



Management problems affecting the health of the litter

1. Extremes of Temperature

Puppies are particularly affected by the extremes of temperature as they cannot control their temperature for the first 8-10 days.

When the weather is cold and there is little or no heating, the puppies will be using all their body reserves to stay warm. The puppies will whinge and cry a lot, will slowly lose weight or be very slow to gain weight. Generally speaking, puppies that are cold will huddle together in a pile and complain, and puppies that are very hot will be spread out all over the box, panting and screaming.

Cold Weather Temperature Control

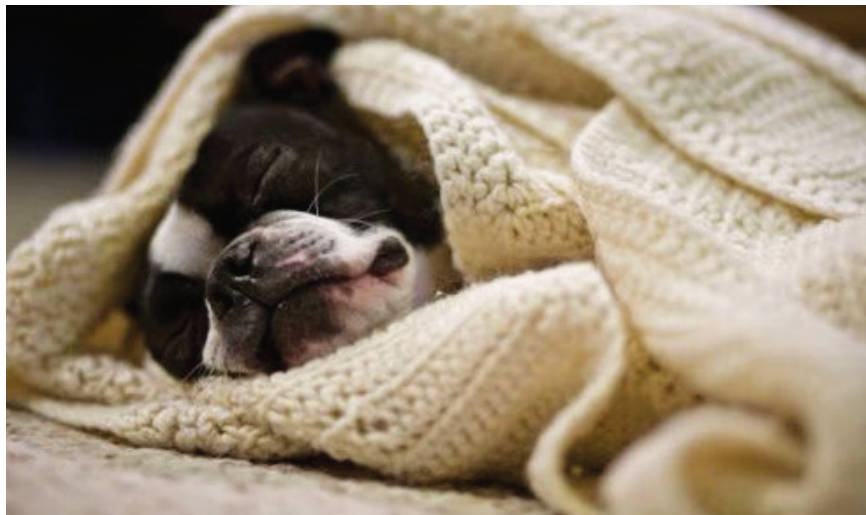
The temperature does not have to be very low for the puppies to start feeling the effects of the cold. Temperatures below room temperature (25°C), especially if there are any draughts in the room, can chill the puppies. Once the puppies are chilled, they start to use up their reserves of body fat and energy to stay warm. Obviously, the colder it is, the sooner the puppies start to deteriorate. Pneumonia and congestion of the lungs will set in very quickly. Trying to save puppies from this dangerous situation can be very difficult and will require extremely good nursing and environmental control.

Symptoms

When the temperature is too low for the puppies, they will huddle up in a pile and whinge and cry continually. They will be very sluggish and often will fail to curl up in the hand.

Treatment

Puppies that are chilled should be gradually warmed up. If you do this too quickly there may be tissue damage. Wrap the puppy up in a woollen blanket or jumper and put it on a hot water bottle. (The hot water bottle should be wrapped up in a towel to prevent the puppy from becoming overheated or scalded.) The puppy should be



gently rubbed and regularly turned every few minutes. It can take 20-30 minutes or longer before it is thoroughly warmed. If you put the puppy and the hot water bottle in a little box and have a reading lamp angled so that heat is directed down into the box, this can help create a warm environment.

Once the puppy is showing more signs of life, with an increased respiration rate, warmer body and increased movement, then start to give it very small amounts of a weak glucose solution (a 'weak' solution is one that tastes faintly sweet to you). Give little feeds often until the puppy is stronger and then start to give small milk feeds frequently until they are back to good strength. Antibiotics may be necessary after a bout of chilling as pneumonia is a very common result, but remember to give some yoghurt or acidophilus as well.

Puppies that are chilled, cannot swallow properly as the vagus nerve is not fully developed at this stage. Over feeding can result in inhalation of milk. Remember to warm the puppy up before feeding!

Controlling the environment to avoid chilling:

- **Create a cave' to keep the roof (and warmth) down near the puppies. Use woollen bedding as it retains the heat.**
- Remember that hot air rises.
- Make sure that the room stays warm.
- Make sure that there are no draughts.
- Do not use a fan heater as the moving air will chill the puppies and will dry out the air too much.





