Pregnant, Nursing Mom and Neonatal Kitten Care

Street Cat Rescue

Street Cat Rescue 2750 Faithfull Ave #108 Saskatoon, SK, S7K 6M6 306 955-7228 contact@streetcat.ca

## INTRODUCTION

Welcome to the wonderful world of feline reproduction! Thank you for agreeing to foster and be part of a remarkable adventure.

SCAT (Street Cat Rescue) is committed to responsible spaying and neutering programs, but every year we take in hundreds of cats and kittens who are abandoned to the streets and are very vulnerable. We are equally committed to providing care to these unfortunate ones, ensuring they are spayed and neutered and go on to good adoptive homes.

The following manual will provide you with information and guidelines on caring for your new foster family. Please remember that you are never on your own with this, support is available through the SCAT adoption centre and after hour emergency contact and veterinary support.

Usually you will receive your foster cat after she has been examined by a veterinarian and the pregnancy has been confirmed. On occasion a cat will come in after hours or on the weekend, she will then require a veterinary visit as soon as possible.

#### In the event of an emergency:

Please take the cat to the Small Animal Clinic, Western College of Veterinary Medicine. 52 Campus Dr, Saskatoon, SK. Phone: 306-966-7126

### FACTS ON FELINE REPRODUCTION

- Feline reproduction is seasonal, cats are designed to only give birth during spring through to early fall. Unfortunately not every female cat has read the rule book on this. But mostly they begin their hormone (heat) cycles when the days become longer. Females generally start to cycle as they near adult size and when the days are getting longer and warmer. Sadly this can be as early as four months of age. After age seven, cycles become irregular and less frequent.

- A cycle commences with the buildup of estrogen and the female prepares to ovulate, this period can be as short as 12 hours or as long as 2 days. During this time she is extra affectionate, rubbing her head and sticking her butt in the air. She will vocalize a lot and very loudly and may urine mark in the house.

- The 'heat' cycle continues and now the female can become receptive to the male, this will continue for the next seven days or more. The female is ready to ovulate but will likely not do so unless the male breeds her. Mating will shorten this seven day cycle. Cycling will continue on and off (7-10 days on, and the same time off) until the cat is bred. Often this behaviour will drive owners crazy and motivates them to spay or, unfortunately, abandon their pet.

- If the female is bred and ovulates her body prepares for a possible pregnancy and the 'heat' cycle will stop. If she has become pregnant, she will carry her kittens for 64-66 days before delivering them.

### CARE DURING PREGNANCY

Usually your pregnant foster has relatively few needs during pregnancy, but it is important to follow these guidelines:

She will require a high quality canned and dry kitten food. The extra calories are needed to support normal kitten development and, after delivery, when she is nursing her metabolic demands will triple or quadruple.

A pregnant cat CANNOT be vaccinated: developing kittens are vulnerable to the elements in modified live virus vaccines.

Deworming/flea control is managed by the vet on a case by case basis. Only specific treatments can be safely used during pregnancy and risks must be carefully considered against benefits. Thankfully fleas are uncommon in our areas, worms not so much.

The pregnant mom will need her own nesting area and separation from other pets in the house. It should be a quiet area with minimal human traffic. She needs to feel comfortable and safe.

# LIST OF SUPPLIES

- High quality canned and dry kitten food approved for growth
- ✓ Digital kitchen scale that weighs in grams
- ✓ Heating pad with a low continuous setting (i.e. no auto shut off)
- ✓ Separate room to house mom and kittens
- ✓ Litter box with NON clumping litter (e.g. Yesterday's News, non-clumping clay or pine based litters)
- ✓ Secure pet carrier for transportation
- Nesting box or tub large enough for mom to lie down and stretch out, filled with soft, washable bedding. Mom should be able to get in and out easily; kittens should not. Ensure the heating pad is under blankets and only located on one side of the nesting area, so that mom can cool off. Try to minimize the amount of electrical cord exposed and accessible to mom and kittens.

\*Note: mom may ignore the box until labour starts. When labour starts, place her in the nesting area before the kittens are born. Usually she will like it just fine.

