

# Guide to Raising Unweaned & Underage Kittens

*national guidelines provided by*



**UC DAVIS KORET  
SHELTER MEDICINE  
PROGRAM**



**Shelter Medicine**  
School of Veterinary Medicine



**Shelter Medicine Program**  
College of Veterinary Medicine  
UNIVERSITY of FLORIDA



**Maddie's  
Fund**  
The Duffield Foundation



# TABLE *of contents*



Across shelters, rescues, and foster networks, well-intentioned caregivers are often met with an overwhelming volume of neonatal kitten care advice. Much of it is contradictory, rooted in anecdotal experience rather than evidence-based practice, or fails to account for the realities of high-volume shelter environments. This fragmentation creates uncertainty, inconsistent care, and preventable loss of life.

This Living Library on Neonatal Kitten Care was created to address that gap.

Developed collaboratively by the Shelter Medicine Programs at UC Davis, the University of Wisconsin, the University of Florida, Maddie's University, and National Kitten College, this resource reflects a shared commitment to evidence-based, unified guidance grounded in the principles of shelter medicine. At its core is a population-health-approach: recognizing that decisions made for individual kittens must also protect the health, capacity, and sustainability of the broader system.

Population health requires both consistency and flexibility. It requires protocols that prioritize disease prevention, biosecurity, and resource allocation while remaining adaptable to differing shelter capacities and community needs. Most importantly, it requires alignment- so that organizations, veterinarians, staff, fosters, and partners are working from the same playbook.

This document is intentionally designed as a living resource. Neonatal care continues to evolve, and as new data, research, and field experience emerge, these guidelines will be updated to reflect best practices. By housing this library across multiple trusted institutions, we aim to ensure broad access, ongoing relevance, and a single, definitive reference point for neonatal kitten care in shelter and rescue settings.

Our collective goal is simple: to advance the care of neonatal kittens through clear, consistent, and practical guidance that promotes individual and population health while preserving staff well-being and maintaining shelter capacity. When we take a coordinated approach and care for each kitten considering the context of the whole, we strengthen the entire safety net, creating opportunities for this fragile population to thrive.



**04** Guidance for the Public During Kitten Season

**08** Caring For Kittens from Birth to Eight Weeks

10 *Body Warmth: A Critical Lifeline*

12 *Bottle Feeding Best Practices*

22 *Developmental Milestones for Kittens*

27 *Socialization & Hygiene*

30 *Mixing Kittens & Infectious Diseases*

**33** Care of the Pregnant & Nursing Queen

**35** Vaccine Protocols for Shelter Kittens

**36** Resources

This version was last updated March 2026. For the most up-to-date content, please visit the digital Living Library at this QR code.



# GUIDANCE FOR THE PUBLIC

## *during kitten season*

During kitten season, well-meaning members of the public often “rescue” litters of kittens they find outdoors, assuming that removing them is the best course of action. However, this can sometimes do more harm than good. It’s critical to educate the community in advance about what to do when they encounter kittens found outside.

Use your website, social media channels, and media outreach (such as press releases) to proactively share guidance. A simple visual flowchart can help both the public and your staff determine when intervention is necessary. Include clear descriptions and photos showing what healthy versus unhealthy kittens look like to help finders make informed decisions.

If the kittens appear healthy, encourage the public to observe from a distance for 4–6 hours before intervening. The mother cat may simply be away temporarily gathering food. It’s important that people do not stay close to the kittens, as their presence may prevent the mother from returning.



If the kittens appear ill, are in danger, if the mother does not return, or if she is confirmed to be deceased, then intervention is appropriate. In these cases, ask the public to contact the shelter before moving the kittens. Only animals that truly require shelter care should be brought in; many can be better supported through alternative means.

Encourage the development of “finder-foster” pathways, where the individual who found the kittens temporarily fosters them with guidance and support from your organization. Building partnerships with local rescues and community groups can create a broader safety net for neonatal and underage kittens.



### **Take the Fear Out of Bottle Feeding!**

This free course is designed specifically for new and prospective kitten fosters, providing step-by-step guidance to build confidence and essential skills. The course was developed by National Kitten College and made possible by Maddie’s University.

## **FOSTER FINDERS**

One often-overlooked source of foster caregivers is the very people who find truly orphaned kittens and bring them to the shelter. By taking action, they’ve already demonstrated concern for the kittens’ well-being—and with a little guidance and support, many may be willing to care for them temporarily in their own homes.

To turn these “finders” into foster caregivers, shelters must provide the knowledge, tools, and confidence needed to succeed. When shelters make it easy and accessible, foster programs naturally grow.



## Training for new fosters should include:

- A simple, easy-to-follow kitten care guide
  - Clear contact information for the foster coordinator
  - A starter kit with essential supplies
- 

## FOSTER KITTEN SUPPLIES

### ✓ Recommended Foster Kit Supplies

- Kitten milk replacer
- Bottles/Syringes for feeding
- Canned kitten food
- A small litter box
- A double-diner food and water dish
- A printed kitten care guide
- A safe heating source (such as a Snuggle Safe disk)
- A small digital kitchen scale for daily weight monitoring

## Setting Expectations

If you are unable to provide a heat source or scale, emphasize the importance of these items and encourage caregivers to obtain them independently.