VET CHAT

The room should be warm (about 28°-30°C) when you enter and the puppies should be warm to the touch. After the first 4-5 days, the temperature during the day can be lower (25°-27°C), but you should still keep the room warm at night. By 10-14 days, unless there is extreme cold, the heating can be turned off during the day but I like to keep some form of heat on low at night in winter until the puppies are 3-4 weeks of age. These are approximate times and will vary greatly according to the geographical location and the amount of insulation in the whelping room or area. Remember, small areas are easier and cheaper to keep warm.

Prevention of chilling in the first place saves a great deal of trouble (and puppies). Post mortems of puppies that die from the cold reveal that they have very little fat reserves left on their bodies and often have little or no food in their stomachs. These signs, combined with the prevailing weather conditions clearly show the cause of death.

The length of time one needs to keep the heating going beyond the initial period will be dependant on the ambient temperature range and the breed of dog. Well coated breeds will require shorter periods of heating than thin short coated breeds. Very thin coated breeds (Italian Greyhounds etc) may require heating for 3-4 weeks depending on the conditions.

Hot Weather Temperature Control

Obviously the reverse of the cold temperature situation applies in hotter weather.

Newborn puppies will usually not require drastic cooling measures during the first 5-6 days unless it is very hot. Good circulation of the air in the whelping room is often all that is needed. Fans and air conditioners can be used with care and should be directed to send the air over the box, never directly down into the box. With air conditioners, be careful not to reduce the room temperature too much. Air conditioners tend to dry out the air so leave a large bowl of water in the room to help keep the air humidified. If you do not have an air conditioner, a wet towel hanging in front of a fan acts as a home made 'cooler'.

As the puppies get older, on very hot days lay a wet towel down on the floor of the box, covering only half the available area. If the puppies are hot they will lie on the towel. Once they are cool enough they will move to a drier area. Remember that dogs do not sweat in the normal human fashion; they lose heat by panting and by sweating from their feet.

Symptoms

When puppies are too hot, they will yell and scream and be too distressed to suckle properly. Puppies will pant (or have their mouths open) and flatten themselves out in an attempt to cool their bellies.

Treatment

Treat overheated puppies by wiping them down with a wet cloth. Do not put them in water or under a tap - too sudden a temperature change can cause brain damage. Wiping the puppy all over and then placing it on a wet towel will, in the majority of cases, be sufficient to help it to settle down. Keep wiping the puppies over every couple of minutes until they calm down; once the panting has stopped, stop wiping.

Leave the puppies on the wet towel and with a syringe, start giving them a small amount of water into the mouth to drink. If they are very thirsty, keep going with the water but slowly! If they are very dehydrated, add a small amount of glucose to the water after the initial thirst has settled down. Puppies usually recover very quickly from overheating and have few setbacks once they are drinking normally and the temperature problems are corrected.

Overheating can occur in winter especially when electric blankets and heated whelping boxes are left on the highest setting or where overhead heating lamps are too close to the puppies. The symptoms are similar to overheating in summer, but there may be more tissue damage as hot material will have been too close to the body.

Puppies that die from overheating have very bluish-purple tongues and are dehydrated. In hot weather conditions it is fairly easy to diagnose the cause of death.

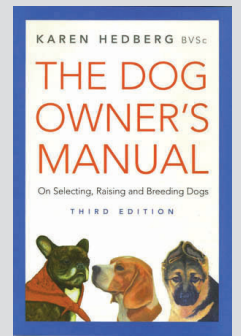




An extract from **The Dog Owners Manual** by Dr Karen Hedberg BVSc

Available for purchase from Dogs NSW for \$63.60 + p/h

This book is well written and an essential reference guide for professional dog breeders or family pet owners.



