

NORMAL TEMPERATURE, PULSE AND RESPIRATION PARAMETERS IN ADULT HORSES



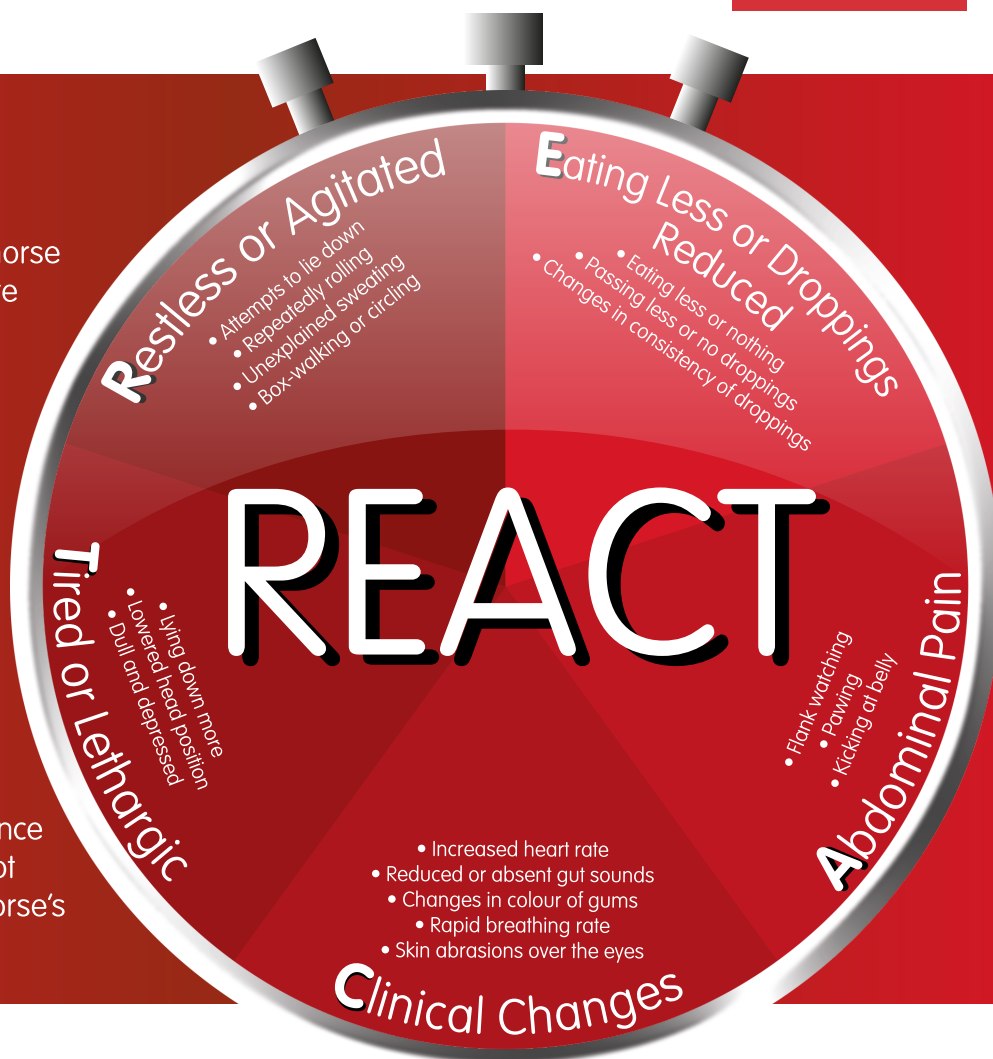
The University of
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WHAT IS IMPORTANT?

- Knowing the 'normal' temperature, pulse and respiration rates for your horse means you will recognise if values are abnormal.
- If there is no reason for a change in parameters such as recent stress or exercise, seek veterinary advice.
- If your horse is showing any signs of illness or discomfort despite having normal parameters, or if you have any concerns, veterinary assistance should be sought.
- If your horse is showing signs of discomfort or illness, veterinary assistance should be sought immediately. Do not waste time trying to measure your horse's parameters beforehand.

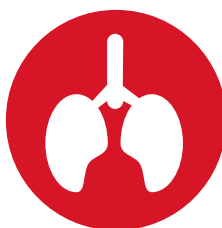


NORMAL RANGES



HEART (PULSE) RATE

28 – 44 beats per minute



RESPIRATORY (BREATHING) RATE

8 – 16 breaths per minute



TEMPERATURE

37.5 – 38.5°C (99.5 – 101.3°F)

WHAT DO I NEED TO KNOW?

