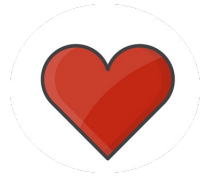


# TAKING A HORSE'S VITALS - OVERVIEW



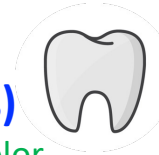
## Resting Heart Rate

- Normal = 28-40 bpm (Beats Per Minutes)
- 40 – 60 BPM, *alert veterinarian to situation.*
- 60 – 80 BPM, *veterinary attention is necessary*
- **80 BPM plus, IMMEDIATE veterinary attention is needed**
- Count heart beats for 15 seconds and multiply by 4
- Can feel for digital pulse on back of fetlock, on the underside of jaw or inside of knee. Or, use stethoscope on left side directly behind the front leg.
- If using a stethoscope be sure to count each “lub-dub” as ONE beat, not two.



## Gut Sounds

- Normal = gut sounds in all four quadrants
- Call vet if no sounds and horse’s behavior is concerning
- Listen in all four quadrants
- Sounds can vary between, gurgles, pings, sounds like rocks tumbling down a tin roof, rumblings
- Listen for at least a minute in each quadrant



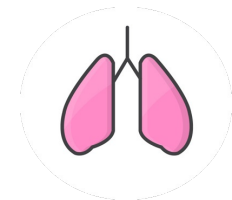
## Mucous Membranes (gums)

- Normal = moist, healthy pink color
- Call vet – brownish, brick red, purple, yellow or grey
- Capillary refill – should be two seconds or less. Press lightly on gums and release – count time it takes color to refill to pink



## Temperature

- Normal = 99-101 Degrees Fahrenheit, 37-38.5 Celsius
- Cause for concern 101.5 (38.6 C)
- **Call vet immediately 105+ (40.5 C)**
- Use rectal thermometer
- Gently insert into the rectum along the side wall so thermometer does not enter a manure ball.
- Be sure to leave thermometer in for one minute or until it beeps to get accurate reading.

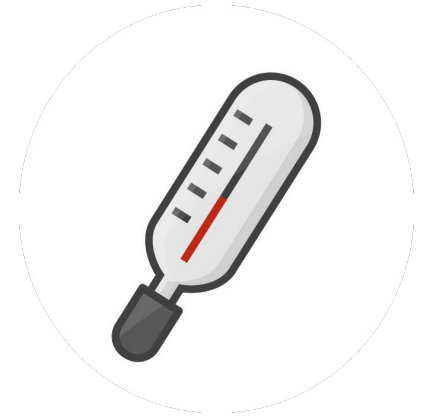


## Resting Respiration

Normal = 8 to 16 Breaths Per Minute

- Call your veterinarian if: A high respiratory rate, increased effort when inhaling or exhaling, and/ or noise when breathing.
- Watch horse’s sides just in front of hind leg for in/out movement
- Count the *in and out* movement as ONE breath.
- Don’t have horse sniff your hand to watch breath as they may breathe faster.

# TAKING THE HORSE'S TEMPERATURE – DETAILED INSTRUCTIONS



## PROCEDURE

- Stand on the left hand side of the horse close to the horse to avoid being kicked. Make sure the horse knows you are there. Face parallel to them so your knees are able to bend if kicked.
- Lubricate the end of the thermometer with soapy water or petroleum jelly.
- If using a mercury thermometer gently shake the mercury down to the bottom of the tube. Note: Digital thermometers are often faster and safer.
- Lift the tail and gently insert the thermometer into the horse's rectum. Make sure the tip of the thermometer rests against the rectal wall (i.e. make sure it is not inserted into a manure ball).
- Hold the end of the thermometer to keep it from disappearing into the rectum.
- If you are using a mercury thermometer wait at least 60 seconds before removing the thermometer and reading it.
- Electronic thermometers will 'beep' when an accurate reading is obtained.
- Remove the thermometer, take the reading, and sterilize it before storage.

## ANALYSING RESULTS

- **NORMAL = For an adult horse, temperatures between 99-101 degrees F (37.2 - 38.3 Celsius)**
- **CAUSE FOR CONCERN - Readings above 101.5 degrees (38.6 C).** Note that strenuous exercise can temporarily raise the temperature.
- **A temperature of 105 degree F (40.5 C) or greater is cause to call your vet immediately.**
- Foals have slightly higher normal temperatures than adults. Their baseline temperatures can run up to about 102 degrees (38.8 C), and they can spike fevers as high as 106 degrees F (41.1 C).

# COUNTING THE HORSE'S HEART RATE

## – DETAILED INSTRUCTIONS



### PROCEDURE

- A horse's pulse can be taken two ways: by listening to the heartbeat with a stethoscope or by palpating (feeling) an artery.
- To use a stethoscope, place the earpieces into your ears with the earpieces pointing forward. Then place the chest piece (diaphragm) behind the horse's left elbow. Listen closely for a "lub-dub" sound and count how many times you hear this sound for fifteen seconds.
- Each "lub-dub" counts as one.
- Multiply this number by four to identify how many beats per minute.
- If you prefer to palpate an artery, you may feel one of these three: the maxillary artery (under the jawbone), radial artery (on the inside of the knee), or the digital artery (just below the fetlock).
- Place your middle finger and either the index or ring finger on one of these arteries ensuring you can feel the "pulse" of blood flow.
- Count how many times you feel this pulse over a period of fifteen seconds. Multiply this number by four to determine how many beats per minute.
- The pulse can be faint to your touch – or hard to hear with a stethoscope. - practice often and be patient as you learn what works for you and your horse.