2. The bitch may be an unsatisfactory mother. Poor Mothers

Contrary to popular opinion, not all bitches are maternal and some will not stay in with the puppies. The puppies are usually born nice and healthy, but they scream for food all the time and slowly lose weight. This is more common in the litters of maiden bitches, particularly if they have had a traumatic whelping or a caesarean. The maternal bonding with the puppies will be reduced if there has been too much interference by the owner constantly handling them or allowing too many visitors.

Nervous or neurotic bitches are very sensitive to too much interference and, in some cases, actually work themselves up until they get milk fever (eclampsia). These bitches have to be handled very carefully, especially if they have to be taken to the vet because of whelping difficulties. Giving Valium after whelping can help these bitches to settle down.

Maiden bitches that have had a caesarean can be tricky to handle. The poor bitch wakes up with a ready-made family and quite often does not feel any connection with the puppies. The sooner these bitches return to their own surroundings, the sooner they may start to feel maternal. Some of these bitches may need to go on to low doses of Valium for several days. This reduces anxiety and the bitches usually become quite maternal after 2-4 days. In the meantime, the bitch has to be watched like a hawk and made to stay with the puppies (preferably glued together!!). Some may even bite the puppies, so constant care is needed until she calms down.

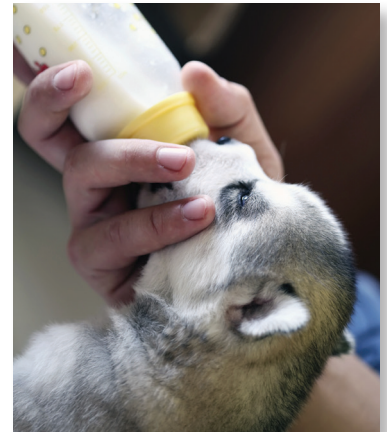
Puppies that are not gaining weight after 1-2 days at the latest should be taken to your vet. They may have an infection, you may have a management problem, or the bitch may be your 'management' problem.

Lack of Milk In some cases the bitch may not have much milk at the time of whelping. This problem usually rectifies itself within a few days. In the meantime, you will need to supplement the puppies. Always feed the empty ones first (they feel very empty behind the ribs). The bitch is usually producing 50-75% of what is necessary, so it is only needed to supplement the puppies every four hours. If you supplement too much, then the bitch has no stimulation to increase her own production. Giving Maxolon tablets to the bitch can help stimulate milk production ½ - tabs 2 to 3 x daily for 4-7 days can assist.

Occasionally a bitch may refuse to settle down after whelping and be extremely restless, up and down, puffing and panting as though still in labour when she may have whelped one or two days before. This sort of bitch may be suffering from Uterine cramps, particularly after a hard whelping or a large litter. A bitch like this may need to be placed on an antispasmodic (eg. Buscopan) for several days until the uterus becomes less sensitive.

3. Weak puppies/Supplementation

If for some reason the puppies are not drinking from the bitch, supplement feed them every ½ -1 hour until they pick up enough strength to suckle from the bitch. If you add glucose or honey, make sure it remains a weak solution. Once the puppies improve, the mixture can be gradually brought up to full strength.



Nutrigel is another very good product to help the puppies pick up as it is a very concentrated food supplement. You can put 5mm of this on the roof of the puppy's mouth. Yoghurt is very useful as well. Try to get the puppy to urinate before you feed it in order to make more room in its abdomen for food.

4. Loose Motions/Diarrhoea

If the puppies have loose motions, give them natural acidophilus yoghurt from the end of your finger on the roof of their mouths several times a day. Alternatively, you can give them a small amount of acidophilus powder, crushed into some Nutrigel or yoghurt, again several times a day. Also very helpful is to give them a small section of a junket tablet several times a day. If very loose, a small amount of corn flour can be added to the yoghurt, but only until the motions return to normal.

5. Constipation

Constipation can be a very serious problem if you have a gentle mother and/or you are feeding orphan puppies. Usually the puppies' stomachs are hard and tight, and they moan and groan continually. Normal and orphaned puppies should pass a motion after two feeds or approximately every four hours. Gripe water and or small amounts of oil or laxatives can assist.