



Pregnancy in the Bitch

CONGRATULATIONS!

Now you have had confirmation that your bitch is having puppies, here are a few things to think about over the next few weeks.

Pregnancy Length

While this might seem like a straightforward answer, conception is often hard to determine. Sperm can live for days inside the female, and eggs can remain fertile for up to 48 hours, which means the act of mating itself is not an exact measurement of gestation.

Gestation length according to information obtained:

- 62-65 days from the initial rise in progesterone/expected ovulation time
- 58-72 days from the first time of intercourse

Month One

The embryos travel to the uterus usually around day 7 where they are embedded in its lining around day 16. The foetus begins to take shape by day 22, and by day 28 a vet should be able to detect fetal heartbeats on an ultrasound showing their viability.

Many dogs do not show any symptoms during the first three weeks of their pregnancy. Some symptoms may include an increased appetite, enlarged nipples, affectionate behaviour, a clear vaginal discharge (around week four), decreased physical activity and sometimes even "morning sickness"/loss of appetite secondary to nausea.

Month Two

Fetal development moves quickly during the second month. Eyelids form by day 32 and toes are visible by day 35. The claws form by day 40, and the coat and skeleton follow a few days later (day 45). If you would like more accurate information on the number of puppies in the litter in preparation for whelping then it is safe to take an x-ray over 7 weeks as the fetal bones have been mineralised. The bitch will start looking for a place to nest around day 58.

Signs of pregnancy in the bitch are much more obvious during the second month:

- Noticeably increased appetite
- Weight gain of 20-to-50%



- Increased urination
- Behavioural changes
- Clear, odourless vaginal discharge
- Enlarged, firm abdomen
- Decreased appetite
- Visible puppy movement in abdomen

Month Three

The bitch is ready to whelp by the start of the third month. Puppy development is almost complete around day 58, which means the puppies will begin to move into whelping position in the birth canal over the last few days of the bitch's pregnancy.

Symptoms during the last few days of pregnancy in dogs:

- Waist will trim as puppies move into the birth canal
- Appetite loss around day 61 or 62
- Drop in body temperature 12-to-24 hours before labour, please take care as this is not always consistent but an excellent guide to support the other signs
- Restless behaviour
- Pacing, panting, shivering, or digging

Exercise and Nutrition

Your bitch should have gentle exercise up until whelping. This will ensure that she is in good physical condition for whelping.

During the first six weeks of pregnancy, your bitch should be fed her normal diet for her weight. Prior to mating, she should be her ideal weight and body condition for her breed, in order to avoid pregnancy and whelping problems.

From six weeks of pregnancy, you should start to move her on to a higher calorie growth diet, such as a puppy food, to ensure she has sufficient energy and correct nutrients she needs to maintain pregnancy. We recommend the Royal Canin starter diet! Supplements should not be needed if she is fed a good quality balanced diet, and in fact can be harmful if given in too high doses. A raw food diet is to be avoided as they can contain bacteria such as Salmonella or other parasites. In addition, it is important that calcium and phosphate levels are appropriate to ensure correct calcium absorption for milk production and bone growth. Unfortunately, not all raw foods will provide this balance.



Closer to her due date, smaller but more frequent meals will be needed due to the increasing size of the puppies and the decreasing space for her stomach. The puppy food should be continued for the bitch whilst she is nursing her puppies. Once they are weaned, her food can be reduced accordingly to bring her to her pre-pregnancy weight, and then a slow transition back to her normal food for its maintenance. It is important to ensure that your bitch doesn't become overweight. Regular weight checks will help you avoid this. Weight clinics are FREE with our vet nurses.

Parasite Control

Roundworms (*Toxocara*) can be spread transplacentally and then again through milk during suckling and faecal contamination of the environment/licking their pups.

It is important to ensure that your bitch is wormed daily from day 40 of pregnancy to 2 days post-whelping. We recommend the use of Panacur (fenbendazole) for pregnant bitches, available as a liquid, paste or granules.

Bitches should also be kept up to date with flea and tick prevention. A heavy flea burden can cause anaemia, which in young puppies can be fatal. Please speak to your vet before applying a product as they will be able to advise you which one is suitable during breeding, pregnancy and lactation.

Worming products safe to use in pregnancy

Panacur – Advisable to use daily from day 40 of pregnancy to 2 days post-whelping (approximately 25 days)

Milpro - safe to use in breeding dogs including pregnant and lactating bitches

Flea products safe to use in pregnancy

Frontline combo spot on – safe to use during pregnancy and lactation

Bravecto – safe to use in breeding, pregnant and lactating dogs

Puppies should be wormed from two weeks old, then every two weeks until 12 weeks of age. We recommend using Panacur according to weight, until other treatments are appropriate. Please feel free to discuss this with the vet or nurse.

Preparing for the Birth

The bitch may start acting differently or strangely in the days leading up to giving birth. She may become restless, seek seclusion or have a reduced appetite.