It is also essential to set clear expectations. Foster finders should know what the shelter will provide (such as food, litter, medical care, and supplies), and what their responsibilities are—including whether they are expected or permitted to find adoptive homes, or if the kittens will return to the shelter for placement.

By empowering foster finders with the tools and knowledge they need, shelters can expand their lifesaving capacity and create a stronger, more engaged community of care.




A close-up photograph of a kitten's face, showing its eyes, nose, and whiskers. The kitten has a mix of white and brown fur. The background is blurred.

# CARING FOR KITTENS

*from birth to eight weeks*

Unweaned kittens are among the most fragile animals in any shelter or foster setting. From birth to adoption, they rely on caregivers to meet their basic needs.

**Following these five core requirements can help ensure their survival and healthy development** 

# ESSENTIAL REQUIREMENTS FOR KITTEN CARE



Keep kittens warm



Provide adequate hydration and nutrition



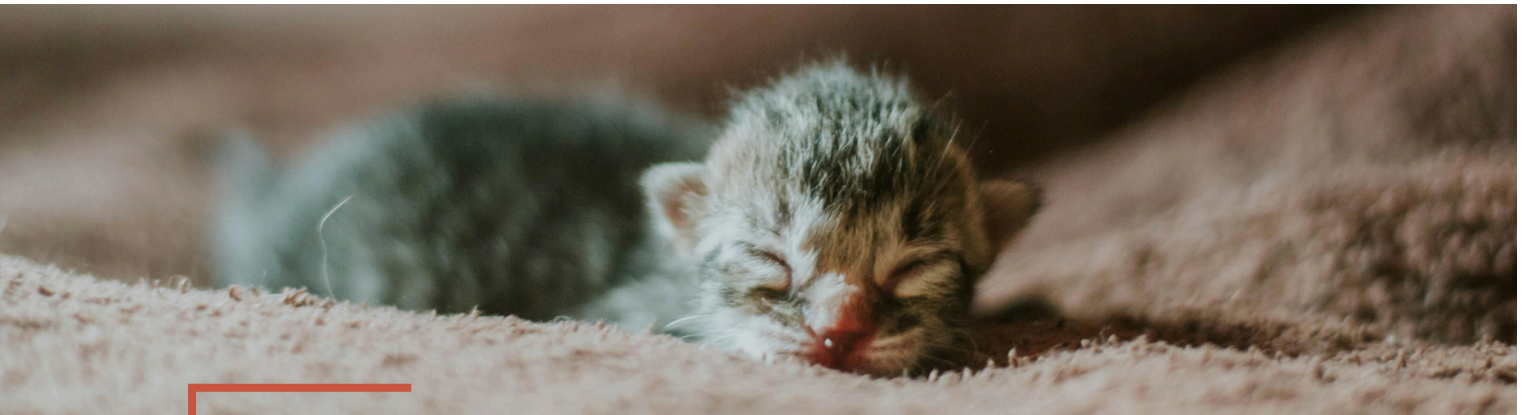
Keep kittens clean



Support socialization with humans and littermates




Protect them from infectious disease



# BODY WARMTH:

*a critical lifeline*



Kittens under four weeks of age cannot regulate their own body temperature. Without intervention, hypothermia can occur quickly—and may be fatal. Caregivers must actively maintain a warm, stable environment.

## RECOMMENDED HEAT SOURCES

### Snuggle Safe Disks

Place a warmed Snuggle Safe disk at the entrance of the crate or cage. It provides up to 8 hours of steady heat. Follow the printed instructions for your microwave wattage; if unknown, heat for 5 minutes and test the temperature with your hand. Always wrap the disk in a soft blanket and ensure kittens cannot come into direct contact with it.

### Heating Pads

If no disk is available, use a heating pad on the low setting. Place it beneath the crate or cage, with a thick towel or fleece layer between the pad and the kitten. Do not use terrycloth towels for unsupervised kittens under six weeks of age, as their claws can catch in the loops, risking injury.

## Pet-Safe Heating Pads

Many pet stores now carry low-temperature heating pads designed specifically for animals. These typically lack auto-shutoff functions and only reach safe temperatures. Always wrap them in a soft layer and monitor placement to prevent overheating.

## BEST PRACTICES

- Always provide a heated and a non-heated area within the crate or enclosure, so kittens can move away from the heat source if they become too warm.
- Create a cozy "nest" with fleece blankets that kittens can crawl into and out of freely.
- Check heat sources frequently to ensure they are neither too hot nor too cold.



**The importance of a heat source for neonatal and unweaned kittens cannot be overemphasized.**

The queen naturally provides a 100–103°F (38–39°C) environment. Kittens without a queen should have supplemental heat until at least 4–6 weeks of age. Even beyond that, they may seek warmth if the ambient temperature is low.

## ENVIRONMENTAL SETUP

- House kittens in a warm, draft-free room.
- Cover the bottom of the cage or crate with a blanket or fleece liner.
- Provide a cozy bed (a small cardboard box or clean litter box lined with fleece) alongside a shallow litter box for kittens over 3–4 weeks.
- A towel or blanket over the front of the crate helps retain heat and block drafts.

