

## Canine Pregnancy day-by-day

### Day 1

First day of mating. During one mating, the male is able to release about 500 million sperms. These sperms are not immediately able to fertilize the egg must go through the stages of ripening. The phase of ripening lasts for about 6 - 10 hours. The sperms travels to through the cervix into the fallopian tubes, which typically arrive after 15 - 45 minutes, then the rest of the sperm within to 3 hours. Female may be in the period just before ovulation or it there is ovulation (release of eggs).

### Day 2

'The cleaned' sperms travel and look for an egg for fertilization.

### Day 3

After 48 hours it is possible to make a second mating.

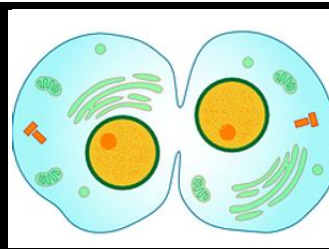
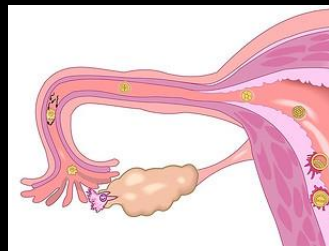


### Day 4

Now is the fertilization of eggs. You do not need to pay special attention to female in the first third of the pregnancy. You do not need to change the type or amount of feed. We can give her so much movement, how much she wants. However in the summer no excessive activity, because it can cause overheating of the organism and dehydration.

### Day 5 - 11

Fertilized eggs are coming down the fallopian tubes into the uterine horns.



### **Day 12**

Early embryos are removing their packaging and they are moving freely in the fluid of the uterus and are looking for a suitable place for nesting. (size about 0.6 mm)

### **Day 13**

Embryo is looking for a suitable place for the nesting. The surrounding fluid is a food source for the embryo before nesting.

### **Day 14**

The fetus migrates in the womb and individual embryos are diffused in uterine corners where later the nesting into the uterine wall begins.

### **Day 15**

During the next two weeks the important organs of the embryo will develop. Beware of interventions into the body of the mother. Everything has an effect on the embryo. Do not use any flea or deworming treatments during the period of gestation. The female is very sensitive to any changes, so we do not change the daily routine, walking time, type of feeding, resting place. Any intervention must be carefully marked into the calendar. This day the development of any of the organs of the fetus can be disrupted. Until the 35th day the uterus can fully absorb fetus / fetuses.

### **Day 16**

The nipples of female are changing to pink and enlarge. The coat on the female belly and around the nipples may become thinner. (embryo size is about 1mm)

### **Day 17**

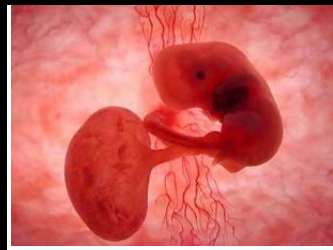
Embryos are nesting and the nervous system begins to develop first, then the head and body of embryos.

### **Day 18**

Placenta begins to develop. The development of the nervous system continues. Size of embryo is about 2mm.

### **Day 19**

The development of the internal organs of embryos.



### **Day 20**

Development of the placenta continues. Around of the placenta occurs marginal bleeding. Blood pigment hemoglobin is changed to green hematochlorin. It is discolor amniotic fluid during birth. From the 20th day from mating can be determined, whether female is the pregnant (abdominal palpation or ultrasound examination). Size embryo is about 4mm.

### **Day 21**

The placenta is created and also basis for development of the heart. From this moment we can determine if the female pregnant. On the ultrasound we can see the embryo yet, but we can see their afterbirths full of fluid (amniotic fluid). Size of the embryo is about 5 mm.

### **Day 22**

The ideal period for ultrasound diagnosis of pregnancy starts. For females in this period can occur morning sickness and loss of appetite as a result of hormonal changes and tension in the womb. The female is apathetic and without mood. Sometimes vomiting may also occur. Helps dividing food to more small doses and give flavored food. At the female may appear a harmless vaginal discharge (clear or nature of egg white).

### **Day 23**

They begin to develop eyes, ears, nose, jaw and liver. Size of 10mm. The ideal period for ultrasound diagnosis of pregnancy.

### **Day 24**

Due to the rapid development of all major organs, the actual fetal growth is slow. The ideal period for ultrasound diagnosis of pregnancy.

**Day 25**

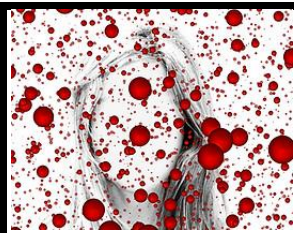
The ideal period for ultrasound diagnosis of pregnancy. In ultrasound examination can be seen heartbeat of the fetuses. The embryos begin to develop teeth, spine and limbs. Size is 14 mm.

**Day 26**

The ideal period for ultrasound diagnosis of pregnancy. An experienced person can also do palpation diagnose pregnancy. Now is the best time because the embryos are walnut size and it is easy to count them. It is suitable for female to begin limiting strenuous movement. Begins development of teeth, back and limbs of the fetus.

**Day 27**

The ideal period for ultrasound diagnosis of pregnancy.



