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## **Infant Animal Care**



**Updated 2015**

### What to do if you find infant animals:

- Move them out of immediate danger
  - If they are cold, warm them up
- Check their condition/age
- Wait a couple of hours, then check to see if they've been moved
- If you believe they are abandoned, contact a shelter or rescue

### What NOT to do if you find infant animals:

- Immediately assume they do not have a mother
- Let them interact with your own pets- they may have something contagious
- Feed them if they are cold
- Feed them cow's milk- instead, use appropriate kitten or puppy formula

### How to Determine the Sex of Your Infant:

#### Kittens

Male



Femal



#### Puppies

Male



Female



## How to Age an Infant Kitten:

The average kitten is 3-5oz at birth, and gains about 1/2 oz per day, or about 1/4 pound per week.

- 3 Days or less- Eyes closed, umbilical cord still attached.
- 7-10 Days- Eyes begin to open.
- 2-3 Weeks- Wobbly on their feet, begin to show play behavior.
- 3-4 Weeks- Ears start to stand up, teeth start to come through.
- 4-5 Weeks- Steady on their feet, begin to eat on their own.
- 6-8 Weeks- Eyes change color, completely eating on their own, all teeth have come through.
- 8 Weeks- Kitten should weigh at least 2 lbs.

## Keeping Kittens Happy

Kittens need to be:

- Warm
- Dry
- Clean
- Safe & Secure



## Temperature

For the first 7-10 days, kittens cannot regulate their own body temperature. Normally they use mom and littermates for warmth.

- Ideal body temp:
  - Newborn kitten: 97–99° F
  - By Week 2: 98–100° F
  - By Week 4: 100–102°F
  - **Don't try to feed a kitten below 95° F!**
- Environment should be 80-90°F
  - Lower temp by about 5°F per week, to normal (warm) room temp, 70-75°F
  - Use a thermometer to monitor if not on a thermostat.

## Warming Options

- Kittens should be able to adjust temp by moving to warmer or cooler area
  - If using a heating device, should not take up the entire cage/area
- Don't cook the kittens!
  - Test all heating devices on yourself first
  - Electric heating pads on **LOW ONLY**, use grounded outlets or surge protector

## Heating Devices

- Snuggle Safe disc
- Electric heating pad
- Incubators
- Warm water bottles/gloves
- Heat lamps

Use a fitted cover, blanket, or towel around heating pads and discs to protect kittens, and for easier cleaning.



## Clean and Dry

- Use absorbent bedding, check often, change daily
- Use caution with hot water bottles/gloves, check often for punctures
- If kittens are dirty, wipe with warm wet cloth or gauze
- If kittens are DIRTY, wash them with gentle soap and warm water, dry quickly and thoroughly
  - Warm dry towels
  - Blow dryers on LOW ONLY, test on self

## Safe and Secure

- Cages or carriers should have narrow bar spacing so kittens cannot slip through, but not so narrow they can get feet stuck. Can use cardboard or plastic barriers inside bars.
- Safe from other animals
- Safe from excessive handling by people

## Milk Replacer

- Special formulas for kittens
  - KMR, PetLac, etc.
- Store powder in refrigerator or freezer
- Wear gloves when handling and mixing
  - Reaching into the can for the scoop without gloves can contaminate the entire can.



## Preparing Milk Replacer

- Follow recipe on label
  - Usually one part powder/two parts water
  - Measuring scoop in can, use for powder only. Measure water with a separate measure
- Make fresh daily
- Store in fridge, in sealed container

## Mixing Milk Replacer

- Mix with lukewarm water
  - Not steaming hot, will cook the formula
  - Does not dissolve well in very cold water
- Blender for large batches only, low speed
- Shake in sealed container
- Avoid clumps
  - Crush with spoon against side of container
  - Pour through small strainer, press clumps through

## Warming Milk Replacer

- DO NOT MICROWAVE MILK REPLACER!!!
  - Fill bottle or small container, place inside bowl or mug of hot water, or on heating pad on low setting. Can use electric baby bottle warmer.
  - Ideal temp = mom's body temp, 98-101°F
- Test on the inside of your wrist. Should feel very warm, but not hot.