The ideal ambient temperature for kittens under four weeks is **around 85°F (29°C)**. While this may not always be possible, make sure a warm nest is always available. The ambient temperature in a carrier can easily reach this with a heat source and a towel or blanket covering the sides. For socialization and warmth, consider pairing single kittens of similar age so they can share body heat and reduce the risk of hypothermia\*.

*(\*see considerations for mixing kittens)*



# KITTEN FEEDING

Just like humans, every kitten is different—they will eat different amounts, gain weight at varying rates, and have individual preferences for feeding styles and formulas. The most important indicator of health is **daily weight gain**. Even a small daily increase shows that a kitten's nutritional needs are being met.

Weigh kittens **once daily at the same time and under consistent conditions** (e.g., before or after feeding and stimulation—but always the same). On average, kittens should gain about **½ ounce (14 grams) per day**, or roughly **4 ounces (113 grams) per week**. Keep in mind, these numbers may vary depending on the individual kitten and the resources available.

Kittens who have recently been separated from their mother are used to small, frequent feedings through natural nursing. When we bottle feed, we deliver **larger volumes at a faster rate**, which requires some adjustment for the kitten's digestive system. It is not necessary—or helpful—to wake healthy kittens for feedings every two hours. Allow kittens to sleep uninterrupted, and their stomach capacity will naturally increase with each feeding, reducing the need for such frequent meals.

## GUIDELINES FOR BOTTLE FEEDING KITTENS

- **Warmth is essential:** Kittens must be warm to digest food properly. Never feed a cold kitten.
- **Use kitten-specific formula:** Prepare exactly as directed on the packaging.
  - *Never* feed cow's milk and avoid switching formulas unless medically advised.
- **Feeding volume:** On average, kittens should consume about **2 tablespoons (30 ccs) of formula per 4 ounces of body weight** over a 24-hour period.
  - However, if the kitten is gaining weight, their intake is sufficient—even if the amount is below this guideline.
- **Adjust for recent weaning:** Kittens recently removed from a nursing mother will require a gradual transition to longer intervals between feedings.
- **Avoid outdated practices:** Even newborns typically do not need to be fed every 2 hours after the first few feedings.
- **Feed vulnerable kittens more often:** Weak, ill, or underweight kittens are at higher risk for hypoglycemia and may require more frequent feedings; a vet can advise you based on the kittens' condition.
- **Do not wake sleeping kittens to feed** unless an unusually long time has passed. Uninterrupted sleep is critical for healthy growth.
- **Kittens sleep more soundly at night:** Expect longer stretches of sleep when the environment is quiet and free of vibrations or disruptions. —————>



Do not wake sleeping kittens to feed — uninterrupted sleep is critical for healthy growth.

# GENERAL FEEDING GUIDELINES

Feeding unweaned kittens requires attentiveness, proper technique, and consistent monitoring to ensure safe and successful nourishment. Below are best practices for preparing formula, bottle feeding, monitoring kitten behavior, and preventing complications.

---

## PREPARING FORMULA

- **Warm the formula to approximately 100°F (38°C)** before feeding. It should feel warm—but not hot—on the inside of your wrist.
  - **Warming Methods**
    - Place the bottle in hot water for a few minutes, or
    - Briefly warm in the microwave. **Always** shake the bottle well after microwaving to eliminate hot spots before testing the temperature, allow time for any air bubbles to dissipate before feeding.
  - **Never feed cold formula** to a kitten—it can cause digestive upset and contribute to hypothermia.
- 

## FEEDING POSITION & TECHNIQUE

- **Proper positioning is critical**
    - Never feed a kitten while it is lying on its back.
    - Place the kitten in a **prone position**—on its belly, with its feet under or slightly forward. This mimics how they would nurse from their mother and reduces the risk of aspiration.
    - Place the kitten on a towel or soft cloth it can grip and knead.
  - If the kitten is frantic or flailing, **gently wrap it in a towel** (“purrito-style”) to help them focus and stay calm.
  - Gently open the kitten’s mouth with your fingertip and insert the nipple. With practice, the kitten will begin to eagerly seek out the nipple and latch on.
-

## SIGNS OF EFFECTIVE FEEDING

- Look for:
  - **A vacuum-like suction** on the nipple
  - **Bubbles rising in the bottle** during feeding
  - **Wiggling ears**—a sign of coordinated suckling
- Hold the bottle at a **45-degree angle** to help control the flow and reduce the risk of air intake.
- Allow kittens to suckle at **their own pace**. Do not squeeze the bottle.



## TROUBLESHOOTING: *the kitten won't nurse*

### **Kitten is cold or dehydrated**

Don't feed your kitten until they are stable, warm and hydrated

### **Kitten is not hungry**

Especially with new intakes of healthy kittens older than 2 weeks

### **Formula is too cold or hot**

Formula, bottle and nipple should all be warm

### **Nipple opening is too small**

Formula should drip slowly when held upside down

### **Kitten may need to eliminate**

Make sure your kitten has urinated/defecated before a feeding

### **Formula is old**

Try a new bag, your kitten might not like the taste if your formula is old

### **Kitten is ready for solid food**

Try offering an older kitten solid food instead

### **Kitten is not fully awake**

Your kitten should be alert for their feeding

### **Kitten has an illness**

A big red flag! Seek medical attention for URI, panleukopenia, etc.

