



WHELPING

Pregnancy and whelping (giving birth) in the bitch can be a stressful time for owners. The purpose of this factsheet is to help you to understand what to expect in a normal pregnancy, and how to recognise when you need to seek the advice or help of the vet.

If your dog is in good physical condition, she will have fewer problems delivering her pups.

It is important to ensure that the bitch is in good physical condition prior to whelping by:

- Increasing her food amount during the last 4 weeks of pregnancy, to a high quality puppy food, as this contains higher amounts of nutrients and energy; it may need to be divided into frequent small meals and increased by at least 1.5 times her normal intake.
- We highly recommend that your bitch is examined by a veterinarian when pregnant. The vet may recommend an ultrasound from day 30 to confirm live puppies (but not necessarily numbers). An x-ray from day 49 (7 weeks) is recommended to give an indication of the number of puppies to expect (but cannot indicate the number of live puppies).
- Ensure she is wormed as worms can pass through the placenta to the pups as well through the milk following birth. Discuss the appropriate wormer and timing with your veterinarian.
- Ensure vaccination is up to date to ensure immunity is passed to the puppies. Discuss timing with your veterinarian.
- Provide a whelping box so that she becomes used to it before the pups are born. This should be in a warm, dry place indoors.

Before Whelping

The length of pregnancy in the bitch averages 63 days (9weeks), however viable puppies may be born within 5 days either side of this expected date. Mammary development can occur as early as 4 weeks into the pregnancy and becomes more pronounced as the pregnancy develops. Some bitches will produce milk over one week before the puppies are born, whereas others will not start to lactate until the birth is underway. False pregnancy can occur in bitches, so mammary development and milk production do not always mean that the bitch is genuinely pregnant.

In the last week of pregnancy the vulva becomes enlarged and flabby and there may be a clear vaginal discharge. One accurate way to time the onset of whelping is to measure and record the bitches rectal temperature twice daily in the run up to the anticipated time of whelping, as a fall in body temperature of approximately 1°C occurs within the final 24 hours of the pregnancy (usually falls below 37.2°C).

Taking a rectal temperature

Normal temperature is 37.5 - 38.5°C.

12 - 24 hours prior to whelping this drops significantly, usually to 37.1 or lower. In small breeds this can be as low as 36.4

If you have a 12 hourly chart of morning and evening temperatures for the past 5 - 7 days it is very clear when this drop occurs.

Gently insert the thermometer into the dog's rectum at least 2-3cm. Leave it in for at least 90 seconds, or if using a digital thermometer, until it beeps.

Do this at 7 or 8 am and 7 or 8 pm each day.

When the temperature drops below 37.2 (lower in small breeds) or there is a significant drop from the last several readings, whelping will occur within 12-24 hours. It may help to call the clinic at this point to let us know that whelping is about to occur.

First Stage of Labour

The first stage of labour can last from 4-24 hours. The cervix begins to dilate and uterine contractions commence. Signs include restlessness, pawing, nest building, shivering, turning the head to watch the belly, possibly mild straining and occasionally vomiting. These signs may be quite dramatic in nervous bitches who may seek constant attention from their owners. It is important to realise that all of the changes described above are normal and nothing to be worried about. These signs normally progress steadily until the cervix is fully dilated and the bitch enters second stage labour.

Second Stage Labour

In the second stage of labour the uterine contractions continue, forceful abdominal contractions commence and the foetuses are expelled. The bitch usually lies on her side while forcing, but will sometimes walk about and force in a squatting position

The first pup is normally born within 2 hours of the onset of 2nd stage labour, and the average interval between puppies is 30-60 minutes. This interval usually gets longer towards the end of the delivery. In large litters there can be up to 4 hours between the birth of puppies – *this is no problem if the bitch is resting comfortably. However, you should contact the vet if there is persistent straining for > 30 minutes and no puppy is produced.* The second stage of labour can take up to 12 hours in some bitches, and it is important that they are supervised by the owner during this time.

You should avoid excessive interference at this stage but you should watch to ensure that whelping progresses steadily, that the puppies are released from their membranes and that they are not accidentally damaged by the bitch.

On average 60% of pups are born head first and 40% are born tail end first, so the delivery of a pup coming backwards is relatively normal and is not associated with any problems.

A dark green discharge is released as the placenta separates from the uterus and this is passed during the delivery of the puppies. During delivery the bitch will have shallow rapid breathing. This can be aggravated by poor ventilation and excessive heat in the whelping area. Between the delivery of puppies the bitch may become very quiet and almost sleepy until the next puppy enters the pelvis and forceful contractions commence again.

