

CRITICAL PERIODS OF CANINE DEVELOPMENT

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NEONATAL PERIOD **(Birth to 12 Days)**

The Neonatal Period, from birth to 12 days of age, is devoted to two functions: obtaining nutrition by nursing, and staying warm.

A puppy is not physically self-sufficient when he is born. He needs the warmth of his environment to control his body temperature. He needs physical stimulation to urinate and defecate. He has neither sight nor hearing, and is deficient in his senses of smell taste and touch. He reacts to hot and cold, and to some extent to pain. He also reacts to the smell of mother.

He moves by crawling forward in a circular pattern, moving his head from side to side in an attempt to locate mother. He may vocalize while he's searching, which stimulates mother to nuzzle him and let him know where she is.

The environment affects him only inasmuch as it touches him. While the puppy grows rapidly in size and strength during this period, his behavior patterns remain virtually the same throughout. EEG's taken during the Neonatal Period show no difference between the puppy's brain waves when he is asleep and when he is awake.

TRANSITION PERIOD **(13 Days to 20 Days)**

The Transition Period is from 13 to 20 Days and is marked by a number of physical changes in the puppy. At the beginning of this period, the puppy's eyes will open, at an average of 13 days. While his pupils will react to light, the retina is still undeveloped, and he is unable to see objects or movement until around 21 days of age.

The puppy will begin to crawl backward as well as forward, and a few days later he will begin to walk in a wobbly fashion, falling as often as he takes steps forward. Once he starts walking, the puppy no longer crawls. The first teeth erupt at around 20 days, and he begins to bite and chew. Tail wagging also begins during this period, indicating that tail wagging is not reliant upon seeing and hearing, since he cannot yet see or hear.

He begins to react to sounds at an average of 19.5 days, when he startles at a noise, but is unable to locate the source of the sound.

This critical period is one of rapid physical changes. Over a period of just a week, the puppy has changed from a Neonate who cannot hear, walk, move his bowels without stimulation, keep warm by himself or eat other than by sucking, into a puppy who can do all these things.

AWARENESS PERIOD **(21 to 28 Days)**

The Awareness Period is from 21 to 28 Days. This is the first week during which the puppy is able to use his senses of sight and hearing. Because the change in his sensory perceptions happens so abruptly, over a 24-hour period in most puppies, he needs a stable environment. Now he has the greatest need for his mother and for a familiar environment. Weaning or moving the litter to a new location at this time in all likelihood will psychologically scar the puppies.

Learning begins during the Awareness Period. It is the time in the puppy's life when he learns what it is to be a dog.

CANINE SOCIALIZATION PERIOD (21 to 49 Days)

The period from 21 to 49 Days, or three to seven weeks is the Canine Socialization Period, when the puppy learns to use the species - specific behaviors that make him a dog.

To reach his genetic potential, the puppy must stay in the nest with his mother and littermates throughout this time. During this period he will practice body postures, facial expressions and vocalizations, and learns their effects on his siblings, mother and any other dogs he meets. He learns how it sounds to bark and be barked at; how it feels to bite and be bitten.

He learns the various behaviors that make him a dog: chase games - imitating the chase necessary to catch and bring down game - teach him coordination and timing; greeting behavior teaches him the body postures of greeting; fight games teach him the use of his body, body postures and expressions to elicit various responses. For example, during play, when a fight might begin, the puppy learns that a submissive body posture has the effect of turning off the aggression of his littermate.

During this critical period, the puppy learns one of the most important lessons of his life - to accept discipline. He learns it from his mother, who through discipline teaches the puppies not to bite so hard, or, during the weaning process, to leave her alone.

HUMAN SOCIALIZATION PERIOD (7 to 12 weeks)

The best time to bring a puppy into its new home is during the Human Socialization Period, from 50 to 84 days, or seven to twelve weeks. It is also the best time to introduce him to those things that will play a role in his future life. For example, if he has not already been exposed to farm animals and it is necessary for him to interact peacefully with them, it is at this age that he should meet them in a positive, non-threatening manner. If the breeder has not already introduced him to the sounds of the vacuum cleaner, car engines and city traffic, he needs to be exposed to these now. Children, men with beards, women in floppy hats, and senior citizens while all people to us, appear different to the dog. His education and socialization should include exposure to many types of people of all ages.

At seven weeks of age, a puppy's EEG shows the brain waves are the same as those of an adult dog. His capacity for concentration is not yet adult and his attention span is short. However, he can learn. Not only can a young puppy learn, he will learn whether we teach him or not. This is the age when the most rapid learning occurs. Everything he experiences makes a greater impression on him now than it ever will again. Learning at this age is permanent.

Because of the relative ease of teaching at this age, because the puppy has not yet learned any bad habits that will later have to be cured, and because the puppy is just a fraction of his adult size and weight, this is the ideal time to begin obedience training in a positive, non-punitive manner, taking into account his physical limitations and short attention span.

FEAR IMPACT PERIOD (8-11 Weeks)

During the Fear Impact Period, from eight to eleven weeks, any traumatic, painful, or frightening experience will have a more lasting impact on the puppy than if it had occurred at any other time. It is the puppy's perception of the experience that is important, not that of the owner.

For example, a trip to the animal hospital during this period, if unpleasant, could forever make a dog apprehensive about going to the veterinarian. By taking along a toy and some treats and making the experience pleasant and fun, the potentially negative impact is alleviated.

SENIORITY CLASSIFICATION PERIOD

(13 to 16 Weeks)

This critical period, from thirteen to sixteen weeks, is also known as the "Age of Cutting" - cutting teeth and cutting the apron strings.

During the Seniority Classification Period, the dog attempts to clarify and resolve the question of leadership.

FLIGHT INSTINCT PERIOD

(4 to 8 Months)

The Flight Instinct Period occurs sometime between four and eight months of age. This is the time when a puppy will test his wings. He will venture off on his own and may turn a deaf ear when called.

The Flight Instinct Period lasts from a few days to several weeks. How the dog is handled during this stage will mean the difference between a dog that doesn't come when called and one who responds readily. Because most dog owners are not aware of this naturally occurring developmental stage, they react incorrectly, thereby creating a problem for themselves.

This emergence of the Flight Instinct is another reason for starting puppies in obedience class before this age.

There is a physiological change that corresponds with the Flight Instinct Period - teething. While the adult teeth come through the gums prior to six months of age, they don't set in the jaw until between six and ten months. There is a physiological need for him to exercise his mouth at this time.

SECOND FEAR IMPACT PERIOD

(6 to 14 Months)

This Fear Impact Period, also called the Fear of New Situations Period, is not as well defined as the first. The Second Fear Impact Period corresponds with growth spurts. Hence, it may occur more than once as the dog matures.

What marks the Second Fear Impact Period is a change in the behavior of the now adolescent dog. He may suddenly be reluctant to approach something new, or be frightened of something or someone familiar. When a dog is exhibiting fear or reluctance, he should not be forced into a confrontation, bullied into being brave, or reinforced in his fear through soothing tones and petting. Force can frighten the dog further, and soothing tones only serve to encourage his fear.

His fear should be handled with patience and kindness. The dog is permitted to work it out for himself without being forced to deal with something he perceives as dangerous. Training during this period puts the dog in a position of success, so his self-confidence will be built up.

MATURITY

(1 to 4 Years)

Many breeds, particularly the giant breeds, continue growing and physically changing beyond four years of age, so maturity refers to sexual maturity rather than full growth. For the average dog, maturity occurs sometime between one and a half and three years of age, with small dogs maturing earlier and giant dogs maturing later. This critical period is often marked by an increase in aggression and by a renewed testing for leadership.