## Feed Fresh Every Time

- Warm just enough for one meal
  - Plus a little extra to avoid air bubbles in bottle
- Discard leftovers after feeding
- Do not warm and chill again!
- Do not put used bottles back in fridge!
- Do not leave out at room temp!

## Clean Equipment and Utensils

- Clean bottles and nipples for EVERY MEAL
  - Can share among littermates, NOT WITH OTHER LITTERS
  - Wash with warm, soapy water
  - Use bottle brush
  - Rinse well and dry
  - Sterilize if possible
  - Clean containers and utensils used for mixing and storage of milk replacer

## Bottles

- 2oz for small kittens
- 4oz for larger kittens (3-6 wks) and puppies



## Nipples

- Nipples come without holes
  - Hot needle
    - Heat with lighter, puncture nipple, leave in place until needle has cooled completely (5-10 min)
  - Scalpel blade or scissors
    - Make X in tip of nipple, better for older/larger babies
- Can soften with use or become brittle and crack - replace as needed

## Kitten Feeding Chart

Age (wks)	Amount/day	Amount/meal	Frequency
0-1	20-40ml	2-6ml	Every 2 hrs
1-2	40-60ml	6-10ml	Every 2-3 hrs
2-3	60-90ml	10-15ml	Every 3-4 hrs
3-4	90-120ml	10-20ml	Every 4-6 hrs
4-5	120-150ml	18-22ml	Every 6 hrs

## Check Milk Flow

- When the bottle is held upside-down, milk should ooze and drip very slowly through the hole in the nipple, one drop per 2-3 seconds.
  - If the hole is too small, the kitten won't be able to get milk out. You should not squeeze the bottle to get milk out.
  - If the hole is too big, the flow will be too fast, and the kitten can aspirate, and/or you'll have a huge mess
  - Check every time - the nipple will soften with use, hole may get bigger

## Nursing Position

- Position for bottle feeding like babies nursing from mom
  - Lying on stomach, head slightly elevated, neck extended
- Do not lay on back like human babies!
- Place on your lap, or on a towel/blanket on a table

## Good Nursing Position



## Bad Nursing Position



## Troubleshooting

- Check temps
  - Make sure the kitten and the milk replacer are both warm, milk replacer is fresh
  - Don't try to feed a cold kitten! Temp >95°F
- Check the equipment
  - Make sure the nipple hole is adequate
- Dribbling/bubbling/milk out the nose?
  - Flowing too fast, hole in nipple too big

## Refusing to Eat

- Active and alert but refusing the bottle?
  - Try syringe feeding
  - Stimulate first, then try offering bottle again
- Cold, lethargic, inactive?
  - Check temp, add heat support as needed
  - Notify CHS ASAP
  - Give drop of dextrose solution or corn syrup under tongue every hour until able to eat



## Stimulate After Feeding

- Kittens cannot urinate and defecate on their own until 2-3 weeks old
- Mother cats stimulate by licking
- Stimulate after every feeding with cotton balls/gauze/towel/paper towel damp with warm water, rub area gently in circular motion for 10-30sec



## What's Normal?

- Urine should be pale yellow, not dark
  - Dark urine means dehydration
  - Should urinate (almost) every time stimulated
- Feces are soft, yellow/brown
  - Amount is normally small in young kittens, may not defecate every time
  - Not normal: very watery, lots of mucus, visible blood, very firm stool, white or green color

## Weaning

- Can start offering canned food mixed with water or milk replacer at around 3 weeks old
  - Offer in very shallow bowl or plate (lids from jars and plastic containers are good)
- Normal kittens wean at 4-6 weeks, bottle babies often take longer to eat well on own

## Potty Training 101

### Kittens:

- Once infant begins to eat on their own, begin potty training.
- After eating, place kitten in litter box and stimulate as usual. Once kitten begins to urinate and/or defecate, allow them to finish on their own. Litter box should be in an accessible location with low sides for easy access.
- Continue stimulation until kitten starts using box on their own.
- Do not allow free-roaming until they consistently use the box.