# WARNING SIGNS DURING PREGNANCY

- **!** Vaginal bleeding during pregnancy is NOT normal. It may indicate a miscarriage or premature delivery. Seek immediate veterinary care.
- ! Greenish or any foul smelling vaginal discharge is a sign of infection. Seek immediate veterinary care.

Remember vaginal bleeding and discharge is normal during labour and indicates labour and delivery is imminent.

### LABOUR AND DELIVERY

! Reminder: Provide mom with a safe and secure nesting area.

Some mama cats will prefer to give birth alone in a dark quiet place, in fact you might miss the whole process. Other cats, especially a young mom, may want you with them all through this difficult process, supporting and encouraging them and sometimes lending a helping hand. Pay attention to what she is communicating.

Mom's hormones are raging at this time and variations from normal behaviour is not unusual. Some cats may become extremely affectionate, others may behave aggressively or become fearful. The nesting area should be prepared as previously described. If possible and if space permits, offer her more than one option for nesting.

### Early labour signs and behaviours:

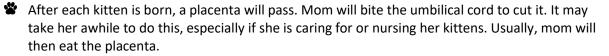
Hours and up to a day of restlessness, grooming, nesting behaviours, panting, crying and vocalizing may indicate the start of labour. Mom will often purr and seclude herself in her selected nest area (this may not be in the nesting box you have prepared for her). Contractions will commence in the next 12-36 hours.

**Important**: During early labour and during/after kittens are born: Do NOT attempt to move mom and kittens. This may stress her into stopping labour or scare her into neglecting the kittens.

### Final stages of labour:

- Brownish/bloody fluids passed vaginally indicate the start of labour and delivery.
- Baby cats can be born head first or feet first and will be surrounded by a thin amniotic sack. This usually breaks during birth.

As the kitten emerges from the birth canal, mom will remove the sack and stimulate the kitten to breath by vigorous grooming. If she does not, you may have to break and remove the sack and wipe away mucus and other debris from the kitten's mouth and nose to allow it to breathe. The kitten should cry out at this point.



Kittens are born every 10-60 minutes. If strong contractions continue for longer than one hour between kittens, seek veterinary advice.

Remove a still born kitten from the nesting area as soon as mom's attempts to stimulate it are not successful.

Once kittens are born and nursing, provide mom with food and water near her head. She may not want to leave her kittens.

- Remember most of the time, labour is normal and proceeds without difficulties, you may just wake up one morning and find the whole event has taken place without you knowing.
- Vaginal discharge is normal up to 3 weeks after delivery. It is typically brownish or reddish and consists of old blood. You may not even notice it because mom will clean herself up. Bright red bleeding, puss, or foul smelling discharge is not normal. Seek veterinary care.

### **Complications of Labour and Delivery:**

#### Dystocia:

Intense contractions for greater than 60 minutes between kittens indicates that mom needs assistance in passing the kitten. Mom and any kittens she has already delivered need to go to the vet IMMEDIATELY.

#### **Retained Placenta:**

If mom retains the placenta she will develop infection. You will see fever, loss of appetite and she may neglect the kittens. If this occurs, she needs to see a veterinarian immediately: she will require hospitalization and she will likely require to be spayed emergently to remove the placenta.

**Note**: If mom is unable to feed the kittens due to her condition, support for this, as well as specialized formula and supplies, are available through the SCAT adoption centre. Use only approved supplies/food, do NOT attempt to feed the kittens with anything else. Kittens requiring specialized care may be transferred to a neonatal kitten foster.

### THE KITTENS, ONCE THEY ARE HERE

- ✓ Keep them warm
- ✓ Keep them safe
- ✓ Keep them fed
- ✓ Keep them clean

As soon as all the kittens are delivered, clean the birthing area, remove and replace all soiled bedding

#### The Basics:

- Keep them in a safe a secure spot, isolated from other pets until after their first vaccinations (about 6-8 weeks) – see chart for more details. Kittens will require testing for FeLV and FIV at 8 weeks of age. Do not introduce them to other household pets until they have tested negative.
- Give them access to a heating pad on low setting at all times.