### **Kitten has a physical deformity**

This should be noted during the intake exam (cleft palate, etc.)

**DOWNLOAD  
TROUBLESHOOTING PDF**

Provided by National Kitten  
College





## FEEDING MULTIPLE KITTENS

- Feed each kitten one full round until they voluntarily stop sucking or release the nipple.
  - Stimulate them to eliminate, then set them aside to rest.
  - Repeat the feeding cycle if needed to ensure they are fully satisfied.
  - A well-fed kitten will have a **pear-shaped belly** when held upright under the front legs.
  - **You cannot overfeed a healthy kitten** -allow them to eat until they are full- but **you can feed too frequently**, which may cause diarrhea and stress.
- 

## POST-FEEDING CARE

- After each feeding, give the kitten a gentle, full-body wipe with a barely damp, warm washcloth using short strokes that mimic the queen's grooming.
  - This helps keep the fur clean, encourages grooming behavior, and provides soothing socialization.
  - Be sure the kitten is completely dry before returning it to the nest.
  - Cover the crate or cage with a blanket to retain warmth.
- **Eye Care Tips:**
  - Use a warm, soft cotton round to gently wipe each kitten's eyes twice daily.
  - The eyes are a primary entry point for bacteria, especially as they begin to open.
  - Queens keep this area clean—fosters must do the same to reduce the risk of infection.

# SUCKLING BEHAVIOR

- Kittens often suckle for comfort.
  - ▣ If you notice **kittens suckling on each other**, especially around the **genital area**, it may indicate stress or a need for more frequent feedings.
  - ▣ Suckling can be a form of self-soothing and is not always an indication of hunger
  - ▣ Monitor for signs of irritation (redness, swelling, exposed tissue).
  - ▣ **Separate the kitten** if this behavior becomes persistent or causes injury.
  - ▣ Provide **supervised play and sleep proximity** to allow continued bonding through scent and touch.



## When to be concerned while feeding kittens

If a kitten is too weak to nurse, seems lethargic, or continues refusing to eat after a few attempts, it may be ill. This warrants **immediate veterinary attention**. Have a clear plan in place for who foster parents should contact for medical concerns or emergencies.





## WEANING KITTENS

Weaning typically begins when a kitten is litter box trained and starts biting the bottle nipple frequently or forcefully—a sign they're ready to transition to solid food. It's important to continue bottle feeding throughout the weaning process to ensure kittens continue receiving adequate nutrition and do not become stressed.

---

### STEPS FOR SUCCESSFUL WEANING:

#### 1. INTRODUCE LAPPING

Start by placing kitten formula or a mix of formula and wet food (gruel) on your finger. Once the kitten licks from your finger, move to a spoon.

#### 2. PROGRESS TO A DISH

When the kitten begins to lap confidently, offer gruel in a shallow dish. Expect them to walk in it or bite the edge—it may take several meals before they catch on.

#### 3. PREPARE WEANING GRUEL

Mix warm canned kitten food with formula to form a thin consistency. Gradually thicken it over time and reduce the amount of formula as the kitten adjusts.

#### 4. BE PATIENT AND PERSISTENT

If the kitten shows no interest, gently open their mouth and place a small amount of food on the tongue or teeth. Consistency and patience are key.

#### 5. NOT ALL KITTENS LIKE WET FOOD

Always have kibble available when weaning. Royal Canin's Mother and Babycat offers small kibble and a strong scent to entice weaning.



#### Kitten Tip!

A kitten is ready to begin weaning when they shows interest in solid food but may still require supplemental bottle feeding. If a kitten is aggressively biting at the nipple during feedings, it may be time to introduce solid foods.

### HYDRATION & CLEANLINESS FOR WEANED KITTENS

- Once kittens are eating thicker gruel, provide **fresh water** in a **low, spill-resistant bowl** at all times.
- Many kittens will walk through their food. Always **clean and dry** kittens thoroughly before returning them to their crate or cage to avoid rapid heat loss.
- Early on, kittens may be too messy to leave gruel or water in their cage unattended. Monitor feedings closely.

### WHEN KITTENS REFUSE WET FOOD

- Some kittens may prefer **dry food** over wet. Keep a small-kibble, highly scented dry option (e.g., **Royal Canin Babycat**) available at all times
- Introduce **shallow water bowls** alongside dry food. If a kitten favors dry over wet food, ensure adequate hydration is maintained.



## STIMULATION FOR URINATION AND DEFECATION

In nature, mother cats groom their kittens to stimulate urination and defecation. If you're fostering underage kittens, **you must perform this role** until they are developmentally able to eliminate on their own—typically around 3–4 weeks of age.