- There will be variation between individual horses and each horse will have a different 'normal' value for them. This is because the value is dependent on age, the size of the horse and the level of fitness. Heart rate and respiratory rate can increase in horses as a result of stress, anxiety, excitement or exercise. Values may also be increased in horses who are experiencing pain for any reason, or when the horse becomes ill.
- Regularly taking your own horse's pulse rate, respiration rate and temperature is important as it will provide you with the knowledge of what is normal for your horse.
- Some horses may have values which are consistently out of the 'normal' range in a similar way to some humans. This may not be any cause for concern. However, in these cases it is advisable to have the horse checked by a veterinary surgeon to ensure there are no underlying conditions.



MEASURING HEART OR PULSE RATE

Heart Rate

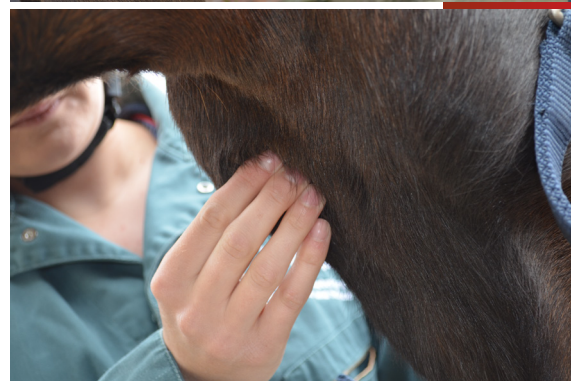
Using a stethoscope, on the left hand side of the horse apply gentle pressure at the location shown in the picture (against the chest just behind the elbow). In horses with a broad chest or those carrying extra weight, it may be harder to hear the heartbeat. Moving the horse's leg forward may make access easier, improving the clarity of the heartbeat. Each heartbeat has two parts as in a human. It takes practice to learn where to place the stethoscope to hear the heartbeat best.

Pulse Rate

If you do not have access to a stethoscope the horse's pulse can be taken at the facial artery. The facial artery runs over the jaw bone at the bottom of the muscular part of the horse's 'cheek', in between where a noseband and throat lash would sit. The location is also shown on the image provided. The facial artery is approximately 1cm in diameter and feels tube-like, but can be pressed easily. Stabilise the artery with your fingers just on the inside of the jawbone, thumb outside is best (as you will feel your own pulse in your thumb), apply gentle pressure until a pulsing sensation is felt underneath the fingers.

Count either the number of heartbeats or pulse rate for 15 seconds and then multiply the amount by four to calculate the heart rate in beats per minute.

Taking the horse's heart rate



Taking the horse's pulse



MEASURING RESPIRATORY RATE

This can be taken by looking at the abdomen/flank area of the horse to look at the rise and fall. An inhale followed by the exhale equals one breath. Similar to the heart rate, count the number of breaths for 15 seconds and multiply the amount by four to calculate the breaths per minute.



TAKING A HORSE'S TEMPERATURE

1. Temperature is taken rectally in horses, using a digital or mercury thermometer.
2. If using a digital thermometer, turn it on and check the display is working. With a mercury thermometer the temperature needs to be lowered and this is done by shaking the thermometer (taking care not to drop it!).
3. Add lubricant to the bulb end of the thermometer.
4. Ask a helper to hold the horse for you.
5. The operator should stand at the side of the horse, near the hindquarters to decrease the risk of being kicked.
6. Take hold of the tail and pull gently towards the side of the hindquarters. Gently insert the bulb of the thermometer into the anal sphincter. It is not necessary to insert the whole thermometer, just the narrowed section (approximately 3-4cm).
7. As the thermometer is inserted, angle it to one side so that the bulb rests against the mucous membrane and doesn't end up hitting a ball of faeces which will be colder.
8. Keep hold of the thermometer for at least 30 seconds or until the digital thermometer beeps to indicate it is ready to be removed. Never let go of the thermometer as it can disappear. With the help of the handler continue to reassure the horse.
9. Withdraw the thermometer and check the reading.
10. Ensure the thermometer is cleaned and disinfected ready for future use.



Taking the horse's temperature

Safety is paramount at all times. Some horses may be resentful of the use of a rectal thermometer. A hard hat should be worn and you must take care to stay out of range of the horse's hind legs. If you do not feel comfortable to take your horse's temperature you should ask someone more experienced or your veterinary surgeon.