Reducing Weaning Stress in Foals
Kevin H. Kline, PhD

Weaning time can be stressful for both the horses and humans involved in the process. Weaning stress for the foal can result in reduced resistance to disease, loss of body condition or injury due to panic behavior. The mare may also become agitated and be more prone to injury, and may experience discomfort due to a distended udder for a few days. The human horse owner may also experience a certain amount of stress due to empathy for the dam and foal. For the latter problem, consult a psychiatrist or try some other form of therapy, possibly at the local pub. For the former horse-related stress problems, several proven weaning management practices will be discussed for your consideration.

Prepare for Weaning

Weaning can be successfully done at any time after the foal has received the first milk, or colostrum, just after birth. However, under most practical management conditions, foals are weaned at between four and six months of age. Before the weaning process is begun, however, the foal must be properly prepared nutritionally, be in good health and exhibit robust body condition. If any of these requirements is lacking, weaning should be postponed until these concerns have been addressed.

Foals should be well accustomed to the feed that will sustain them once the dam’s milk is no longer available. Creep feeders which provide foals with access to solid feed (while denying entry to the mares) should be routinely filled by three to four weeks of age. Foal creep feed should generally be provided in the form of a nutritionally balanced grain, hay and supplement completely pelleted or textured feed, and can be provided free-choice in this form. However, if creep feed without significant fiber from a forage source is used, access to the creep feed should be limited to just a few hours per day. Complete feeds can greatly reduce the labor of creep feeding foals, but diets should still be examined daily for signs of spoilage. Creep feeders should be designed with a roof to keep feed as dry as possible. A complete foal creep feed should provide about 14 percent crude protein, .7 percent calcium, .4 percent phosphorus, and include about .5 percent trace mineralized salt. Improperly balanced creep diets can lead to skeletal growth abnormalities.

Controlling parasites and diseases prior to weaning is critical. Foals which are sick or heavily parasitized before weaning will likely only become more ill once the added stress of weaning is imposed. In order to control damaging internal parasites such as ascarids and large strongyles (bloodworms), worming should begin at four to six weeks of age. In intensive management situations such as continuous grazing of many mares
and foals, worming should be done about every two months. In addition, a continuous wormer such as Strongid C can be provided in the creep feed.

The mare’s first milk (colostrum) will help to protect the foal for several weeks from diseases which the mare herself has been exposed to or which she has been vaccinated against. By about two to three months of age, though, the foal should begin a vaccination program which includes vaccines against tetanus, influenza, rhinopneumonitis, and sleeping sickness. Other vaccines such as strangles or Potomac horse fever may be recommended by your veterinarian depending on local conditions. The foal should neither be weaned nor vaccinated when signs of active disease are present, since both of these procedures will tax the foals already challenged immune system. Likewise, it is generally a good idea not to vaccinate a foal during the early stages of weaning stress, in order to allow its immune system to rebound before the added challenge from the vaccine.

**Deciding When to Wean**

As mentioned earlier, weaning normally occurs between four to six months of age. The exact timing of weaning will depend upon the physical maturity of the foal during the time weaning is considered, as well as its general health and condition. In addition, factors such as adverse environmental conditions and the temperament of the mare should be considered. If extended bad weather is forecast, it may be wise to postpone weaning to avoid added environmental stress. If the foal to be weaned has a dam with a difficult disposition, especially one with serious vices, weaning should be accomplished sooner rather than later in order to avoid development of learned vices in the foal. Foals weaned later than six months may begin to develop some undesirable behavior regardless of the disposition of the dam, and the nutritional support from the dam is insignificant by the foal’s sixth month. Therefore, weaning should not be postponed beyond the foal’s sixth month of age.

**Weaning Methods**

The exact method used to wean foals, once the decision to wean has been made, will be dictated to a certain extent by available facilities, number of mare/foal pairs available, and the age distribution of foals to be weaned. Still, the horse owner has a few options available.

Weaning methods can be divided into the two basic categories of abrupt versus gradual weaning. If a horse owner has only one foal which needs to be weaned at a particular point in time, the abrupt weaning scenario, whereby a foal is completely and suddenly removed by sight, sound and smell from its dam, may prove to be excessively stressful for all parties involved. Research suggests that gradual weaning of single foals, in which the mare and foal are placed in adjacent but separate quarters which preclude suckling, generally causes less stress to the mare and foal than abrupt separation. The
initial, adjacent separation usually lasts for a few days or weeks, until complete separation is achieved. Of course, if the mare or foal exhibits dangerous behavior such as attempting to scale or jump over partitions during the adjacent separation period, an abrupt method may be chosen by default.

The stress of abrupt separation weaning methods can be greatly reduced by certain management techniques. If one is weaning more than one foal simultaneously, weaning on the “buddy system” can be helpful. Separating pairs of weanlings from their dams simultaneously and together might reduce stress in the foals, although research has found that this method can actually increase stress above the abrupt single weaning method if the foals were not thoroughly familiar with one another and “buddied up” prior to weaning.

Perhaps the best system of abrupt separation of mare and foal involves “pasture weaning” whereby the mares in a stable social unit of mares and foals on pasture are removed one by one over time. The foals are allowed to remain in familiar surroundings with both similar-aged “buddies” and familiar mares. Strategies to be employed with this method should include removal of the more aggressive mares first whenever possible, and leaving a docile, tolerant “baby sitter” mare to be removed last of all. Removal of mares from the pasture simply based upon the age of her foal, disregarding temperament, can lead to unpleasant and dangerous encounters when a weaned foal approaches an aggressive or overly protective mare and her foal. This method is also less apt to succeed if the mares and foals have not resided in the same pasture for most of the Spring and Summer. If most of the mares are long-term pasture residents, and only a few mares are newcomers, the newcomers should generally be removed first, although temperament and level of social acceptance by the herd are overriding considerations.

**General Considerations**

Regardless of the specific method of weaning used, facilities must be designed to safely restrain mares and foals which will inevitably show some level of agitation. Partitions, walls, fences, feeders and other objects in the immediate vicinity of the mare and foal must be strong, smooth and readily visible to the horses. Placing a flimsy wire fence between mare and foal, for instance, will likely result in injury due to lack of visibility and/or lack of respect for the potentially debilitating structure. Likewise, even a slightly protruding nail or sharp edge on an otherwise sturdy and well-designed wall or fence row can cause damage to the mare or foal as they fret and worry along its length.

Another suggestion for easing weaning stress is to wean the foal in a familiar environment. Completely removing the mare and foal from familiar surroundings during the weaning process only compounds the stress. For horse owners that may have only one foal to wean, and would still like to try the “buddy system”, introducing the suckling foal to a goat or sheep companion that stays with the foal during the weaning may also
ease the foals transition to independence. Mares also generally appreciate the companionship of other compatible mares after weaning and temporarily reducing the mare’s grain intake after weaning may help to reduce painful udder distension.

Conclusion

No single method of weaning foals is superior to all others under all circumstances, and no method has been found which completely eliminates weaning stress. However, careful evaluation of management conditions on given farms can lead to the selection of a weaning method that minimizes stress to the greatest extent possible.