Do not bathe them unless absolutely necessary (e.g. profuse diarrhea). Dry them thoroughly and keep them in a warm environment. Hypo-allergenic baby wipes can be used in most cases as an alternative to bathing. t

Weigh the newborns. Kittens generally weigh between 90-110 grams at birth. Kittens smaller than 80gms are at serious risk and may require special handling. Seek veterinary care.

Some moms may choose to move their kittens. Ensure her space is free of hazards and there are a few clean areas with bedding so that she has safe options. Make sure a heating pad is available.

Weigh the newborns once a day and record the weight (see chart at end of document). If mom is protective or nervous, place the scale beside her while you weigh them. They should gain 7-12gms per day.

They may lose up to 10% of their birth weight within the first 24 hours, this is normal.

If there is no weight gain or you see a drop in weight for more than 24 hours, please contact the adoption centre or seek veterinary care. Even a small weight loss in kittens under a week old can be deadly. Do not hesitate to reach out for help or advice.

Closely monitor mom and new kittens. Watch carefully to ensure kittens are nursing and mom is caring for ALL of them. A neglected or rejected kitten can become ill very quickly and die.

Signs of distress or illness in neonatal kittens include:

- frequent crying
- ! restlessness
- ! weakness or lethargy
- ! hypothermia/low temp
- ! diarrhea
- ! dehydration
- ! difficulty breathing
- Immediately contact a veterinarian if you notice these signs. Make sure the kitten is kept warm. You can rub a couple of drops of corn syrup on their gums on the way to the vet.

# CHART: MONITORING THE KITTENS/DEVELOPMENTAL MILESTONES

	What is Normal?	Something is Wrong!			
Weight	Birth weight approx. 100g They gain 7-10% birthweight each day (that should be 7-12g/day) Weight doubles by 2 weeks	Underweight for age Not gaining weight			
Attitude	Bright, alert and responsive (BAR) Hardly cries	Lethargic and unresponsive Cries a lot			
Body Condition	Plump and round (0-6 weeks) Symmetrical body and limbs	Thin body condition, taut over extended abdomen (0-6 weeks) Asymmetry			
Coat Condition	Hair shiny and free of debris	Hair loss, skin irritation, cuts, hair stained with poop			
Muscle Tone	Strong	Weak and flaccid			
Rectal Temperature	0-2 week, 35.5-37C 2-4 weeks, 36-37.5C 4+ weeks, 37.8-38.6C	0-2 weeks, anything below 35.5 is abnormal 4+ weeks anything above 38.6 may be a fever			
Heart Rate	220-260 beats/min	Slow or irregular heart rate, in chilled kittens heart rate will slow down			
Respiratory Rate	Birth: 10-18 BPM (breaths per minute) After 1 week: 16-22BPM	Laboured breathing (slower or faster)			
Reflexes	0-14 days: rooting and suckle reflex 0-38 days: elimination reflex 0-7 days: gag reflex 3-17 days: startle reflex 6-8 days: shiver reflex	Weak, fading kittens will have diminished reflexes Note: if chilled, newborn kitten do not shiver			
Mouth	Palate closed 2-3 weeks: incisor 1 and 2 erupt 3-4 weeks: incisor 3 and canines erupt 4-5 weeks: lower pre molar erupt 5-6 weeks: upper pre molar erupt	Cleft palate			
Mucus Membranes	Pink, moist and slippery	Dark red, dry, tacky, pale			
Eyes and Ears	5-14 days: eyes open 6-17 days: ears open 4-6 weeks: iris colour and normal vision	Swelling, discharge or pain around area			
Abdomen	Slightly plump and enlarges after nursing 2-4 days umbilical stump falls off	Distended and painful with excessive crying Redness, pain and/or swelling around umbilicus			
Anus Genitals	Present and evident	Red, swollen; Yellow or green discharge; Not present or evident			
Pee	Dilute yellow 3-4 weeks: urinating on their own	Dark yellow or bloody			
Gastro- intestinal	Responsive to nursing Interested in solid food at 3-4 weeks Eating dry food and wet food on their own by 8 weeks	Unresponsive and weak Poor appetite Vomiting and/or diarrhea			
Movement	1-10 days: fore limb support (belly crawl) 4 days after belly crawl: some hind limb support; 16 days: walking; 21 days: normal gait				