### ANALYSING RESULTS

- **Normal = adult horses have a heart rate between 28 to 40 beats per minute.**
- Newborn foals' heart rates range from 80 to 120, older foals from 60 to 80, and yearlings from 40 to 60 beats per minute.
- **Maximum heart rates can exceed 180 beats per minute**, but a rate above 80 should be considered serious in most *non-exercising* horses.
- Heart rates not associated with exercise, especially if combined with abnormal behavior should be taken seriously.
- **40 – 60 BPM, alert veterinarian to situation.**
- **60 – 80 BPM, veterinary attention is necessary**
- **80 BPM plus, IMMEDIATE veterinary attention is needed**

# LISTENING FOR GUT SOUNDS – DETAILED INSTRUCTIONS



## PROCEDURE

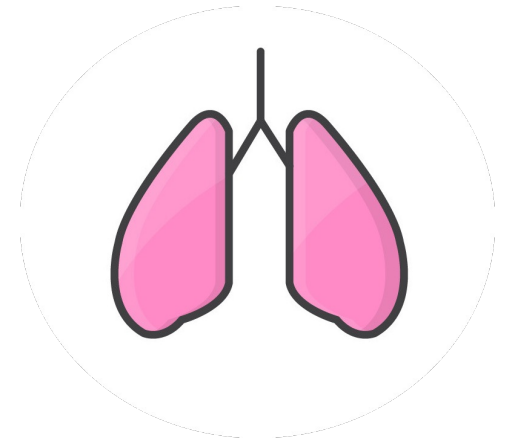
- Place the stethoscope in your ears with the earpieces pointing forward.
- When listening for gut sounds (borborygmi), we divide the abdomen into 4 quadrants: upper left, lower left, upper right, and lower right. Each of these quadrants helps us to check in on different parts of the horse's digestive tract.
- Start on the left side of your horse. If this is new for your horse, you may wish to have them sniff the stethoscope first and start up by the withers. Then gradually move back to their sides to listen.
- Place your stethoscope head behind the last rib and at the mid-height of the abdomen. Listen to the upper left quadrant. Drop the stethoscope down about 8 inches and listen to the lower left quadrant.
- Listen for at least 60 seconds in each quadrant.
- Repeat on the right side. Again, moving at the pace that is comfortable and confident for you and your horse.

## ANALYSING RESULTS

- Gut sounds are caused by the propulsive action of the equine intestines.
- Rumbles, gurgles, and sounds like “stones rolling down a tin roof” are all normal.
- Check your horse often at different times of day and weather conditions to get a solid baseline.
- **A healthy horse will have consistent and active rumblings in each of the four quadrants.**
- **As a general rule, it is normal to hear 1 to 3 sounds (borborygmi) in a 60-second period. If less than 1 borborygmus is heard per minute then that portion of the gut is noted as hypomotile (not enough movement). If more than 3 borborygmi are heard per minute the area is noted as hypermotile (too much movement).** Of course, there are variations depending on the individual horse and when he or she last ate.
- **Combine your findings from gut sounds and your horse's behavior and other vital signs to determine if you need to call the vet.**
- Learning what is “normal” for your horse is key

## REFERENCES:

# COUNTING YOUR HORSE'S RESPIRATIONS (BREATHS) – DETAILED INSTRUCTIONS



## PROCEDURE

- Stand on either side of the horse and look at their abdomen/flank
- Watch their flank rise and fall – one full inhale and exhale counts as one breath
- Don't count their nostril flares – you can get a faulty reading if the horse is smelling something
- Count the number of breaths for 15 seconds and multiply this amount by four to calculate the breaths per minute.
- It can be easier to watch several breaths before starting your timer as they often breathe so slowly it can be a little unnerving when you first start practicing.
- As always, practice these skills often at different times of day and seasons to get a strong baseline of what is normal for your horse. For example, horse's in the desert heat may have a "normal" respiration rate of 40 bpm. Knowing what is normal for your horse can avoid a lot of angst.

## ANALYSING RESULTS

- Normal = range of 8-16 Breaths per minute for a *non-exercising* horse
- Call Your Vet for:
  - A high respiratory rate
  - increased effort when inhaling or exhaling
  - noise when breathing.

[BridlesandBreath.com](http://BridlesandBreath.com)

## REFERENCES:

<https://www.bwequinevets.co.uk>,  
Totalequinevets.com

# CHECKING YOUR HORSE'S MUCOUS MEMBRANES (GUMS) – DETAILED INSTRUCTIONS



## PROCEDURE

### Visual Inspection

- Lift the upper lip of the horse and look at the the gums above the teeth (also called mucous membranes)

### Blanching the Gums

- Blanch the gum area by pressing your finger on the gum gently. This will push the blood out from under your finger so you can check the capillary refill time.
- After releasing the pressure, count the seconds that elapse while the color returns to the gums.

## ANALYSING RESULTS

### Visual Inspection

- Mucous membranes should be a healthy pink, shiny, moist and slippery.
- If they are pale, dry or tacky the horse may be dehydrated
- **If the gums are pale white, brick red, bluish, purplish, brownish, grayish, yellowish or have a red line where the gums meet the teeth you should call your veterinarian.**

### Blanching the Gums

- Normal Refill time is less than 1.5 seconds
- 2-3 seconds is cause for concern
- **Beyond 4 seconds – call your veterinarian**
- Delayed capillary refill time is an indication of reduced blood circulation.