of operation. Our trained staff can handle any issues, and seek medical attention, if required. We contract and pay a premium fee to send animals to after hours emergency clinics.