---

### STEPS FOR SUCCESSFUL STIMULATION:

- Before and after each feeding, **gently rub the kitten's lower abdomen, genitals, and rectum** with a soft cotton round, unscented baby wipe, or toilet paper dipped in warm water.
  - Always use **white materials** so you can observe the color of urine and feces.
    - **Pale yellow** urine is ideal.
    - **Dark urine** may indicate dehydration—consider adding extra water or unflavored Pedialyte to the formula.
  - Avoid overstimulation, which can irritate sensitive areas.
  - Watch for signs of chafing and keep kittens warm and dry during and after stimulation.
- 

### WHAT TO EXPECT

- **Urination** should occur with every stimulation.
- **Defecation** should occur at least once daily. →

- ▣ A newly acquired kitten may go up to **48 hours** without defecating due to stress—this can be normal.
  - If a kitten appears unable to urinate or defecate despite stimulation, contact a veterinarian.
- 

## GENERAL GUIDELINES

- Stimulate **before and after each feeding** until approximately **3 weeks of age**.
- Begin transitioning to **litter box use at 3–4 weeks**.



## LITTER TRAINING TRANSITION

- **Kittens do not need to be trained to use a litter box—they are naturally clean animals.** Placing a puppy pad near where they sleep can help you recognize when they're ready to transition to a litter box. When kittens begin moving away from their sleeping area to eliminate on the pad, it's a clear sign they're developmentally ready for a box.
- Place a **shallow litter box** in the kitten's cage using **non-clumping litter or pellets**.
- Provide some **dry kitten food** around the same time so kittens don't mistake litter for food.
- If a kitten defecates outside the box (e.g., on bedding), place the feces into the box to help them associate the scent with the appropriate spot.
  - ▣ Unless heavily soiled, scoop, but do not deep clean the litterbox until the kitten is using it reliably- smell association is part of the learning process.



# DEVELOPMENTAL MILESTONES *for kittens*

## WEIGH KITTENS DAILY

Weigh kittens at the same time every day with a postal or kitchen scale. **Kittens should gain about ½ ounce (14 grams) every day, or 4 ounces (113 grams) per week.** Lack of weight gain in a 24-hour period is cause for concern.

## IF THE KITTEN IS NOT GAINING WEIGHT

Begin syringe feeding the kitten to offer additional nutrition and hydration. To syringe feed the kitten, mix up the formula as usual and then draw it up in a syringe. Place the opening of the syringe on the side of the mouth – never directly in front of the mouth.

Place a drop of milk on the kitten's tongue and make sure whatever is swallowed is completely under the control of the kitten to avoid aspiration. If you place a nipple on the syringe, you can enter through the front of the mouth encouraging the kitten to pull the milk through the nipple. Make sure they swallow the formula before you push more into their mouth.

## KITTENS 0-1 WEEK OF AGE

FEEDING	<ul style="list-style-type: none"><li>• <i>Without Queen:</i> <b>Bottle feed 6–8 times per day.</b> If the kitten is not gaining weight, add an additional feeding.</li><li>• <i>With Queen:</i> Kittens should nurse vigorously and compete for nipples; nursing can take anywhere from a few minutes to approximately 45 minutes.</li><li>• Weigh daily (if the queen permits). Excessive crying or restlessness may indicate poor milk flow or inadequate supply.</li></ul>
ENVIRONMENT	<ul style="list-style-type: none"><li>• Nest temperature: <b>85–90°F (29–32°C).</b> Hypothermia is the greatest risk at this stage.</li></ul>
DEVELOPMENT	<ul style="list-style-type: none"><li>• Average weight: <b>~4 ounces (113 grams).</b></li><li>• Kittens sleep 90% of the time and eat the remaining 10%.</li><li>• Handle minimally to support healthy sleep and development.</li></ul>

## KITTENS 1-2 WEEKS OF AGE

FEEDING	<ul style="list-style-type: none"><li>• <b>Bottle feed 5–7 times daily,</b> until full but not bloated. Add a feeding if weight gain stalls.</li></ul>
ENVIRONMENT	<ul style="list-style-type: none"><li>• Nest temperature: <b>80–85°F (27–29°C).</b></li></ul>
DEVELOPMENT	<ul style="list-style-type: none"><li>• Weight: <b>~8 ounces (226 grams).</b></li><li>• <b>Ear canals open</b> between days 5–8.</li><li>• <b>Eyes begin opening</b> between days 8–14, from the inner corners outward.</li><li>• All kittens are born with blue eyes; pupils will not be distinguishable at first.</li><li>• Healthy kittens are round, warm, and energetic. They should squirm when picked up and crawl back to the queen.</li><li>• <b>Sexing:</b> Compare kittens side by side. Females have closely spaced anus and vertical vulva; males have more distance between the anus and penis with a visible scrotal sac.</li></ul>

## KITTENS 2-3 WEEKS OF AGE

<b>FEEDING</b>	<ul style="list-style-type: none"><li>• <b>Bottle feed 5–6 times daily.</b> Increase frequency if weight gain slows.</li></ul>
<b>ENVIRONMENT</b>	<ul style="list-style-type: none"><li>• Nest temperature: <b>75–80°F (24–27°C).</b></li></ul>
<b>DEVELOPMENT</b>	<ul style="list-style-type: none"><li>• Weight: <b>10–12 ounces (283–340 grams).</b></li><li>• <b>Ears begin to stand upright.</b></li><li>• By day 18: Kittens begin crawling; by day 21: they can stand.</li><li>• Begin playing with littermates—biting ears, paws, tails—even before teeth emerge.</li><li>• <b>Start socialization:</b> Handle gently and introduce to calm human interaction. Avoid frightening stimuli.</li></ul>