# SETTING UP A SAFE PLACE TO GROW

- As kittens grow they will want to explore, this usually starts at 4 weeks old. We must ensure they do not stray too far from mom and nest and that their environment is safe and free of hazards.
- A bath tub may be ideal at this stage (0-4 weeks). A bowl for food and water can be placed at one end away from their bedding and litter. (ensure bathtub drain is closed/securely covered)
- Alternatively, the centre can supply you with a collapsible mesh and canvas tent that allows for sleeping, a litter box and feeding station. Ensure it is clean and decontaminated before use.
- Supply kittens with plenty of safe toys.

Kittens should be introduced to a litter box at 3-4 weeks. Fill a very shallow box with nonclumping litter and place it away from their food dishes. They will learn from mom how to use it.

At 5-6 weeks door dashing and escape attempts from their enclosure is going to happen. (Vaccinations and deworming need to be considered at this time, especially if there are other animals in the house – refer to vaccination chart)

Once kittens are dewormed and vaccinated, they can be allowed free run of your home. Do so with caution (refer to hazard list).

Do not leave them unsupervised. Remember, the further they stray from their litter box the less likely they are to find it in time.

After 4 weeks of age, it is important to socialize kittens with humans. This is crucial to their development, they need to learn to love and bond with humans. Always ensure they are in a safe environment and closely supervised. Wash hands before and after handling the kittens.

### Household hazards for kittens:

Even the most experienced fosters can overlooked certain hazards. These are the things we have seen that can injure or even kill a kitten:

- Rocking chairs: for obvious reasons, keep out of kitten areas
- Reclining chairs, pull out sofa beds, etc.: kittens can easily crawl inside and become injured
- 1 Toilets: keep lids closed and secure so kittens cannot climb in
- Bath tubs and sinks: keep drained at all times
- Doors: watch that kittens are not behind doors or have their paws inside door jams that are being opened or closed
- ! Windows: unscreened windows should be closed at all times
- ! Outdoors: kittens are not allowed to be outdoors unless confined. NO EXCEPTIONS
- ! Other cats/pets in the home: pets can be asymptomatic carriers of viruses that could infect an unvaccinated kitten
- Dogs: can easily injure a kitten, often accidentally do not leave unsupervised

- Washers/dryers/other appliances: kittens can crawl inside the machines without being noticed or get stuck behind them
- Holes in ceilings, walls or floors (including uncovered furnace vents): can afford entry to curious kittens
- Small objects such as rubber bands, string, paper clips, etc. can be ingested and lead to abdominal obstruction or perforation
- ! Many household plants are poisonous to cats and kittens: keep them out of reach
- ! Electrical cords: remove, hide, cover or spray (e.g. with bitter apple)

# **CHART: BABY CAT - PHYSICAL AND BEHAVIORAL MILESTONES**

	Physical Milestones	Behavioral Milestones		
Week 1	<ul> <li>cannot regulate body temp for several weeks</li> <li>must maintain a warm environment, they snuggle with mom and litter mates</li> <li>grooming by mom is critical to bonding: mom must also stimulate their anogenital region to allow them to pee and poop</li> <li>nursing provides essential nutrients as well as colostrum and milk immunoglobulins to build a healthy immune system as well as intestinal health</li> <li>kittens will call to mom (we will not be able to hear all their cries, but mom can) kittens cry at an ultrasonic range</li> </ul>	<ul> <li>kittens move towards warmth</li> <li>they can identify mom accurately</li> <li>they purr as early as 2 days</li> <li>they start to respond to sound by 5 days</li> </ul>		
Week 2	<ul> <li>they gain in strength, sensory and motor skills</li> <li>they start to belly crawl</li> <li>their eyes open at 5-14 days (on average): they can only see very blurry images</li> <li>ears start to unfold, increasing their ability to hear</li> <li>the sense of smell improves</li> </ul>	<ul> <li>they respond to sound by 10 days; they respond to mom's commands by 14 days</li> <li>they recognize distinct odours and may hiss at unfamiliar smells</li> <li>they test out their wobbly legs and start to explore</li> <li>they start to relate to litter mates, sniffing and pawing</li> <li>they may start to groom themselves and litter mates</li> </ul>		

