



# Equine News



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Oklahoma Cooperative Extension Service • Division of Agricultural Sciences and Natural Resources  
Oklahoma State University

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## ***How's your Knowledge of 'Normal'?***

Fall is *back to school time*. In keeping with the theme of the season, here is a short test on what is considered *normal* health parameters for a horse.

- What is the normal expected body temperature of a mature horse?
- What is the normal expected resting respiration rate of a mature horse?
- What is the normal expected resting pulse rate of a mature horse?
- What color is normal for the gums of the mouth of a horse?
- If you apply and release a small amount of finger pressure on the gums, how quickly should the normal color return after?

How did you do? If you answered 99.5 to 101° F, 12 to 16 breaths per minute, 28 to 44 beats per minute, pink and a few seconds, you know what are considered to be normal values for healthy horses.

We as owners should be able to monitor these vital signs. A brief consult with your veterinarian or an owner with experience is all you need to get started. Cost of a stethoscope, thermometer and a stop watch is pretty small. It will take a little practice and it is a good idea for you and the horse to become accustomed to the testing actions before an actual incidence of a health problem.

Those tests usually follow observations of an abnormal behavior, depressed attitude, or lack of appetite. Caretakers should listen for gut sounds, either excessive or absence, when a horse is acting abnormally. Even paying attention to the

quantity and consistency of manure should be a daily routine.

While the normal health parameters of the majority of all horses are expected to be within published ranges, the expected behavior and attitude is very specific to individual horses and influenced by the environment. As such, the responsibility of what is normal for a particular horse falls on the daily caretaker.

It takes keen observation and experience to make a qualified judgment on the need to call the veterinarian when an abnormal behavior or vital sign is observed. For example, respiration rate will vary more than body temperature, so changes may be of little consequence. Feed intake may be lower in hot environments just because the horse does not feel like eating as aggressively or as much. So, small, short term changes in behavior may not indicate a significant problem, or one expected to last any appreciable length of time. *(continued next page)*

***A horse's heart rate can be obtained by listening to the heart sounds with a stethoscope positioned on the horse's left side behind the attachment point of the front leg. The sound you will hear will be a two-phase beat representing the closing of the valves of the heart. Use a stopwatch or second hand and count the beats for 15 or 30 seconds and multiply as needed. You can also take a pulse rate by feeling the blood flow through the artery on the inside of the front cannon bones or the artery that crosses under the jaw bone of the head. Having the horse accustomed to the act will help you get a more accurate value when needing to test, as a frightened horse may increase its heart rate simply because of the test.***



*(Normal, continued)*

On the other hand, horses that are not eating, not drinking or appearing abnormally depressed should be watched closely, further checks conducted, and are potential candidates for further treatment. A horse that unusually stands away from others, is lying down at odd times, or has an abnormal gait needs more than a casual glance.

High body temperature, i.e. 102° F or greater, purple or red gum color, and elevated heart or respiration rate are the usual indicators to *make the call*. That type of information also helps the veterinarian make a judgment as to their decision for further testing and immediate treatment.

One final comment is to avoid the self administration of medications, drugs or homeopathic agents for conditions that are likely to need veterinarian intervention. Even though you may have the experience or the need is immediate, a veterinarian may be unable to treat the horse with the best course of action because of masked responses or drug interactions. So, if you suspect a real potential for veterinarian assistance, *make the call first!*

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### ***Horse Happenings Around OSU***

New semester means new student activities. The 2009 incoming freshman and transfer class has kept the Department of Animal Science enrollment more or less level. For several years, horses rank among or are the highest area of interest with the students. Many, or most, have ambitions of veterinary school, although the diversity of career options is large.

Extracurricular activities associated with student clubs like the OSU Horseman's Association have begun, with many planned activities including outreach with the Oklahoma Special Olympics Equestrian Games and youth clinics. The OSU Cowgirl Equestrian team has a new roster and

the team begins competition for the 2009-2010 season with a home event October 3rd verses SMU. You can keep up with the Cowgirl team on their website: <http://www.okstate.com/sports/w-equest/okst-w-equest-body.html>

Dr. Cooper's undergraduate horse classes are once again attracting a full load of students. Graduate studies in horse nutrition includes an ongoing research trial on energy utilization in diets for growing horses. The fall equine management course, judging team activities and horse training labs are in full swing. The horse judging team is gearing up for the usual fall competitions at the All American Quarter Horse Congress, the AQHA World Show and the NRHA Futurity.

We have had several outreach events already this fall. The OSU Horse Owners Day, hosted by the School of Veterinary Medicine and the Department of Animal Science had about 70 attendees who attended seminars and labs on horse health and nutrition management.

That is not everything that is happening, just the bigger activities that are occurring since the beginning of the semester. Much more is in the planning stages for spring.

The web is an amazing source of information, some good and some bad. Finding a comprehensive site of nonbiased information for horse information may be difficult to locate among all the possibilities.

If you have not found the National Cooperative Extension site developed for horse owners yet, you should stop reading this newsletter and go to it: <http://www.horsequest.info/>

The site offers notices of web casts, a comprehensive library of answers to frequently asked questions, learning modules and more. It is continually being updated with current information of benefit to horse owners.