## KITTENS 3-4 WEEKS OF AGE

<b>FEEDING</b>	<ul style="list-style-type: none"><li>• <b>Bottle feed 4–5 times daily.</b></li><li>• <b>Begin weaning:</b> Offer gruel (wet food + formula) in a shallow dish but continue bottle feeding to ensure adequate nutrition.</li></ul>
<b>ENVIRONMENT</b>	<ul style="list-style-type: none"><li>• Nest temperature: <b>70–75°F (21–24°C).</b></li></ul>
<b>DEVELOPMENT</b>	<ul style="list-style-type: none"><li>• Weight: <b>13–16 ounces (369–454 grams).</b></li><li>• Begin self-grooming; mother still handles most cleaning.</li><li>• Vision improves significantly, resembling adult cats.</li><li>• Eye color begins to shift from blue toward adult coloration.</li></ul>

## KITTENS 4-5 WEEKS OF AGE

### FEEDING

- Continue weaning. Most kittens can eat gruel from a shallow dish.
- Introduce **dry food and water**. Some kittens prefer kibble; strongly scented small kibbles like **Royal Canin Babycat** may help.
- Continue **bottle feeding twice daily** until kittens reliably eat solids.

### DEVELOPMENT

- Begin **litter training**:
  - Use a **low-sided box** with 1 inch of non-clumping litter or shredded newspaper.
  - Place kittens in the box after each meal; guide them by scratching their paw in the litter.
  - Keep boxes clean and away from food.
  - Confine kittens to a small area to reinforce box location.

## KITTENS 5-6 WEEKS OF AGE

### FEEDING

- **Feed gruel 2–3 times a day**. Offer dry food and water at all times.
- Some kittens may still prefer the bottle or need encouragement to try new textures.
- For picky eaters: Mix **meat-flavored baby food** (no onion powder) with water.

### DEVELOPMENT

- Weight: **~1 pound (454 grams)**.
- Begin **supervised exploration** of the room.
- Male kittens: **Testicles become visible**.
- Socialization: Encourage play; wear long sleeves if needed.
- Desensitize kittens to typical household sounds (TV, vacuum, etc.).
- Introduce them to a variety of people (including men and children) to prepare them for adoption.

## KITTENS 6-7 WEEKS OF AGE

<b>FEEDING</b>	<ul style="list-style-type: none"><li>• Kittens should now reliably eat <b>canned and dry food</b>.</li><li>• Feed at least <b>three meals daily</b> and leave dry food out between meals.</li><li>• Provide extra dishes if one kitten guards food.</li></ul>
<b>DEVELOPMENT</b>	<ul style="list-style-type: none"><li>• Fully mobile and playful—your kittens are becoming “<b>mini-cats</b>.”</li><li>• They groom themselves, use scratching posts, and respond to names.</li><li>• Continue reinforcing <b>litter box use</b> after meals, naps, and playtime.</li></ul>
<b>ADOPTION PREP</b>	<ul style="list-style-type: none"><li>• Begin <b>spay/neuter scheduling</b> and preparing kittens for adoption.</li><li>• Ensure kittens are <b>well-socialized</b>, vaccinated, and confident in various home environments.</li></ul>

## KITTENS 7-8 WEEKS OF AGE

<b>FEEDING</b>	<ul style="list-style-type: none"><li>• <b>Offer wet food 2–3 times daily</b>. Each kitten should consume just over one 3 oz can per day.</li><li>• Leave <b>dry kibble and fresh water</b> available at all times.</li><li>• If a mother cat is present, she should only allow brief, infrequent nursing sessions at this stage.</li></ul>
<b>DEVELOPMENT</b>	<ul style="list-style-type: none"><li>• By the end of week 8, kittens should weigh <b>1.5 to 2 pounds</b>.</li><li>• At this point, they are <b>miniature cats</b>—fully mobile, social, and capable of transitioning into their adoptive homes.</li></ul>
<b>ADOPTION PREP</b>	<ul style="list-style-type: none"><li>• Healthy, robust kittens can be <b>spayed/neutered and adopted</b> as early as <b>6 weeks of age</b>.</li><li>• Be sure to check <b>local and state regulations</b> to confirm if your facility may legally adopt out kittens at 6 weeks.</li><li>• Ensure each kitten has been socialized, vaccinated, and fully weaned prior to adoption.</li></ul>



# SOCIALIZATION & HYGIENE

## Socialization (3–12 Weeks of Age)

In this section, socialization refers to helping kittens become comfortable with people, other cats, other species, and everyday experiences. Positive exposure during this sensitive period shapes how they respond to handling, new environments, and social interactions throughout life. For these purposes, the key socialization window for kittens is 3-6 weeks, but valuable socialization can still be achieved up to approximately 12 weeks of age.

