



Canine Neonatal Care: A Basic Guide

Evan Bell, BSc DVM

Last edited December 2025

Preparation for a Litter

While the average duration of a pregnancy in dogs is 63 days, it is possible to see a litter show up 1-2 days before or after this date. With progesterone timing done before breeding, we can determine when a bitch ovulates, making it easier to predict when to expect whelping to occur. Without progesterone timing in advance, it is a bit more difficult to predict. There are a few options available to help narrow down when she is about to whelp.

- Temperature – start taking her temperature rectally twice daily a week or so out and watch for a drop of at least 1oC. This is not always evident but may help you identify impending labour.
- Nesting Behaviour – you may see her start to make a ‘nest’ of sorts in a quiet place in the house (sometimes in the whelping area if you have it already set up). Some may start collecting toys into this area.
- Ultrasound Monitoring – a veterinarian can monitor for signs of fetal development that may help indicate a puppy is ready to be born. This can be tricky to identify and requires interpretation by your veterinarian.
- Reverse Progesterone Timing – requires daily progesterone testing to help identify when her progesterone reaches baseline levels (which should trigger whelping). This is not accurate in all situations but is considered the most accurate option in the correct situation.

In the weeks leading up to whelping there can be several changes to watch for such as an increased appetite, or a larger/rounder abdomen. Casual activity, such as leash walks or mental stimulation puzzles at home are encouraged while keeping separated from dogs outside the home. Exposure to other dogs can result in infectious diseases that can cause

Whelping Area

A whelping area is generally a room with a ‘whelping box’ set up. This is usually isolated from any other pets in the home and should be a clean box with clean linens, about 1.5x the size of the dog. For cleaning purposes, the box should have a rubber or waterproof liner to contain any liquids. Around the edges it is recommended to install a railing to help prevent puppies from being squished by the dam. Ensure that the walls of the box are high enough to allow the dam to leave and contain the puppies. You can either DIY them, or you can purchase a commercially made product from online retailers.

The room will need to be a higher ambient temperature than the rest of the home, and the box should have additional heat sources to ensure the puppies are kept at the right temperature.

Initially, you may need temperatures around 30oC and over the next four weeks it can reduce to 23oC. Heat pads or lamps can be used provided there is a way for puppies to move towards/away from them to regulate temperature. Too hot, and burns can occur, while a cold puppy is often one that doesn't survive. Ideal humidity is around 65%.

Whelping

Labor occurs in three stages:

- **Stage I:** The female may show signs of discomfort and nesting. This is the start of uterine contractions and may last for up to 12 hours.
- **Stage II:** Active delivery of puppies, with visible contractions, which should occur within 4 hours of pushing. My note various colours of discharge.
- **Stage III:** The passage of the placenta after each puppy. Keep track of how puppies and placentas past to ensure they are equal! Retained placentas can cause serious illness.
- **(Repeat Stages II and III until all puppies are birthed)**

If no puppy is delivered after 4 hours of pushing or if there's more than a 2-hour gap between puppies, veterinary intervention is required.

Equipment recommended to have on hand includes:

- *Clean towels (soft and warm from the dryer)*
- *Mosquito hemostats or umbilical clamps*
- *Clean dental floss or suture material for tying umbilicus*
- *Iodine (2%) to swab cords (plus cotton balls or swabs)*
- *Gloves (nitrile or latex)*
- *Medical scissors (clean)*
- *Gauze*
- *Water based lubricant*
- *Suction bulbs for clearing airways (can use Rexall Ear Syringes)*
- *Hot water bottles or warm magic bags*
- *Scale (in grams)*
- *Colour codes collars / ID collars*
- *Chart that tracks each puppy, weight, vitals, etc.*
- *Milk replacer (eg: Esbilac) if dam has poor milk production or let down*

During the whelping process, a vocal and active puppy is the goal. Once a puppy is born, wipe them clean with a warm, clean towel and ensure any fluid around the nose or mouth is removed. The placenta should pass shortly after. The dam does not need to eat it but may try. If the number of placentas does not equal the number of puppies born, contact your veterinarian as some may be retained and can cause issues.