Try to encourage her to get familiar with a “nest” or whelping box. This is an area that you should prepare that will be suitable for her giving birth and raising the puppies. The nest should be warm, clean and dry. You don't want it too isolated, so that the puppies can get used to household noise. However, you do not want to place it in the busiest area of the house as you want to allow the bitch to feel safe to give birth there. The sides need to be high enough to keep the puppies confined until they are at least 4 weeks old. The bed needs to be washable and padded, with enough room for the bitch to lie stretched out to feed the puppies. You will need lots of newspaper and soft bedding that is washable and tough (e.g. vet-beds).

Ideally, you should also prepare a penned off outside area within the house for the puppies to play in when they are over 4 weeks old, and to allow the bitch to get some rest.

In the last week of her pregnancy, take the bitch's rectal temperature 2-3 times daily. A sudden fall in her temperature (normally to around 37C) can help to show that she should start to give birth in the next 8-24hrs. A blood measurement showing a fall in Progesterone between 5-8ng/m indicates that whelping will start within 14 hours. 12-24hrs before birth she may start “nesting”, shivering, or releasing milk.

Stages of Labour

There are several stages of labour, and it is important to understand what is normal so that you can be aware if things start to go wrong.

1ST STAGE:

- Lasts 6-12 hours (can be up to 36hrs)
- Intermittent contractions but NO signs of straining
- Restless
- Panting
- Nesting / rearranging of bedding

2ND STAGE:

- Lasts anywhere between 1 and 24 hours (usually between 3-12hours)
- This is the stage where the pups are born
- Temperature increases back to normal
- Contractions AND abdominal straining begin
- Clear fluid discharge

The first puppy is usually born within 4 hours of the onset of second stage labour.

The bitch usually severs the umbilical cord and licks the puppy clean, but she may need assistance.



3RD STAGE:

- Involves passing the placenta
- Usually within 15 minutes of delivery of each puppy
- Take care to count how many placentas are passed to note if there are any retained. If so, she will need close supervision and possibly a trip to the vets for an injection to help in its passing as this can cause serious disease. The placentas are best removed from the whelping box to prevent ingestion and subsequent sickness.
- Greenish discharge may be seen for up to 3 weeks post-whelping

When to call the vet:

- Weak, irregular straining for more than 2 hours
- Strong, regular straining for more than 30-50 minutes
- Foetal fluid appears but nothing happens for 2-3 hours
- Greenish discharge appears but no sign of a puppy within 2-4 hours
- More than 2-4 hours has passed since birth of last puppy and more remain
- If the second stage of labour lasts more than 12 hours
- Placentas are not passed within 4-6 hours
- Rectal temperature is over 39.5C (101.3F)
- Ongoing blood loss (should not be continuous, only drops)
- If discharge is putrid or foul smelling
- If the bitch appears unwell
- If the puppies appear abnormal

If you are at all concerned please contact the vet for advice.

The first few weeks with the puppies

The mum will spend most of her time with the puppies in the first two weeks. Lactation is also the time for greatest nutritional and calorie demand, so it is important for food and water to be readily available. It is also important to check that the puppies are feeding well, and that she is producing enough milk. If you are concerned, you should contact the vet or nurse for advice.

It is normal for the bitch's temperature to be raised slightly for a few days, however if it is over 39.5C this suggests a fever and veterinary advice should be sought.

It is normal for there to be a green vaginal discharge for up to 3 weeks post-whelping. Excess blood is not normal.



When to call the vet:

- High temperature
- Wobbliness
- Excessive salivation
- Itchy face
- Fast heart rate
- Painful inflamed mammary glands
- Failure to provide milk
- Profuse, or smelly discharge
- Or any other signs of unwellness

The document is only a basic guide and should not be considered exhaustive. We strongly encourage responsible breeding so please make sure you have done your homework. Be careful that you take advice from a reputable source. There are some excellent FREE online breeding resources from The Kennel Club, visit <http://www.thekennelclub.org.uk/breeding/>

If you have any questions or concerns please contact the practice on 01626 835002.

GOOD LUCK!!

FREE dog breeding resources from The Kennel Club – breed responsibly!

- NEW: Canine Pregnancy – Presented by Angelika Von Heimendahl
- NEW: Whelping and Rearing A Litter of Puppies – Featuring Kennel Club Assured Breeders Angie Townsend (breeder of Labrador Retrievers) and Jane Newport (breeder of Parson Russell Terriers)
- NEW: Preparing Puppies for Future Life – Featuring Kennel Club Assured Breeders Angie Townsend (breeder of Labrador Retrievers) and Jane Newport (breeder of Parson Russell Terriers)
- Dog Breeding – Is it right for me? – Presented by Aimee Llewellyn-Zaidi & Dr Nick Blayney
- Dog Breeding – Where to start – Presented by Aimee Llewellyn-Zaidi and Frank Kane
- Getting started with Genes and Inheritance – Presented by Aimee Llewellyn-Zaidi
- Getting started with DNA Testing – Presented by Dr Cathryn Mellersh
- Getting started with Simple and Complex Inherited Disorders – Presented by Aimee Llewellyn-Zaidi
- How to use Mate Select – Presented by Aimee Llewellyn-Zaidi
- Getting started with Inbreeding and Selection – Presented by Dr Tom Lewis
- Getting started with Estimated Breeding Values – Presented by Dr Tom Lewis