## SOCIALIZATION GUIDELINES

- Kittens gain most of the socialization they will carry with them throughout their lives between the ages of **3 and 6 weeks of age**.
- Start handling and social interaction by **3–4 weeks of age**.
- Allow for **supervised playtime** with littermates. If fostering a single kitten, pair with another same-age kitten whenever possible\*.  
*(see considerations for mixing kittens)*
- Introduce daily human interaction through play, petting, and quiet presence in the room.
- Provide toys and stimulation inside the crate or foster area—pipe cleaners, cardboard tubes, and soft toys are excellent options.
- In foster homes, spend time sitting in the room with kittens each day. In shelters, ensure kittens receive **daily hands-on interaction** in their cages. →



- **Avoid introducing foster kittens to resident pets** during the first two weeks in foster care. After the adjustment period, **careful, supervised introductions** to adult cats and dogs can support positive socialization.
- 

## BATHING

Kittens without a mother need help staying clean and learning to groom. After each feeding, gently wipe them down with a **barely damp, warm washcloth** using short strokes to simulate maternal grooming.

*For heavier soiling or fecal accidents, spot-cleaning or bathing may be necessary.*

## STEPS TO BATHE AN UNDERAGE KITTEN

### 1. PREPARE THE AREA

Use a small sink or basin filled with **warm (not hot) water**. If needed, add a small amount of **Dawn or baby shampoo** (no fragrances or harsh chemicals).

### 2. PRE-WARM TOWELS

Have **dry, warm towels** ready to avoid chilling. Warming towels in the dryer ahead of time is ideal.

### 3. HANDLE CAREFULLY

Wear long sleeves and gloves if necessary. Hold the kitten gently while supporting the body to keep them calm and secure.

### 4. FOCUS ON PROBLEM AREAS

Only immerse soiled areas. A “butt bath” is often sufficient.

### 5. RINSE THOROUGHLY

Use warm water to gently remove all soap.

## 6. DRY VIGOROUSLY AND QUICKLY

Wrap the kitten in a towel and rub to dry. Switch to a second dry towel if the first becomes wet.

## 7. WARM AND MONITOR

It is safe to use a hair dryer on low with a towel as a barrier between the kitten and the hair dryer. Warming with towels just out of the dryer can also speed up the process. **Never put a damp kitten back into a crate or cage.**

## 8. REHYDRATE

Even though they are submerged in water, the warmth from a bath will dehydrate a kitten.



### **Important! The kitten must be warm:**

Your body heat alone is not enough to warm a cold kitten. Always use external heat sources when drying after a bath.





# CONSIDERATIONS

## *for mixing kittens*

Mixing kittens requires balancing **infectious disease risk** with **behavioral and socialization needs**. While social interaction is vital for kittens to develop normal play behaviors, communication skills, and emotional well-being, exposure to unrelated animals increases the chance of spreading illness—especially in shelters, where disease pressure is high. To protect kittens, the best practice is to **limit length of stay** in shelters and move them quickly into environments with lower disease risk and stronger behavioral support, such as foster care or adoption.

Healthy kittens **six weeks and older** should typically be fast-tracked—spayed/neutered and adopted out promptly—eliminating the need for co-housing. **Neonatal kittens under six weeks** should also be moved quickly into foster or rescue rather than held in a shelter for socialization.

### GENERAL PRINCIPLES FOR COMBINING KITTENS:

- Kittens considered for pairing should be similar in size, developmental stage, and health status to reduce risk of injury, stress, or disease transmission
- **Do not add a single kitten to a healthy litter**—the risk to the litter outweighs the benefit to the lone kitten.
- Two healthy singletons arriving at the same time may be considered for pairing, as they pose a similar risk to each other and companionship may be great social benefit.
- If no other kittens are available, a **kitten-friendly dog** in foster may be a safer companion than an unrelated kitten.
- Kittens presenting alone often have **unknown exposure histories**, increasing potential disease risk.

Sick kittens require careful, case-by-case decisions. Signs like sneezing, ocular discharge, diarrhea, vomiting, parasites, or sudden weight loss indicate higher infectious disease risk. Pairing sick kittens increases the risk for both, but the behavioral benefits of companionship may still outweigh the risk in select situations.

Overall, mixing kittens should only be done when the **behavioral benefit is meaningful**, and the **infectious disease risk is acceptable**, particularly if the alternative is a young kitten remaining completely alone for an extended period.



## KEY QUESTIONS & FACTORS BEFORE MIXING KITTENS

Before mixing kittens, shelters must carefully balance **disease prevention, vaccination status, and behavioral needs**. Screening for infectious disease must begin **at intake** and continue **daily**, since many kittens may be contagious during the incubation period while still appearing healthy. Signs such as sneezing, ocular discharge, diarrhea, vomiting, parasites, hair loss, poor appetite, or unexplained weight changes indicate that **kittens should not be mixed**.

Kittens with at least **7–14 days of documented good health** are safer candidates, as most incubation periods for major diseases like panleukopenia (5–7 days, up to 14) and ringworm (2–4 weeks) would have passed or become visible with daily checks and Wood’s lamp exams.

