

## Horse Vital Sign Basics, TPR + Gut Sounds

As a horse owner it's very valuable to be able to obtain and understand your horse's normal health parameters. These are easy to assess and will give your veterinarian important information during an emergency situation. Below are normal parameters for most horses, but it's important to establish "normals" for *your* horse. If any abnormalities are noted, please contact your veterinarian.

### Supplies:

#### Quick read digital thermometer

You can purchase a quick read digital thermometer at your local human pharmacy for \$7.00-\$10.00. Look for one with a non-bendable end, this makes insertion easier.

#### Stethoscope

You can purchase an inexpensive stethoscope at a medical supply store, drug store, or horse supply catalog usually for under \$20.00.

### **Temperature:** Normal for an adult: 99.5°-101.5°F

Foals can run a little higher than adult horses. (Up to 102.0°F can be considered normal for foals).

A horse's temperature is taken rectally. Place a small amount of lubricating jelly (or if you're in a bind a little bit of spit) on the end. Approach the horse from the side - don't stand directly behind, any horse can kick. Raise the tail gently or push to the side, push the *on* button on the thermometer, wait for it to be ready, then insert the thermometer into the anus. Stand quietly and talk soothingly to him, and wait for the thermometer to beep. It is very important to take your horse's temperature before giving medications as some medications can alter the temperature. If your thermometer is reporting a low number followed by a C, hold the button down, this should switch it from Celsius to Fahrenheit.



**Pulse/Heart Rate:** Normal resting heart rate for an adult horse: 30-40 beats per minute.

The pulse and respiratory rate can be taken without a stethoscope, but a stethoscope can make it easier. If a stethoscope is not available you can take your horse's pulse using the facial artery. This artery can be found at the bottom side of the jaw where it crosses over the bone. Count the beats for 15 seconds, and multiply by four to achieve beats per minute. You can use a stethoscope to listen to the heart beating in the chest. Place the stethoscope on the left side of the chest just behind the elbow. It is often easier to hear if the left front leg is forward. You may have to apply some pressure to hear it. Each "lub-dub" is one beat. Again count for 15 seconds, and multiply by four.



**Respiratory Rate:** Normal resting respiratory rate for an adult: 8-16 breaths per minute.

You can take the respiratory rate by watching the horse breathe. Each inhale or exhale is one breath. Count for 15 seconds and multiply by four. You can use your stethoscope to listen to your horse's trachea, or listen to his lungs as well. Note any abnormal sounds you hear; crackling, squeaking, etc. You can also hold a hand close to a nostril or by placing your hand gently on your horse's side and counting how many exhales occurring over 15 seconds and multiply by four.



## **Mucous Membrane Color and Capillary Refill Time (CRT):**

Normal Mucous Membrane Color: pink

Normal Capillary Refill Time: <2 seconds

If you take a look at your gums in the mirror you'll notice they are a nice healthy pink, and if you touch them they'll feel moist to the touch. Pink means your tissues are receiving enough oxygen-rich blood, and the moistness means you're hydrated. Your horse's gums should look and feel the same way. Blue, purple, or white gums are indications of something more serious going on and your veterinarian should be contacted. Dry gums or gums that feel sticky indicate the horse may be dehydrated. If you look in the mirror again and press your finger to your gums and for just a second put pressure and then release you will see your gums turn white and then fill in pink again. This is called the capillary refill time (CRT). Do it again and count how many seconds it takes to refill to their nice healthy pink. It should be less than 2 seconds. You can do this test with your horse as well.



**Gut Sounds:** Normal for an adult: 3-4/minute

To listen to gut sounds you will need a stethoscope. If the gut sounds are very loud you may be able to hear them by listening with your ear up the horse's flank. You want to listen on both the right and left sides for 1 minute each. You can also listen on the upper and lower quadrants on the left and right side (shown below)