	Physical Milestones	Behavioral Milestones			
Week 3	<ul> <li>they continue to develop motor skills and senses</li> <li>they are better able to regulate temperature</li> <li>they start to walk</li> <li>vision improves rapidly</li> <li>they start to wean/the first canine teeth appear</li> <li>they start to pee and poo on their own (3-5 weeks)</li> </ul>	<ul> <li>they snuggle less with mom and litter mates</li> <li>they identify and follow objects by sight</li> <li>social play and play fighting begin: life is a party</li> <li>litter box (with non-clumping litter) can be introduced to start potty training</li> </ul>			
Week 4	<ul> <li>hearing, sight and smell develop to adult level</li> <li>coordination improves, they begin to jump, pounce and climb</li> <li>weaning is underway</li> <li>teeth continue to come in</li> <li>much better at regulating their own temperature</li> </ul>	<ul> <li>they stray further from their nesting box, and they are able to orient by sight and avoid obstacles</li> <li>they begin to learn by watching and practicing</li> <li>in the wild, mom would start to teach hunting skills by bringing in live prey</li> <li>group play is common, waking hours are spent playing with and grooming their litter mates</li> <li>they begin to interact with humans on a regular basis</li> <li>dominance hierarchies are formed</li> </ul>			
Week 5	<ul> <li>they begin to run and rarely stop</li> <li>the basic skills are well developed but lack grace</li> <li>weaning is well underway but they still love to nurse</li> </ul>	<ul> <li>they are engaging in complex play, e.g.</li> <li>hiding while playing</li> <li>able to consistently use the litter box</li> <li>in the wild, they would start to kill prey</li> </ul>			
Week 6	<ul> <li>they are growing like a bad weed</li> <li>strength and muscle development increase</li> <li>they continue to refine sensory and motor skills</li> <li>full control of elimination</li> <li>they start to show the grace of an adult cat</li> <li>baby teeth are still erupting (teething!)</li> <li>they can eat solid food (wet and dry)</li> </ul>	<ul> <li>play is more complex</li> <li>adult response to threatening sights and smells</li> <li>they practice arching poses, hissing and sideways jumping</li> <li>they are becoming more independent of mom and litter mates</li> <li>they copy mom's routines and movements</li> <li>they chew on everything!</li> <li>they enjoy regular handling and snuggling with their humans</li> </ul>			

### WEANING MOM AND KITTENS

A gradual weaning process for the kittens starts about 4 weeks.

Weaning will gradually reduce the amount of milk mom produces. Weaning times can be dependent on the size of the litter, condition/health of mom and how much milk she is producing.

- Introduce kittens to a semi solid slurry of canned kitten food and water. Alternatively, you can mix 3 parts KMR (kitten milk replacer) to 1 part dry kitten food: let sit until softened and mash the food really well.
- Serve the slurry at body temperature. Offer slurry to the kittens in small dishes (for example: the kind used for hamsters) or a shallow saucer or pie plate (if you do not mind a mess).
- Encourage them to eat by gently smearing a little food on their lips or having them lick from your finger.
- Offer food 3-4 times per day initially.
- Once they learn to eat the slurry, stimulate their appetites by not letting them nurse for 2 hours before feeding. Mom will appreciate the break.
- Allow them to eat for 15-20 minutes and then return them to mom.
- Some kittens will take longer to wean than others. Observe the litter at feeding time to ensure all are eating enough. Check their tummies afterward to ensure they are full.
- Continue to weigh them once a day to ensure they are gaining weight.
- Always have fresh clean water available in shallow bowls. It will get messy so be patient and put the bowl on a towel.
- As the kitten grows, mix more food (less water/KMR) into the slurry. Kittens are able to eat dry food on their own by 7-8 weeks, but make it available during the weaning process for kittens to experiment with.
- Even with gradual reduction, mom may develop a painful engorgement (of mammary glands) after the kittens are completely weaned. Cut her food supply by ½ of normal intake, this will cause her body to produce less milk.
- If she is engorged and uncomfortable you can restrict fluid for 24 hours only. Warm compresses to her mammary glands at 20 minute intervals and 3-4 times per day may help.
- If the mammary glands become rock hard, bright red and painful, take her to the veterinarian immediately.

