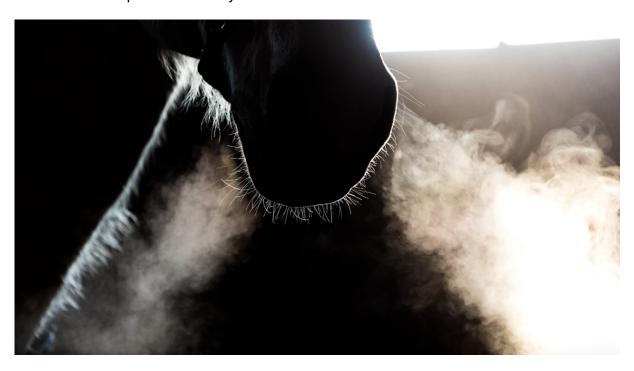
# Disclaimer:

This information has been compiled with great care to ensure the accuracy of the information. However, Functional Horse Training cannot be held responsible for the dissemination of incorrect information, or any damage caused by incorrect use of this information.

This information does not replace a veterinary diagnosis and no definitive medical conclusions can be derived from this document. Always consult your veterinarian in case of medical problems with your horse.



# Measuring respiration

Normal values

Normal values for an adult horse at rest: 8-15 BPM

Everything above applies to breathing.

Requirements:

Timer (telephone)

## **Instructions:**

Measure the breathing for 60 seconds (1 minute) at least 4x in total, each time on a different day, but in the same situation/in the same place for a reliable average.

Measure the breathing in a quiet environment with a stable temperature. If the temperatures deviate greatly at your measuring moments, this can affect the measurements.

## Example:

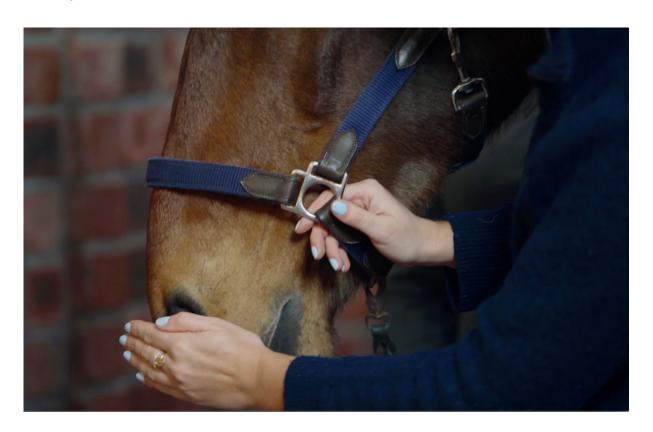
Measure moments on Monday, Wednesday, Friday, Sunday at 10:00 in the morning in the paddock. Measurements:

Monday: 14

Wednesday: 12

Friday: 14

Sunday: 11



14 + 12 + 14 + 11 = 51 / 4 = 12.75.

So on average your horse will have a resting breathing rate of 12 - 13 times per minute.

Methods:

#### 1. Hand in front of nose

Place your hand a few inches in front of either nostril. 1x in and out counts as 1 total breath.

#### 2. Flank observation

Position yourself at a distance towards the horse's hindquarters so that you have a good view of the rib cage. Focus on the last ribs just before the flank and observe the movement of the breathing. 1x in and out counts as 1 total breath.



## 3. Feel diaphragm

See method 2. Instead of observing, place 1 hand on the lower back of the horse and 1 hand on the bottom of the back ribs. Spring with the natural movement.

1x in and out counts as 1 total breath.

Keep in mind that this method affects the horse more than method 1-2 and is therefore less reliable because the horse often adjusts its breathing.

## **Deviations**

In addition to measuring the breathing per minute, you can also use a stethoscope to listen to the heart and lungs. Always compare left and right. For diagnostic research, a veterinarian can also use a "rebreathing bag".



# Measuring heartbeat

Normal values: for an adult horse at rest: 25-40 BPM.

Just like with breathing, there are many factors that influence heart rate such as: temperature, mental state, fitness, age, gender, medication, effort etc.

Requirements:

Timer (telephone)

Stethoscope

#### **Instructions**

Measure the heart rate for 60 seconds or 30x2 seconds (1 minute) at least 4 times in total, always on a different day, but in the same situation/in the same place for a reliable average.

Measure the heart rate in a quiet environment with a stable temperature. If the temperatures deviate greatly at your measuring moments, this can influence the measurements. The same applies to effort, so make sure the horse has not just been trained.

#### Example:

Measure moments on Monday, Wednesday, Friday, Sunday at 10:00 in the morning in the paddock. Measurements:

Monday: 35

Wednesday: 40

Friday: 32

Sunday: 39

$$35 + 40 + 32 + 39 = 146 / 4 = 36.5$$
.

So on average your horse has a resting heart rate of 36-37 BPM.

#### Methods:

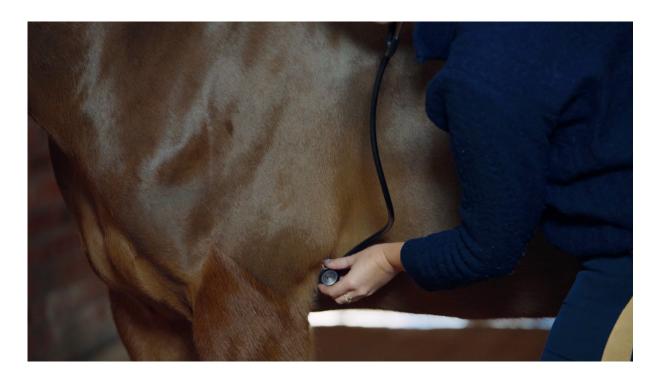
## 1. Mandible pulse

Stand on the horse's left side. Using your middle and index fingers, find the pulsation of the mandibular artery along the horse's lower jaw. If you have difficulty finding it, vary the pressure a little. Once you have located the vein, measure the pulsation for 60 seconds.



## 2. Stethoscooe

Place the stethoscope on the left side of the horse behind the elbow and push it slightly forward behind the Triceps muscle. If necessary, move it back and forth until you hear the heartbeat clearly. Measure for 60 seconds.



## 3. Heart rate monitor

Attach the heart rate monitor according to the manufacturer's instructions and measure for 60 seconds