### Puppies:

- 10-15 minutes after eating, take puppy outside to area you designate for potty time. Allow puppy to do his business. Once he goes, Praise, Praise, Praise!
- Always take puppy to same area. Dogs will go where they smell their own waste.
- Crate puppy when you are not home. They don't like to do their business and lie in it.
- NEVER punish puppy for having an accident. Take waste outside to potty area, then clean mess inside to neutralize the odor.

## Keep Good Notes

- Identify individual kittens clearly
- Weigh kittens daily on gram/ounce scale
- Note how much they eat at each meal
- Note urination/defecation





## Wellness Care

- Dewormer every 2 weeks until 4 months old (pyrantel)
- FVRCP vaccination (Herpes/Calici/Panleukopenia)
  - Start with intranasal at around 4 weeks, injectable at 6 weeks
  - Booster every 2-4 weeks until 4 months
    - 2 weeks in shelter, 3-4 weeks ok if out in foster home
- Rabies vaccine at 12 weeks
- FeLV testing
  - When old enough to draw blood safely, before S/N or adoption



## Daily Observations

Observe infants daily for any subtle changes such as:

- Lethargy
- Change in appetite
- Change in elimination

Call your vet with any questions or concerns

## Common Infant Medical Issues

### 1. Panleukopenia

- Feline parvo virus
- Also called feline distemper
- **Highly contagious**
- **Hard to kill/disinfect**
- Causes vomiting, diarrhea in cats and older kittens, can cause sudden death with no signs in young kittens
- Can use IDEXX Canine Parvo SNAP test on cats

### 2. Ringworm

- **Highly contagious to all mammals**
- **Hard to kill spores**
- Check for hair loss, crusts, flakes, or scabs
  - Can be disguised by food, dirt, feces on fur
  - Use Wood's lamp to evaluate strays, any animals with hair loss or skin problems



### 3. Upper Respiratory Infection

Most common cause is viral (Herpes and/or Calici). These viruses are extremely common in cats, especially in shelters. They cause much worse disease in kittens than adults.

URI in dogs is referred to as Kennel Cough. Caused by many viruses as well as Bordetella (bacteria) and mycoplasma infections.

Treatment includes oral antibiotics to treat secondary infections, antibiotic eye ointment, and steam treatments to open up blocked nasal passages and ease breathing. In severe cases, force-feeding and subcutaneous fluids may be necessary.

**Everyone must wash hands after handling a sick animal.**

URI Symptoms Include:

- Discharge or crusting of eyes, nose
- Sneezing, stuffy nose, trouble breathing
- Loss of weight, failure to gain weight
- Extremely common, contagious to other cats



### 4. External Parasites

Most treatments (Frontline, Advantage, Revolution, etc.) are labeled for animals 6-8 weeks or older. See a vet ASAP if younger animals require treatment.

- Fleas- Can cause anemia and be deadly in infants.
- Ear mites- Coffee-ground appearance in ears. Must be treated with an application of ear mite medication.
- Lice
- Ticks- Can transmit diseases such as Lyme disease.



### 5. Intestinal parasites

Extremely common in infants. Can be passed from mom to infant in the womb and while nursing, but can also be picked up outside.

Symptoms include diarrhea, vomiting, distended belly, failure to gain weight or weight-loss. Worms are sometimes seen in the stool.

A fecal sample should be checked under the microscope, and the proper dewormer dispensed.

All kittens and puppies should be dewormed every 2 weeks.

Some parasites are zoonotic (contagious to other species, including humans): **always wash your hands after handling animal stool.**

## Common Intestinal Parasites:

- Roundworms
- Tapeworms
- Hookworms
- Whipworms
- Coccidia
- Toxoplasma
- Giardia

## 6. Diarrhea- Loose or watery stool. Sometimes accompanied by blood.

Though common in infants, diarrhea can cause rapid dehydration and death in babies and should be taken seriously. Call your vet immediately.

### Common Causes:

- Over-feeding- Skip one feeding, then return amount of formula to a previously tolerated level. You can feed infant a smaller amount more frequently, and add a little extra water to formula to prevent dehydration.
- Parasites- If diarrhea persists, parasites may be to blame. A fecal sample should be checked under the microscope for parasites. A dewormer may be needed.
- Virus/ Bacterial Infection- may require antibiotics.