Third Stage Labour

In this stage the bitch expels the placentas or “afterbirth”. The placentas may be passed individually along with each puppy, or may be passed together at the end of the delivery. The bitch may try to eat the placenta but this can cause vomiting so we recommend that they are disposed of by the owner.

Causes for Concern

- Black or dark green vaginal discharge before a pup is born.
- Shaking or shivering for up to 24 hours.
- Listless or inappetant for more than 24 hours.
- Over 4 hours elapsed after onset of second stage labour.
- Over 30 minutes of persistent strong abdominal contractions without the expulsion of a pup - call the vet immediately as assistance may be required.
- Over 2 hours between puppies with or without straining.
- Failure to deliver pups 24 hours after a 1°C drop in rectal temperature.
- Persistent crying or signs of pain and licking at the vulva during delivery.
- Prolonged gestation, i.e. pregnancy over 70 days from day of mating.



CALL THE VET

Manual Delivery of Puppies

If a puppy is only partly expelled from the vagina then you may need to assist the bitch. Put the dog in a standing position and lubricate the puppy with KY Jelly. Gently grasp the body of the pup (never hold onto a limb!) and pull steadily away from the bitch and down towards the floor. It is a good idea to use a towel to help you grip the puppy.

If you are unable to get the puppy out gently, please call your veterinarian immediately as assistance will be required.

Care of the Puppies

Normally when a pup is born the bitch will attend to it, licking at its head to open the clear membranes that cover the puppy and biting through the umbilical cord. Give your bitch the

opportunity to clean and care for the puppy; don't intervene immediately unless the puppy isn't breathing.

If the bitch isn't attending to the puppy and/or you notice it is not breathing, remove the sac from the puppy's nose and mouth and hold him head down to help drain the fluid from his lungs, nose and mouth. It is a good idea to use a towel to help you grip the puppy. Rub the puppy vigorously with a clean dry towel to warm it and stimulate breathing. Make sure the puppy is warm. You may first notice gasping. Keep stimulating the puppy until regular, spontaneous breathing occurs. The puppy may start to vocalise. This can take up to 15 minutes. Once the puppy is breathing well, place him with the bitch or other puppies.

New-born puppies should be allowed to suckle from the mother as soon as they can as this encourages the release of the hormone oxytocin which promotes contractions of the womb.

If the bitch hasn't bitten through the umbilical cord, you can tie it off (using regular cotton thread) approximately 2-3cm from the puppy and then cut the cord below where you have tied it.

Post Whelping

You should have your bitch and the puppies examined by a veterinarian soon after delivery (e.g. within 24hours) to ensure there are no retained placentas and the puppies are healthy.

A vaginal discharge is normal after delivery. You should monitor this discharge daily. Watch for a decreasing amount of discharge, a change in colour from red to brown, and a change in consistency from watery to mucoid (resembling mucous). It should never have an odour. Your dog will expel most of the discharge in the first two weeks, but you may see small amounts over the following four to six week. Blood in the discharge after the first week is abnormal, so if you see any, call your veterinarian.

You should also examine your dog's mammary glands every day. These glands provide colostrum and milk for the puppies. Firm and painful mammary gland may indicate mastitis, an inflammation of the mammary gland.

The puppies should ingest colostrum within the first 24 hours after birth. Weigh the puppies every day to document weight gain. The puppies should gain weight daily, although there

may be a short lag in the first day or two. Weight loss or the absence of weight gain may mean serious problems, so please consult your veterinarian.

The puppies should remain with their mother; she will feed them, help keep them warm, stimulate them to urinate and defecate, and teach them appropriate canine interactions.

The bitch will need to remain on good quality puppy food whilst she is feeding her pups. The bitch's weight should also be carefully monitored to ensure she does not fall below her pre-mating weight. She will very likely require 1.5 to 3 times her normal amount of food.

Supplements should not be given if feeding a premium puppy food. Discuss this with your veterinarian.

Causes for concern post whelping

Immediately

- Puppies have deformities e.g. cleft lip or cleft palate, spina bifida, imperforate anus
- Puppies are not feeding
- Puppies constantly crying
- The bitch is not interested in the puppies
- The bitch is not interested in food, water, or toileting after whelping



Ongoing concerns

- Puppies fail to thrive or gain weight
- Puppies develop diarrhoea
- Puppies develop vomiting
- Bitch becomes depressed, anorexic
- Bitch develops mastitis - inflammation of the mammary glands
- Bitch develops eclampsia - 1 -4 weeks following the birth of puppies eclampsia ("milk fever") may occur. This is because calcium levels in the blood become too low. It is a life-threatening condition if not treated. Signs include restlessness, twitching, stiff gait when walking, disorientation, and can progress rapidly to seizures and death.
URGENT VETERINARY ATTENTION IS NEEDED.