# **ADOPTION TIME**

Mom cannot be adopted until after she is spayed. Ideally she should be confined until she is spayed and should be spayed 3-4 weeks after the kittens have stopped nursing. This allows the mammary tissue to dry up and return to normal. If mom is spayed before this happens, it may lead to increased bleeding and a more difficult surgery.

You can separate mom from kittens once they are eating enough to maintain and gain weight (generally around 8 weeks). This may be the best choice under some circumstances, for example: when mom's health is threatened but this is best guided by veterinary advice and oversite.

If you find it difficult or heartbreaking to separate mom from her baby cats, don't fret. In most cases, the kittens can be left to nurse until they are adopted or mom kicks them off (allowing mom to nurse them after they require it, won't cause any harm). If mom's health isn't threatened or there is no hurry to get mom adopted, keeping mom and kittens together may be your best option.

2-3 weeks	<ul> <li>first wellness check</li> <li>check for ear mites/treatment (if required)</li> <li>first dewormer (if required)</li> </ul>
4-5 weeks	<ul> <li>second dewormer (if required)</li> <li>start weaning/feeding slurry</li> <li>introduce litter box</li> </ul>
6-8 weeks	<ul> <li>wellness check</li> <li>FVCRP vaccine</li> <li>third (or first) dewormer</li> <li>photos and bios due: available for pre adoption on website</li> <li>eating independently</li> </ul>
8-10 weeks	<ul> <li>wellness check</li> <li>testing for FeLV and FIV</li> <li>FVCRP booster</li> <li>eligible for Petsmart or other adoption centre ONLY if initial FVCRP was administered 10 days previously, kitten weighs at least 800g and FeLV and FIV testing are negative</li> </ul>
10-12 weeks	- wellness check - 2 <sup>nd</sup> FVCRP booster
12-16 weeks	- wellness check - rabies vaccine

# **CHART: PREPARING FOR ADOPTION - THE KITTEN CHEAT SHEET**

# **CHART: MONITORING KITTEN WEIGHT**

Kitten's Name:								
Day 1	g	g	g	g	g	g	g	g
Day 2	g	g	g	g	g	g	g	g
Day 3	g	g	g	g	g	g	g	g
Day 4	g	g	g	g	g	g	g	g
Day 5	g	g	g	g	g	g	g	g
Day 6	g	g	g	g	g	g	g	g
Day 7	g	g	g	g	g	g	g	g
Day 8	g	g	g	g	g	g	g	g
Day 9	g	g	g	g	g	g	g	g
Day 10	g	g	g	g	g	g	g	g
Day 11	g	g	g	g	g	g	g	g
Day 12	g	g	g	g	g	g	g	g
Day 13	g	g	g	g	g	g	g	g
Day 14	g	g	g	g	g	g	g	g
Day 15	g	g	g	g	g	g	g	g
Day 16	g	g	g	g	g	g	g	g
Day 17	g	g	g	g	g	g	g	g
Day 18	g	g	g	g	g	g	g	g
Day 19	g	g	g	g	g	g	g	g
Day 20	g	g	g	g	g	g	g	g
Day 21	g	g	g	g	g	g	g	g
Day 22	g	g	g	g	g	g	g	g
Day 23	g	g	g	g	g	g	g	g
Day 24	g	g	g	g	g	g	g	g
Day 25	g	g	g	g	g	g	g	g
Day 26	g	g	g	g	g	g	g	g
Day 27	g	g	g	g	g	g	g	g
Day 28	g	g	g	g	g	g	g	g
Day 29	g	g	g	g	g	g	g	g
Day 30	g	g	g	g	g	g	g	g
Day 31	g	g	g	g	g	g	g	g
Day 32	g	g	g	g	g	g	g	g
Day 33	g	g	g	g	g	g	g	g
Day 34	g	g	g	g	g	g	g	g
Day 35	g	g	g	g	g	g	g	g