

The New Foal

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The first step in evaluating a foal's health is knowing what is normal and what is not.

At one minute post-delivery, the healthy newborn foal will be inhaling and exhaling forcibly with its chest and abdomen. The foal's heart rate will be between 60-80 beats per minute and rectal temperature 99-100° F. After five minutes the foal should be breathing rhythmically, starting to lift his head and move his body to free from the grey amniotic (birthing) sac. At this time a normal foal will also demonstrate the desire and ability to nurse. After 15-30 minutes the foal may try to stand, breathing with 40-60 breaths per minute and his heart beating faster than at birth (120-160 beats per minute). In 60-120 minutes after birth, the foal should be standing and searching for milk. Since the suck reflex is a primary indicator of good health, something may be amiss if the foal isn't actively seeking the mare's udder or making sucking movements with its mouth. Soon after nursing the foal should pass part of the meconium - the first stool made of waste material from ingested amniotic fluid while still in the uterus. By the time 12 hours has passed, the foal will start behaving with a life of its own. Sucking on and following the mare should now be strongly established, and the foal can stand up and lie down easily. The foal should be able to expel stool and urinate without difficulty.

Perhaps the first sign of trouble would be if the foal's limbs or body seems askew - a crooked leg, oversized head or misshapen jaw. While such conditions are very rare, approximately 1% of births, they are obviously cause for alarm. Slight angular errors of the limbs or joints may straighten themselves with time or may need to be helped by surgery; still others are too severe to be repaired and may prevent the foal from standing in a timely fashion.

A premature delivery can result from a number of factors including intrauterine infection or hormonal imbalances in the mare. A premature foal is usually weak, small and underdeveloped. The haircoat will be silky, shiny and soft to the touch, and the ears will be floppy because they lack the hardened structural cartilage. The very early foal often has respiratory problems due to underdeveloped lungs. These foals may be too weak to get up and nurse - sometimes their bones are still too soft to allow them to stand - and can develop pneumonia or die of malnutrition if prompt attention is not received.

A baffling condition known as Neonatal Maladjustment Syndrome (NMS), which includes the dummy-foal, wandering-foal and barker-foal syndromes, is believed to result from brain damage caused by insufficient oxygen during a difficult or premature delivery, or a long delay before the foal begins to nurse. These foals can make violent, convulsive movements, rapidly become weak, helpless, unable to nurse and develop apathy to the environment. Oddly, many of these foals can survive and become normal adults, but immediate veterinary attention is needed to survive this unusual beginning to life.

Another condition characterized by weakness is Neonatal Isoerythrolysis (literally 'newborn self-destruction of red blood cells'). The condition arises from an incompatibility between the blood types of the mare and foal, similar to Rh factor incompatibility between human babies and their mothers. Shortly after ingesting the colostrum (the mare's first milk), the foal's heart rate may increase with rapid breathing and depression, and the foal's gums and the whites of the eyes take on a yellow hue (jaundice). Jaundice may also occur as a result of other conditions including septicemia (a circulating bacterial infection) and several types of hepatitis (liver disease).

Normal foals are vigorous and not 'nappy' like human babies. Foals that demonstrate excessive sleepiness or fatigue may be ill. Unthriftiness, fainting and rapid heart rate may be caused by congenital or developmental defects in the heart valves and walls. If a foal is unthrifty and colicky, it may have an alimentary-tract abnormality. All these conditions would require prompt veterinary attention.

Incoordination is also another distinguishable sign of a troubled foal. The incoordinated foal is keyed in to the outside world, and while its muscular efforts may be strong, they are abnormal in placement and direction. The newborns sensitive system is particularly vulnerable to conditions characterized by lack of coordination, which are often caused by a viral, bacterial or parasite assault on the brain, nervous system or spinal column.

Elimination troubles are as common in newborn foals as they are in the human infant. If the foal is switching, straining and raising its tail, it is probably constipated. This may be caused by the retention of meconium (the first stool) which can get trapped in the foal's rectum if it becomes too hard and dry. An enema can take care of this problem. Other newborns may have a warm, wet, soiled navel stump which continually dribbles urine. The persistent urachus, or 'leaky navel', is caused by a failure of the urine channel in the umbilical stump to close. Because there is a risk that the surrounding tissues will become infected, it's wise to consult a veterinarian. A more serious elimination problem is due to a ruptured bladder, resulting from extreme compression during delivery, too violent a jerk on the umbilical cord following birth or failure of the bladder wall to close completely during fetal development. The foal becomes progressively weaker, the abdomen becomes more distended and even though the foal strains to urinate, it doesn't produce much. It is essential to attend to this problem immediately because uremic poisoning (excess urea in the blood) can rapidly result in death.

If the foal appears bright and eager but sore, reluctant to move and having a hard time breathing, he may have broken ribs, the result of a traumatic delivery. Similarly, the newborn may have a ruptured diaphragm (the muscular partition separating the cavities of the chest and abdomen) with depression, reluctance to move or nurse, mild colic, shallow panting, a tucked abdomen and a 'sawhorse' stance. This is also the result of birth trauma or rarely a congenital defect. Call a veterinarian to perform a thorough check to assess the problem.

A young foal may also have eye problems. If the foal is blinking a lot and its eyes are tearing profusely, it may have developed an eye injury from hay or straw, or from the lashes on an in-turned eyelid (called entropion). If the newborns lenses are opaque, this may be congenital cataracts that can be corrected with surgery. An underdeveloped or small eyes (microphthalmia), on the other hand, is a hereditary condition and there is no way to reverse it.

A sick foal's attention is turned inward and the foal will become progressively less able to respond to the outside world. The foal doesn't lack coordination, but its strength is sapped and consequently, so is the willingness to eat, play and carry on other normal activities. One of the most obvious signs of a sick foal is diarrhea, watery fecal material which often is accompanied by tail matting, dehydration and scalding of the skin of the buttocks. If the condition persists for more than a day, veterinary attention is imperative. Another common neonatal ailment is septicemia or "joint ill", caused by a systemic bacterial infection. The condition is characterized first by depression and weakness, then later by hot, painful, swollen joints. If the bacterial infection persists, abscesses may develop in the lungs, liver and kidneys or the foal may succumb to pneumonia and die. If a foal has a bout with pneumonia, treatment should be aimed at controlling the infection, improving respiratory function, minimizing stress and staying as warm, clean and comfortable as possible. Mares can be immunized against some types of pneumonia organisms and will pass this immunity on to their foals. As with any disease, prevention is the best possible cure.

Most horseman will agree that nothing is a greater source of pleasure than a foal who develops with bounce, spirit and good health. But if your foal makes a false start, don't despair; for the newborns who aren't bright eyed and bushy tailed in the first hours of life, there's often hope if the problem is quickly recognized and treatment is promptly initiated.