

## **The Importance of Sleep in Horses**

Our topics for this week are:

- **Types of sleep in horses**
- **Requirements for normal sleep in horses**
- **Causes of sleep-deprivation in horses**

Sleep is necessary for normal mental health and physical strength in humans and most animals, including horses.

There are two types of sleep: non-rapid eye movement (NREM) sleep and rapid eye movement (REM) sleep. NREM sleep is a light sleep which horses can achieve while standing up. This is due to their “stay apparatus”, an arrangement of muscles, tendons, and ligaments that work together so they can remain standing with virtually no muscular effort. During NREM sleep, horses often stand on 3 legs while resting the fourth. Their head is lowered, the lower lip may droop, and the tail is motionless. NREM sleep time is usually “polyphasic” in multiple short periods of approximately 15 minutes each for a total of about 4 to 6 hours a day. NREM sleep is about 85% of the total sleep time for horses. Care must be taken not to startle a horse in NREM sleep since their reaction may result in an injury to them or their handler.

Although REM sleep is just 15% of horse sleep time, it is very important for full rest of their muscles and digestive system. Horses can only achieve normal REM sleep while lying down on their side or on their chest with their chin on the ground. To achieve REM sleep, they must lie down to sleep for half an hour to two every few days, and in a herd, they typically will not lie down unless another trusted horse is near and remains standing as a sentinel to guard against predators. An exhausted horse, short on REM sleep, may go into REM sleep standing up which will cause his neck to drop, his knees to buckle, and to fall onto his muzzle.

How many hours of sleep a horse needs depends on their age, activity level, and size. Young horses and pregnant mares require more sleep than adult, non-pregnant horses. How much they get depends on whether they have companionship of other horses, a large enough and soft and dry enough surface to lay on. The rest area should also be quiet and without distractions of loud noises, flashing lights, or temperature extremes.

Sleep-deprived horses are likely to be lethargic, poorly coordinated, and ill-mannered. This may be suspected if no shavings, straw, leaves or other bedding is evident in their haircoat, particularly in the early morning hours.

If sleep deprivation is suspected, an inspection of the horse's sleep opportunities and habits should be investigated. Items to be checked include:

- Available periods of darkness - horses should have at least 6 hours of continuous darkness at night. If light is needed in dark stalls, a red-light source such as a red-light flashlight should be used.
- Available quiet periods - at least 6 hours of quiet should be provided.
- Adequately soft bedding - 4 to 6 inches of wood shavings and rubber matting should be provided in stalls.
- Sufficient space to easily lay down - for an average 14 to 15 hand,, quarter horse a stall for sleeping that is at least 12 by 12 feet should be provided.
- Companionship, preferably another, compatible horse.
- Horse preferred temperature - horses prefer cool temperature 40 to 60 degrees F. Avoid overnight blankets that only have the intended purpose to keep the hair coat clean or control insects.
- Evaluate the horse's ability to lay down and rise normally. Musculoskeletal or equilibrium problems can interfere with achieving REM sleep.

If you have comments or you're interested in particular animal handling subjects, contact us at [CBC@BetterAnimalHandling.com](mailto:CBC@BetterAnimalHandling.com)

Now let's recap the key points to remember from today's episode:

- 1. Excessive drowsiness, a change in temperament, and a clean hair coat in the mornings is suggestive of sleep deprivation in horses.**
- 2. Quiet, darkness, horse companionship, and soft bedding are important for normal sleep in horses.**
- 3. Arthritis, or other physical impairments that adversely affect the ability to lie down or get up can cause a deficiency of REM sleep in horses.**

More information on animal handling can be found in my books, *Animal Handling and Physical Restraint*, *Concise Textbook of Small Animal Handling*, and *Concise Textbook of Large Animal Handling* all published by CRC Press and available on Amazon and from many other fine book supply sources.

Additional information is provided at: [www.betteranimalhandling.com](http://www.betteranimalhandling.com) . This website has more than 325 past podcasts with notes on handling of dogs, cats, other small mammals, birds, reptiles, horses, cattle, small ruminants, swine, and poultry.

Don't forget, serious injury or death can result from handling and restraining some animals. Safe and effective handling and restraint requires experience and continual practice. Acquisition of the needed skills should be under the supervision of an experienced animal handler.