Taking Temperature, Pulse and Respiration

Riders who condition their horses for endurance riding must become familiar with TPRs (temperature, pulse, and respiration), because these are clues to how much the horse is exerting. How high those TPRs get can tell the rider how much is being demanded of the horse.

How fast these vital signs return to normal tell how fit the horse is; a well-conditioned horse's TPR rates return to normal much more quickly than those of a soft horse.

A horse's TPRs are also a good indication of whether he is healthy or sick. Your first impression of him standing in his paddock or pasture usually gives a clue—if he looks perky or dull—but a quick check of his vital signs can confirm or lay to rest your suspicions. Fever or pain can elevate his temperature, breathing and heart rate, so a check of his TPRs can quickly tell you if he's suffering from illness or colic or some other problem.

Every horse owner should become familiar with TPRs and how to check these vital signs, and should assess every horse now and then. You should do this not only when conditioning a horse (to check on fitness progress) but also just on a general basis, to determine what the "normal" rates are for each individual.

If you know what a certain animal should be when at rest, you have a better idea about whether he is "abnormal" if there comes a time you need to determine if he is sick. If you need to consult with your vet about a certain problem, you can tell the vet what your horse's TPR rates are—and this (coupled with your description of other symptoms) can give the vet a better clue as to whether the horse is sick and what the problem might be.

Find out what each horse's normal rates are at rest. Not every horse is the same. The numbers given for "normal" are just averages (100.5°F for a horse's normal temperature). Just like humans, every horse has his own "normal" (human temperature is said to be 98.6°, but some people are "normal" at 97°). Besides finding out each horse's normal by taking TPRs a few times while at rest, this will also give you and the horse practice. Every horse you own should become at ease about having temperature taken. Then when the horse's P&Rs are taken at a ride, or if you have to take TPRs in an emergency situation, the horse will not resist or try to kick.

Temperature

Normal temperature for a horse ranges from 99° to 100.5° on average. One individual may be normal at 98° and another at 100°. Knowing what his normal is can make a difference when you try to determine whether or not he has a fever.

Take into consideration the fact that a horse's temperature is lowest in the cool of early morning and a little higher in the afternoon or evening after he has been active or if the day has been warm.

For taking a horse's temperature, any rectal thermometer will do, but an animal thermometer is best because it is sturdier and has a ring in the end for tying a string to it. Never put a thermometer into a horse's rectum without a string attached. You don't want to lose it in the rectum.

If you don't have an animal thermometer, tape a string to the end of a human rectal thermometer with a small piece of masking tape or duct tape. This works fine; years ago when our family helped put on a ride, we obtained used thermometers from the local hospital and taped strings to them, for use by the TPR crews. You can also use the newer electronic thermometers.

Have the horse tied or held. Shake the thermometer down below 96° to get an accurate reading. Lubricate the end of the thermometer with petroleum jelly or your own saliva (a little spit works fine), so it will slip in easier and not cause discomfort. A dry thermometer is not as easy to put in and the horse may object.

Stand close to the horse and gently rub alongside his tail to get him to relax. Don't just try to pick up his tail or he may clamp it down and protest. If you gently rub the sides of his tail-head he will usually relax and raise the tail a little; most horses enjoy the rubbing because this is a hard place to itch.

When the tail is raised, it is easy to slip the thermometer into the rectum, aiming it slightly upward and rotating it a little as you slide it in. If the horse tries to clamp his tail, gently hold it to one side. If you do it properly, without poking the sides of the rectum or causing any discomfort, he won't fret about it; even a very nervous individual will become accustomed to it after a few practice sessions and submit willingly because he likes to have his tail rubbed.

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For an accurate reading, the thermometer must rest against the rectal wall. If stuck into a fecal ball, it will give a low reading, which can be deceptive. If it feels like it doesn't go in very easily or is stuck into manure (which will make it go in hard rather than smoothly) take it out and try again. Leave it in a full minute or more. The most accurate reading will be obtained if you leave it in for three minutes.

Pulse

Pulse rate of a healthy horse is an average of 40 beats per minute. But every horse's normal is different. One horse may have a normal resting pulse as low as 28 while another horse's normal may be 44. Athletic, fit horses tend to have lower resting pulse rates than out-of-shape horses.

Take your horse's pulse when he is resting to find out what his normal rate is. It's easy with a stethoscope (placed at the heart girth behind the horse's left elbow) but it is not difficult to take it with your hand if you know where to feel. One of the easiest places is along the jaw where the big artery runs across under the bone. Move your fingers along the bottom of the jawbone until you find the artery. It feels like a small, firm cord. Press lightly on that artery with your finger and you can feel the pulsing blood.

An easy way to count pulse is to count for 15 seconds if you have a second hand on your watch, and then multiply by 4. This is a fast and handy way to do it, especially if the horse doesn't want to stand still for a whole minute. If you wish, you can do it a couple times this way (15 seconds each), to make sure of your figure.

You can also check pulse rate directly over the heart, just inside the horse's left elbow, feeling with the flat of your hand against his rib cage. Actual heartbeat is two beats in one (easy to distinguish if listening with a stethoscope). Count each lub-dub as one beat.

Respiration

Respiration rate is easiest to determine because you can see it by watching movements of the horse's nostrils or flanks. Count as he inhales or exhales, but not both. Just as in counting pulse, it is often easiest to count for 15 seconds, then multiply by four.

Checking your horse's temperature, pulse and respiration can give a clue as to whether you are overdoing him during a conditioning program or a long ride, and they can be an indicator of whether or not he is sick. A knowledge of his vital signs help you keep more "in tune" with your horse.

-Heather Smith Thomas