Once clean and dry, ensure the umbilicus is tied off with dental floss about 1-2cm from the body wall. It will shrivel eventually so do not feel the need to tie too close to the body wall or issues can occur. Swab the tip with iodine to keep it clean.

Sometimes, if the puppy is not thriving (ie: vocal and actively wiggling) you will need to stimulate them. Do not swing the puppy. Place them in a warm towel and rub their sides vigorously. Once the puppy is 'angry' (yelling at you and actively moving), you can start checking them over for defects. Checking around the umbilicus for any hernias, the mouth for palatal defects, or the general body for anything abnormal is important. If anything abnormal is found, please contact your veterinarian.

Now that the puppy has been resuscitated properly, you should track their weight and any other information you have in a chart. Puppies should be weighed twice daily and continue to gain 5-10% of their body weight daily from the beginning. Any negative growth is correlated with increased mortality.

The next step is to ensure the puppy receives colostrum, or the first milk that contains what will act as immunity for the first 6-8 weeks of life. This is incredibly important that puppies can nurse within the first 12 hours. After this window, the puppy will not be able to acquire any immunity from the dam. In the case where the dam has poor milk let down, use a milk replacement and contact your veterinarian to discuss options for the puppies regarding immunity. Some puppies will require tube feeding, others will willingly take to a bottle.

Once all the puppies have been delivered and cleaned as above, ensure they are kept in a warm area. Cold is one of the biggest killers for newborn puppies. It is also recommended that the dam not be left alone with the puppies as some can become aggressive towards them, killing them.

Dystocia (Difficult Birth)

If the female experiences difficulties during delivery, immediate veterinary care is necessary. This may include issues such as obstruction (due to large or mispositioned puppy) or metabolic problems (such as hypocalcemia). If the dog has strong contractions but no puppy after 4 hours or more than 2 hours between deliveries, seek veterinary help.

Set yourself up for success and have an emergency plan in case this occurs overnight or on a weekend. This plan could be as simple as knowing which hospitals are available to help after hours and to ensure all of your documentation (such as progesterone timing) is available for discussion with the after-hours veterinarian.

Cesarian Section (C-Section)

Some breeds may require a planned C-section due to their high risk of dystocia. If this applies to your dog, consult with your veterinarian before the dog's heat cycle begins. Please contact the Vets on Main team **BEFORE BREEDING** to inquire if you think your dog may require a c-section.

Rearing Puppies

The development of puppies is a relatively quick process and happens over several weeks.

Week 1

- The majority of time will be spent sleeping, with multiple feeding breaks.
- Feeding is often every 2-3 hours, and some may require additional supplementation.
- Monitor for weight gain always!
- May require stimulation to defecate or urinate – rub the perineal region or the penis (for males) to help this process.

Week 2

- Starting to open eyes and ears
- Handle gently and can start to introduce nail trims
- Call to schedule 8-week vaccines with your veterinary team

Week 3

- Starting to play with littermates

- Teeth should start erupting slowly
- Less dependent on manual stimulation to urinate or defecate.

Week 4

- Mash can be introduced – mix of kibble soaked in either water or milk replacer to soften it up.
- Start socializing each puppy individually.

Week 5

- Start reducing water content in the mash to work towards a commercial diet.
- Work to start weaning them off dam.

Week 6

- Continue reducing water content to kibble.
- Should be able to wean fully off the dam by this time.
- Introduce new sounds and objects to improve socialization.

Week 7-8

- Continue socialization within your 'bubble'

By the 8-week mark the puppies should be lively and thriving. They should be fully weaned from the dam and exploring their environment with enthusiasm. It is ideal for them to receive their first vaccine at this time as well – too much earlier and the maternal antibodies can interfere or block the vaccine's effect.

AAHA has a guideline of recommended vaccines and a suggested timeline. You can look at their recommendations any time at: <https://www.aaha.org/aaha-guidelines/vaccination-canineconfiguration/vaccination-canine/>. After the first vaccine, most puppies are ready to go to their new home.