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Getting Orphaned Foals off to a Good Start By Kathy Anderson, UNL Extension Horse Specialist



Orphaned foals can be a great challenge to get off to a good start, but careful planning, much dedication and hard work can help them end up normal healthy adult horses. Orphans are a challenge at any time, but even more so if they are orphaned right at birth. Losing a mare is never expected and being left with a motherless orphan can turn into an unexpected nightmare. Although very exhaustive at first, intensive management early on will optimize the foal's survival chances.

If a foal is orphaned at birth, the first 24 hours is very critical. Normally foals receive sufficient antibodies through the mother's milk shortly after birth through nursing colosturm. A mare's first milk or colostrum contains a high concentration of immunoglobins (antibodies) to protect the foal from disease and infection. Colostrum is secreted by the mare in her milk only during the first 24 to 48 hours following foaling. There is no transfer of antibodies from mare to developing foal through the placenta during pregnancy, thus foals are born without any protection from disease.

The ingestion of colostrum by the newborn allows for passive transfer of immunoglobulins, which provide almost immediate immunity to the foal. Foals which do not receive these antibodies are at high risk and are diagnosed as having a condition known as failure of passive transfer (FPT). Foals absorb the maximum amount of colostrum through the gastrointestinal tract in the first 6 hours after birth, and basically no absorption occurs after 12 to 18 hours, and thus must be supplemented with plasma transfer or other sources. Ideally a foal should receive 250-300 ml of colostrum every 1-2 hour for the first six hours after birth with at least a total of 1 liter. If the foal cannot nurse directly from the mare, it is a good idea to have a veterinarian administer it directly with a nasal-gastric tube to ensure nothing is wasted and the foal gets the needed amount.

The immunity level of the foal should be tested by a immunoglobulin G (IgG) blood test to determine if the antibody levels are sufficient. This test can be run as early as 8-12 hours after birth, which would allow for a second feeding of clostrum if the levels are low. The preferred IgG level is 400-800 mg/dl.

Many broodmare owners having very many foals will collect and store colostrum in case of emergencies. Colostrum can be collected from good milking mares once their newborn foals have nursed. It has been shown; 200 to 500 ml can be milked from mares without affecting the antibody passage to her own newborn foal. However, remember, this needs to be done within the first 24 hours after she has foaled. The collected colostrums can be frozen for up to 3 years if stored properly. When it is needed, this frozen colostrum should be thawed at room temperature in a warm water bath just before use. Do not thaw by microwave as essential antibodies can be destroyed.

Once you have established sufficient immune protection, now you need to work on the daily care and feeding of the orphan. Normally, foals nurse up to seventeen times an hour during the first week of life! But this will decrease to three times per hour in the first few weeks of life. There are a few basic options an owner has: use a nurse mare or goat, or manually feed the orphaned foal.

Obtaining a nurse mare would generally be highly desirable as it would greatly reduce labor. Unfortunately, nurse mares can be hard to find. Another potential problem includes convincing the nurse mare to accept the foal. One substitute is to use goat's milk by purchasing a milk-producing goat. Some orphan foals have been fostered onto nanny goats with minimal problems. These goats can be placed on hay bales or platforms so the foal can nurse. However, as the foal grows, the goat may not be able to provide enough milk so supplemental feed may be needed.

Most commonly, however, owners derive some type of manual feeding program. Initially, foals can be bottle feed with preferably a powdered mare's milk replacer. When bottle feeding, a lamb's nipple on some type of bottle works best and do small, frequent feedings. Very weak foals may need to be fed initially through a nasal gastric tube (stomach tube) by a veterinarian. Many owners prefer to train even young foals to drink out of buckets. It has been recommended to offer the very young foals 400 ml of milk replacer every hour. Once the foals are a bit older (2 + weeks), the schedule can change to every 4 hours, but a consistent feeding schedule is very important. Even very early on, foals should be offered both milk replacer and pellets formulated for young orphaned foals. Many tend to prefer the pellets very quickly, and then slowly transition onto creep feed over a few months. Additionally, some high quality hay can also be fed after the first few weeks.

It is essential to monitor the foal's overall health. If the mare was ill before parturition, the newborn may be malnourished. The foal should be able to stand, walk, have a suckling reflex, and nurse a bottle within two to three hours. Often times, small, weak foals may appear fine initially, but begin to deteriorate with in 24 hours. If this happens, veterinarian assistance may be critical. Foal neonatal centers are available but can be extremely expensive.

As with any newborn, a dry, clean, warm environment is essential. As the foal becomes stronger, it should be turned out into a small pasture or lot for exercise. If possible, rear the orphan with another orphan, pony, goat, or horse. Orphan foal behavior problems can be reduced if owners make every attempt to treat the foal as a horse and not as a pet.

The health care program of orphan foals must be monitored closely. All routine vaccinations and deworming must be timely for the orphan to get the greatest benefit. Foals should receive their initial vaccinations for tetanus, encephalomyelitis, influenza, and rhinopneumonitis at 60 days of age, with an additional booster four to six weeks later. Parasite control can be initiated at 60 days of age, and should be done at a minimum every eight weeks. A continuous daily dewormer is available and could bene-fit many orphans by minimizing parasite infestation.