All kittens must be vaccinated on intake and **every 2 weeks** thereafter. Because maternal antibodies can block vaccine effectiveness, repeated vaccination is essential until **20 weeks of age**. →

In general, **do not mix sick kittens with healthy kittens**. Even combining sick kittens with similar clinical signs carries risk, as the causes may differ and may result in exposing kittens to severe disease. Mixing should only be considered when the behavioral benefits outweigh the disease risk. For example, pairing two healthy singletons who present at the same time is a lower-risk pairing choice. Similarly, pairing two otherwise healthy kittens diagnosed with and undergoing treatment for ringworm may be of benefit to those individuals. **Pairing** is generally considered safest, as it puts only two kittens at risk rather than exposing litters.

Using **surrogate queens** requires special caution. Orphan kittens may be incubating disease, may transmit illness to the queen's litter, and may be outcompeted for milk. Orphans who missed early colostrum are at high risk for disease and can endanger the queen's biological kittens. Queens do not pass immunity through milk after the first 24 hours, so unrelated kittens so unrelated kittens must be vaccinated in order to provide protection. Overloading queens also creates health and welfare risks for the mother cat.

Ultimately, shelters should **imagine the worst-case scenario** before mixing animals. Pairing two single kittens carries limited, manageable risk and can provide important socialization. In contrast, adding one kitten to a queen with a litter—or combining two unrelated litters—dramatically increases the number of animals who could be affected if disease spreads, and should rarely be considered.



# CARE OF THE PREGNANT AND NURSING QUEEN

This section outlines how to support a queen during the final week of pregnancy, recognize and manage normal labor, and provide proper care during nursing. It emphasizes nutrition, preparation of a safe birthing environment, signs that require veterinary attention, and ongoing monitoring of both the queen and her kittens.

Caring for a pregnant queen and newborn kittens can be deeply rewarding, but it also requires preparation and support. Organizations and households should consider whether they have the capacity, training, and veterinary access needed to guide a mother safely through delivery and to provide appropriate care for neonates in the critical first weeks of life.



In the final week of pregnancy, a queen's appetite often decreases due to limited abdominal space, so she should be offered **frequent small meals** along with **unlimited dry kitten food and water**, as her nutritional needs may triple. Prepare a warm, quiet, **low-light kitting box**, encouraging her to use it but not forcing her. A heating pad (under half the box) or a cord-free heat source can help maintain warmth. Before delivery, use **shredded newspaper** instead of litter to prevent messy births in the litter box.

Most queens give birth without assistance. They may become restless, seek seclusion, or want the foster to stay close. Allow her to choose her birthing spot; once delivery is complete, move her and the kittens to the prepared box if needed. Labor progresses through three stages: early restlessness, delivery of each kitten followed by maternal cleaning and cord cutting, and expulsion of the placentas. Kittens typically arrive **15–30 minutes apart**, and the entire process usually lasts **2–6 hours**. If a queen strains for more than **2 hours** without producing a kitten—or appears distressed—veterinary care is required.

A nursing queen requires **constant access to high-calorie food**, both dry kitten food and canned food, to support milk production. Monitor her mammary glands for signs of **mastitis**, and assess milk supply indirectly by observing the kittens: well-fed kittens are quiet, sleep often, and have round bellies. Foster caregivers should know whom to contact with concerns. **Queens can be safely spayed while nursing**, as long as they are returned promptly to their kittens after surgery.



# UPDATED NEONATAL VACCINATION PROTOCOLS

National shelter-medicine recommendations now support **vaccinating all kittens in animal shelters and other environments with meaningful risk of exposure with FVRCP immediately upon intake—regardless of age**, including neonates under 4 weeks old. This shift reflects mounting evidence that many kittens arrive with **minimal maternal antibody protection**, and delaying vaccination even a few days can dramatically increase the risk of exposure to lethal pathogens like **feline panleukopenia**. Shelters should administer a **modified-live FVRCP vaccine at intake**, then continue boosters every 2 weeks until **20 weeks of age** or until the kitten leaves the high-risk environment. This accelerated, intake-first protocol is now recognized as one of the most effective strategies for reducing disease outbreaks, protecting neonatal kittens, and supporting **higher live-release rates in high-volume, resource-limited settings**.



# RESOURCES

These resources expand on the national standards outlined throughout the guide, offering access to expert-led webinars, downloadable PDFs, practical tools, and ready-to-use templates.

Whether you're training staff, onboarding foster caregivers, or enhancing your nursery program, these trusted resources provide the added guidance needed to help every neonatal kitten thrive. —————>



## COURSES & WEBINARS



**Taking the Fear out of Bottle Feeding and Basic Kitten Care**  
*Webinar provided by Maddie's Fund and National Kitten College*



**Kitten College: Transforming Tiny Lives Through Innovation**  
*Self-guided course provided by Maddie's Fund and National Kitten College*

## DOWNLOADS



**Bottle Feeding Chart**  
*Provided by National Kitten College*

## PARTNERSHIPS



**Revival Shelter Program Enrollment**  
*By partnering with Revival Animal Health, you gain a trusted ally dedicated to supporting you, the animals you serve, and the lasting impact you create in your community*



**Join the Royal Canin Crown Partners Program**  
*Access to the pet professional online portal, where you'll find exclusive discounts, benefits, and resources*





**Shelter Medicine**  
School of Veterinary Medicine



**Shelter Medicine Program**  
*College of Veterinary Medicine*  
**UNIVERSITY of FLORIDA**



**Maddie's  
Fund**  
The Duffield Foundation