**Day 28**

The ideal period for ultrasound diagnosis of pregnancy. There is ossification of the jaw and the skull of the fetus. The shape of the fetus changes originally from ovoid shape to spherical. Size is about 17 mm.

**Day 29**

The fetus is already very similar a miniature dogs. You should start to increase food ration for female. Don't overfeed, excessive weight gain should be avoided.

**Day 30**

Complete ossification of the jaw and skull. Size of the embryo is about 2cm.



**Day 31**

The growth of sensory hairs on the chin, eyebrows and nose.

**Day 32**

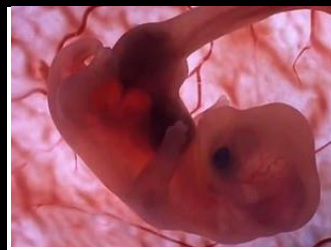
In mid-gestation embryo reaches approximately 20% of its size at birth.

**Day 33**

There is a growth of fingers, the ossification of the nose, ribs and leg bones. Completion of the development of all major organs. Size of about 27 mm.

**Day 34**

Female starts to change behavior. It is quieter and more sensitive. Her abdomen and external genitalia begin to slightly increase. Approximately to 35 days may be fetus absorbed, later leaving the fetus during birth as the black fetus.





### **Day 35**

Completed the development of all major organs. Size of 35mm. Female starts to have an increased appetite. It is advisable to start feeding her food for pregnant females and increase the amount by 10%. Ration should be divided into 2 to 3 times a day.

### **Day 36**

Ends period of slow growth of body of the fetus. The fetus start rapidly grow. It starts with developing reproductive system, continues skeletal ossification and scapula.

### **Day 37**

Begins stage the fastest growth of the fetus.

### **Day 38**

The female is slowly gaining weight. The uterus starts to expand. We can observe the increase in volume in the area of last ribs of the female. You can also detect slight enlargement of the mammary glands.

### **Day 39**

Growth of fetus is accelerated, skeletal ossification continues.





#### **Day 40**

In this period, fetuses have already established almost all the internal organs. On the head of the fetus begin to appear the first signs of hair. Eyes are closed. The size of about 65 mm.

#### **Day 41**

The fetus is about 30% of its total size at birth. Ossification of the spine and fingers.

#### **Day 42 - 43**

Ossification of the spine and fingers. Continues rapid growth of the fetus.

#### **Day 44**

Uterus of the female occupies two thirds of the abdominal cavity. We can observe hair loss and thinning hair on the mammary gland. It's very easy now to feel the puppies, counting them might be a bit more difficult. It is recommended to feed 3 to 5 times a day in smaller doses and increase the total amount of 15-20%. In this period we can not let the female do steep and strenuous movements or jumping.

#### **Day 45**

Ossification of pelvis and fetuses grow coat.

#### **Day 46**

Ossification of pelvis and fetuses grow coat. Using X-ray can be seen the skeletons of fetuses and it is possible accurately to count them (counted skull and spine).



#### **Day 47**

Ossification of pelvis and fetuses grow coat.

#### **Day 48**

The female starts to be visibly larger. At this stage, female may lose her appetite. Fetuses pushes the internal organs of female, most in the digestive tract.

#### **Day 49**

Fetuses reach 75% of the size at birth. It is already necessary to at this time to accustom female to a box in which she will give birth.

#### **Day 50**

Organs are already well developed. Belly is crowded with puppies and we can see their sporadic movement (swarming). Female in this period may (but may not) lose her appetite. We feed more often and small doses. The total daily dose should be gradually increased by 25-50%.

#### **Day 51**

Female starts to relax and look for a suitable place to give birth.

**Day 52**

For some more of milk females, can occur spontaneous release of milk from the teats. Female often rests.

**Day 53**

The female is resting and preparing for the birth.

**Day 54**

The female is resting and preparing for the birth. As the last internal organ develop lungs.

**Day 55**

The body of the fetus is covered with coat, but the coat on the feet is even less visible. Claws are already developed. Starts pigmentation of skin. Size of fetus is 145 mm. The female is resting and preparing for the birth.

**Day 56**

Starts calcification of teeth. The female is resting and preparing for the birth.

**Day 57**

Movements of fetuses are more pronounced. Significantly swollen mammary glands. The female is resting and preparing for the birth.

**Day 58**

The fetus has developed lungs. From that day the fetus is viable. Female is resting and preparing for the birth.

**Day 59**

The belly of female become loose, uterus decreases and body of female is preparing for childbirth. It is time to be prepared, and to have everything at hand. The female may start to give birth any day now. You need to start measuring and recording body temperature in the rectum of the female each morning and evening.

**Day 60 - 65**

Expected date for birth. The birth can to occur between the 59th to 67th day. Shortly before birth (12-24h) female refuses to eat normally and there is a decrease in body temperature from 38-39 °C to 36.5-37.5 °C. (1-2 °C) Previous hormonal changes lead to the induce of uterine contractions, which subsequently causes abdominal contractions (contractions), and starts gradually exclusion of fetus. The progress of the delivery can be for each female very different.

**Photo and Text Credit: National Geographic's Dog's in the Womb series**