## ***Items to Pay Attention To When Transporting Horses***

There have been several studies conducted to evaluate the effect of trailering and transport on horse health. The design of individual studies has an effect on results, as does influencing factors such as ambient temperature, length of transport, type of transport and horse differences. Regardless, there are several responses that are probable, and should be monitored.

Long term transportation is likely to reduce voluntary water intake during and immediately following transport. In general, horses that are transported for long durations, i.e. 6 hours and longer, will voluntarily drink less than when not transported under similar environmental temperatures. In addition, there is a heightened potential for a horse to not drink for several hours, i.e. 5 to 6 hours, post long term transportation.

The level of dehydration that results from normal decreases of voluntary water intake generally are not of major consequence to the health of the horse. However, owners need to relate the degree of decreased intake to the task at hand following transportation.

Starting an endurance ride with a slightly dehydrated horse may affect performance, especially in hot environments. Conversely, lower intakes during and immediately following transport is less of a concern with temperate environments and nonstrenuous exercise. Point of interest is knowing how sensitive your horse is to transportation and new environments, and expect a natural tendency of less water intake for several hours following transport. Gauge the level of concern with the degree of decreased intake, the level of work and environmental conditions.

Another commonly suggested concern relates to whether there is an observable increase of nasal discharge, coughing or other conditions related to respiratory irritation. Horses transported for

longer periods of time, i.e. 24 hours, may have increased irritation of nasal passages, increased nasal discharge, increased levels of circulating hormones related to stress conditions and certain bacterial loads in the upper and lower respiratory system.

Results suggest that most of the observed conditions did not cause increased temperature or other indications of sickness, and generally were short termed. However, as with managing any animal, expect your horse to respond very individually, and pay close attention to its behavior, attitude and physical condition during and following long durations of transport.

There are many different beliefs and practices with hauling. Some owners will remove horses from trailers on a set schedule, i.e. 15 minutes following every four to six hours of transport. Others will allow for 10 to 15 minutes of rest following every 4 to 6 hours by stopping without removing horses from the trailer.

Both have advantages, removing horses from the trailer provides a chance for closer observation of attitude and behavior. Not removing from the trailer may give more of a rest to the horse. Studies show that while heart rates are expected to rise during traveling, that rates will go down when horses are left in a trailer during a nonmoving rest period.

There are other interesting results of studies that may not be as relevant to day to day transport. Several studies have noted the preference for horses to face backwards to the direction of travel while moving. Slant loads may provide a more solid base of support than when facing forward. Other studies stress the need to keep the trailer clean as respiratory irritations can increase when there is an increase in particulate matter circulating in and around the head of the horse. So, maintain the trailer as clean as possible and use bedding and ventilation to your advantage instead of a potential source of allergens.

*(continued, next page)*

*(Transporting horses, continued)*

Continued research is needed, but the best advice is to pay attention to your horse. Expect some horses to be extra sensitive to transportation stress.

Note that the most likely response will be decreased interest in water consumption. Monitor the intake and gauge the relevancy of any changes by the quantity, time period and expectations of use following transport. The ability to test for capillary refill time on the gums and response to skin pliancy tests aid in judging dehydration status.

From that point, pay attention to evidence of respiratory irritations, i.e. nasal discharge, tearing of eyes, along with observations of behavioral changes that might suggest bigger problems if left unwatched and unattended. Water intake and respiratory problems are not the only concerns, but are likely the most probable to occur with transportation stress.

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As winter approaches, why not:

- Pull out all the tack and give it a good cleaning and oiling prior to the winter season storage.
- Power wash and/or really clean the inside and around your barn. Risk of fires, allergens and varmints will be lowered.
- Purchase or print out you 2010 calendar and mark the dates for vaccinations, Coggins tests and dewormings that will be needed.
- Body condition score all your horses before the need for cold weather nutrition adjustments.
- Take the time to go on that trail ride you have been promising yourself and your horse. You both deserve it!

## **Spring Dates for Youth Activities**

2010: Hard to believe by someone who has been working with the Oklahoma horse youth for over 25 years that another decade is only a few months away.

Nonetheless, it is just around the corner, and the calls to obtain dates for youth activities have increased in frequency with the start of the new school year.

Here are a few planned activities for 2010:

State 4-H Horse Leader's Conference will be slated for January 23rd, 2010. The agenda will be released to County Cooperative Extension offices in the very near future. It will be a one-day activity at OSU Stillwater with workshops on helping our youth become better hands on and off horses.

State 4-H Horse Topic Communication Contests will be Saturday, February 6th. Material will be forwarded to County Cooperative Extension offices soon. You can see what it entails by looking at the 2009 material on the web. It is listed in the 4-H curriculum, horse project on the state 4-H website. Go to [www.ansi.okstate.edu/e-equine](http://www.ansi.okstate.edu/e-equine) and follow the links.

OSU Horse Judging Day will be Saturday, February 13th. This is the annual event that teaches adults and youth the current trends in judging horses. Same as above on where to find material when it is prepared.

State 4-H and FFA Horse Judging Contest will be April 3rd.

State 4-H Horse Show will be June 17-19 in Shawnee. Youth will qualify through district shows, materials will be released next spring.

