

Fading Puppy Syndrome

What is fading puppy syndrome?

Fading puppy syndrome is a term used to describe the situation where puppies are apparently normal at birth but gradually “fade” and die within the first two weeks of life. Normal pre-weaning losses in dogs, including stillborn puppies, can be up to thirty percent with about half of these deaths occurring within the first week of life.

Why does this happen?

During the first two weeks of life, puppies are very vulnerable to illness since they are unable to regulate their body temperature independently. Very young puppies also have poor ability to regulate fluid and energy balance. In addition, their immune systems aren't fully functioning and they have limited protection from infections. This makes puppies susceptible to dying from a variety of causes.



What are the clinical signs of fading puppy syndrome?

The clinical signs are vague and insidious. It is often too late to save a puppy once clinical signs are apparent. The common findings are a low birth weight or failure to gain weight at the same rate as their siblings, decreased activity and inability to suckle. These puppies have a tendency to remain separate from the mother and the rest of the litter. They are often reported to cry weakly in a high pitched tone. Some people refer to this as “seagulling” due to its similarity to the cry of seagulls. These puppies often quickly progress to severe lethargy, loss of muscle tone and death.

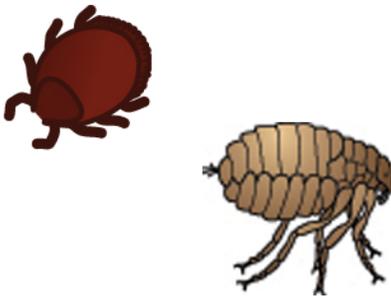
What causes fading puppy syndrome?

There are many factors that contribute to fading puppy syndrome. Some of the more common factors include:

- Lack of adequate care from the mother
- Lack of milk production or consumption
- Congenital (present from birth) defects in the puppy, which may not be immediately apparent
- Low birth weight
- Infectious causes

One or more of these factors can contribute to fading puppy syndrome. For example, a lack of mothering instinct coupled with poor hygiene can often result in neonatal septicemia (systemic infection) in a very short time. Although some maternal immunity is conferred to the puppy in utero or while it is developing in the mother's womb, the majority of this immunity is acquired via the *colostrum* or first milk. If the puppy does not drink an adequate amount of this first milk, it is more vulnerable to infection.

Many common bacteria can cause overwhelming septicemia and death in a vulnerable puppy in a very short amount of time. Because of the weakness and poor immune response, death often occurs quickly and with few, if any, clinical signs. Viral infections are also an important cause of fading puppy syndrome. If the mother is carrying a virus or isn't properly vaccinated, the puppies are more likely to contract an infection from the mother or have an even weaker immune system. Canine parvovirus, adenovirus and canine distemper have all been implicated as causes of fading puppy syndrome.



Intestinal parasites, fleas and ticks can also weaken a puppy by taking vital blood and nutrients away from the developing puppy. Infested puppies often fail to gain weight and slowly “fade” and die.

What can be done to treat fading puppy syndrome?

It is important to ensure that the puppy receives adequate fluid and is kept warm. Puppies should not be allowed to become chilled and an environmental temperature of slightly above 103°F (39°C) should be maintained.

If bacterial septicemia develops, antibiotics may benefit the puppy, but strict hygiene and good management procedures are also critical. Your veterinarian will discuss proper care and cleaning of the puppies and their environment.

It is also important that the mother is examined for teat (breast) discharge and possible mastitis (breast infection), metritis (uterine infection) or other illness.

If you are at all worried that you may have a sick puppy, do not hesitate to contact your veterinarian. If you have a puppy that dies, a necropsy (autopsy) should be performed to determine the cause of death. This may help you prevent other puppies from dying from the same cause.