## Common Behavioral Issues

### 1. Socialization

Kittens and puppies need human socialization from a young age. Spend time petting and cuddling the infants throughout the day. Handle the animal's paws and ears so that they will be comfortable having vet check-ups.

Timid puppies and kittens will need extra time spent with socialization. Go slowly, use treats, and have patience!

If you are attempting to socialize semi-feral kittens, separate them from each other when weaned to encourage bonding with humans.



### 2. Biting Kittens

When a kitten is playing, their predatory drive kicks in. Biting is a natural play behavior for kittens.

When playing with young kittens, never use your hand as a plaything. Use toys such as balls, string, etc.

If the kitten tries to bite your hand, you can try several deterrent methods. Either hiss at the kitten, like its mom would, or use a spray bottle of water to startle it. Never yell at or hit a kitten!

### 3. Biting Puppies

Young puppies may become nippy, as this is normal play behavior. This is usually not aggressive, but you should never let a puppy nibble on you.

When petting a puppy, offer a chew toy as an alternative for the nipping.

If the puppy nibbles on you, yell “Ouch,” then stop playing with the puppy for a few minutes. Eventually the puppy will learn to only nibble on appropriate toys.

### 4. Chewing

Puppies chew to relieve the pain of teething. Always make sure puppies have appropriate toys to chew on.

- Make sure the area the puppy is playing in is free from choking hazards.
- If a puppy is chewing something inappropriate, remove it from his mouth and substitute it with a bone or toy.
- Never yell at or hit a puppy for chewing something inappropriate.
- Puppies need to be supervised at all times. Crate the puppy when you are unable to supervise.



### 5. Scratching

Kittens scratch to mark territory, for exercise, and because it’s fun! This is a natural cat behavior and should be expected.

To avoid your furniture being shredded, provide an acceptable scratching post for your kitten, and place it in a location central to all the activity, not back in a dark corner. If kitten starts to scratch furniture, take her to the scratching post and start petting her.

Don’t take the paws and put them on the post, this will only cause resistance.

Keep kittens nails trimmed.

Declawing is not recommended. It can cause severe long-term pain, and turn scratching into biting when scared or stressed.

### 6. Food/Toy Guarding

It is important not to allow your puppy to become too possessive of food, toys, or treats. When giving a puppy a treat or toy, never let them grab it roughly from your hand. Say “take it” and hand it to them gently.

Teach them “leave it” or “drop it” – start by trading the toy or treat for a higher value item like a really good treat.

Feed animals in separate spaces, so they do not feel they have to fight for or protect their food from other pets.

If you notice growling or guarding behavior, consult a trainer and start a hand feeding program.

## 7. Crying/Whining

Young pups may cry or whine for attention when left alone or crated. Though it sounds pathetic, never give in to the whining or you will reinforce the unwanted behavior.

- Wait until they stop, even for a moment, to open the door or give attention.
- Start crate training early – start with short periods of time, give treats or meals in the crate to create positive associations.
- It sometimes helps to cover the crate with a towel or sheet. Watch out for chewing – fabric can be dangerous when eaten.
- Soft music or TV sounds may help soothe and distract them.



## How You Can Help

- Encourage friends to spay/neuter
- Promote shelter adoption
- Become a bottle-feeding volunteer

## Resources

Maddie's Institute

Caring for Orphan Kittens - webinar, articles, links

<http://www.maddiesfund.org/caring-for-orphaned-kittens-.htm>

UC Davis Koret Shelter Medicine Program

Information Sheet - Feline: Guide to Raising Orphan Kittens

<http://www.sheltermedicine.com/node/39>

NYC Feral Cat Initiative

<http://www.nycferalcat.org/BottleFeedingKittens-Letter.pdf>

Books:

[Hand Raising the Orphaned Kitten](#) by Myrna L. Papurt, DVM (1999)

[The Guide to Handraising Kittens](#) by Susan Easterly (2001)

## Final Note

Thank you for Attending.

Please remember to Spay and Neuter your Pets!