HORSE

- Temp:- 98.5F to 101F (36.9C to 38.3C)
- Pulse:-
  - Adults 30 - 40 beats per minute
  - Foals 70 - 120 bpm
  - Yearlings 45 - 60 bpm
  - 2yr. olds 40 - 50 bpm

Where to find pulse

1. Under the top of the lower jaw (left hand side)

2. On the foreleg level with the knee-joint.

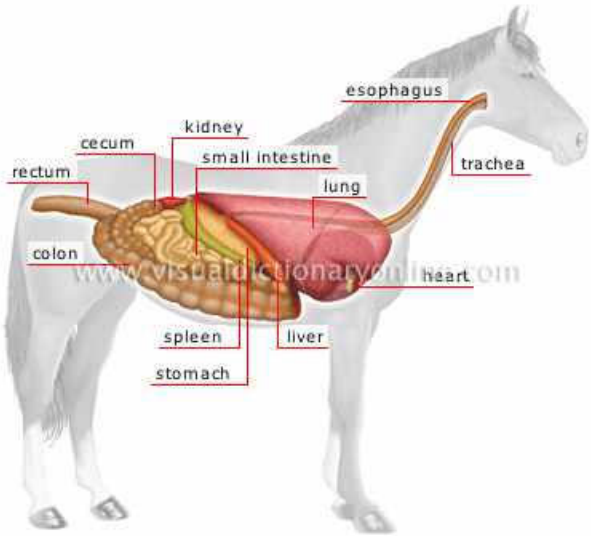
You may also place your hand or a stethoscope behind the horse's left elbow to take his pulse. Be sure to count each lub-dub as 1 beat

- Resp:- 8 to 15 breaths per minute

The respiration rate should **NEVER** exceed the pulse rate. A horse should also spend equal time inhaling and exhaling.
Be sure to count 1 inhale and 1 exhale as one breath (not as two).

GUT SOUNDS

The gut sounds that come from your horse's stomach and intestines can be very important information for your vet to diagnose an illness.
Gut sounds should always be present.
The absence of gut sounds is more indicative of a problem than excessive gut sounds.
Usually, an absence of gut sounds indicates colic.
If you don't hear any sounds, contact your vet.



Press your ear up against your horse's barrel just behind his last rib. If you hear gurgling noises, he's fine. Be sure to check gut sounds from both sides.

DONKEY

Temp:-

- Adult: 98.8F, range 97.2 - 100
- Young: 99.6F, range 97.8 - 102.1

Pulse:-

- Adult: 44, range 36 - 68
- Young: 60, range 44 - 80

Resp:-

- Adult: 20, range 12 - 44
- Young: 28, range 16 - 48

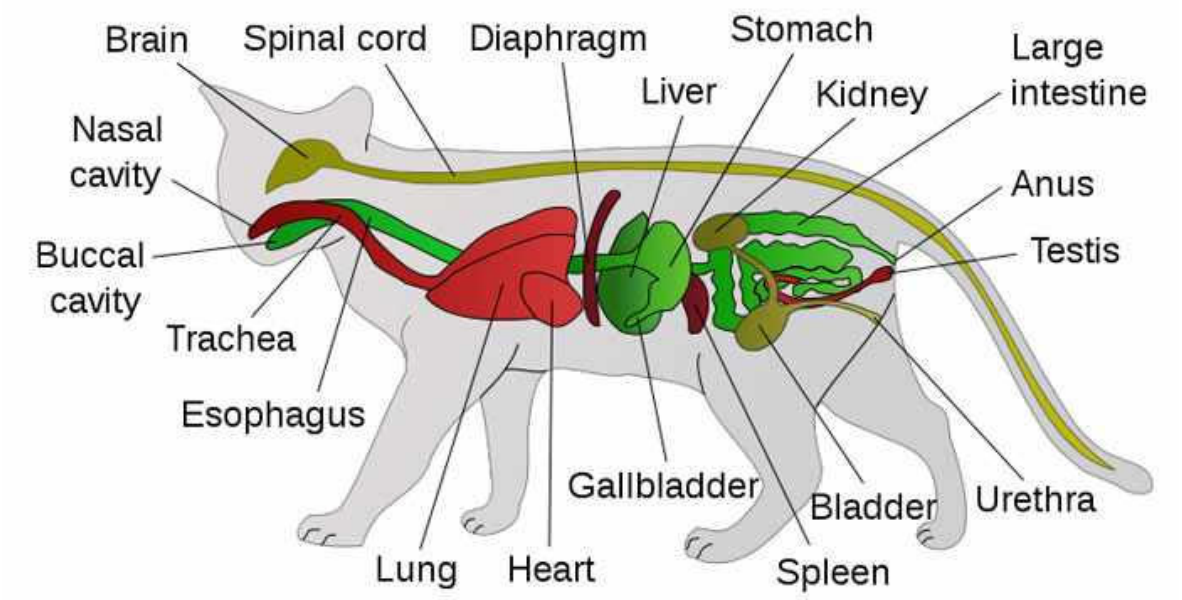
CAT

- Temp:- 100.4 - 102.2 Fahrenheit (38-39 Celsius)
- Pulse:-
  - Kittens 160 - 240 beats per minute
  - Adult Cats 140 - 220 beats per minute

The cat's pulse can be taken either by finding it on the inside of the hind leg near the groin or in the area along the left chest wall just behind where the elbow connects with the body by holding your hand over your cat's heart. Inside the hind leg, however, is more accurate.

NOTE: that there is no exact pulse rate for any cat or any particular breed, size, or age, under any specific circumstances

- Resp:- 24 - 42 breaths per minute



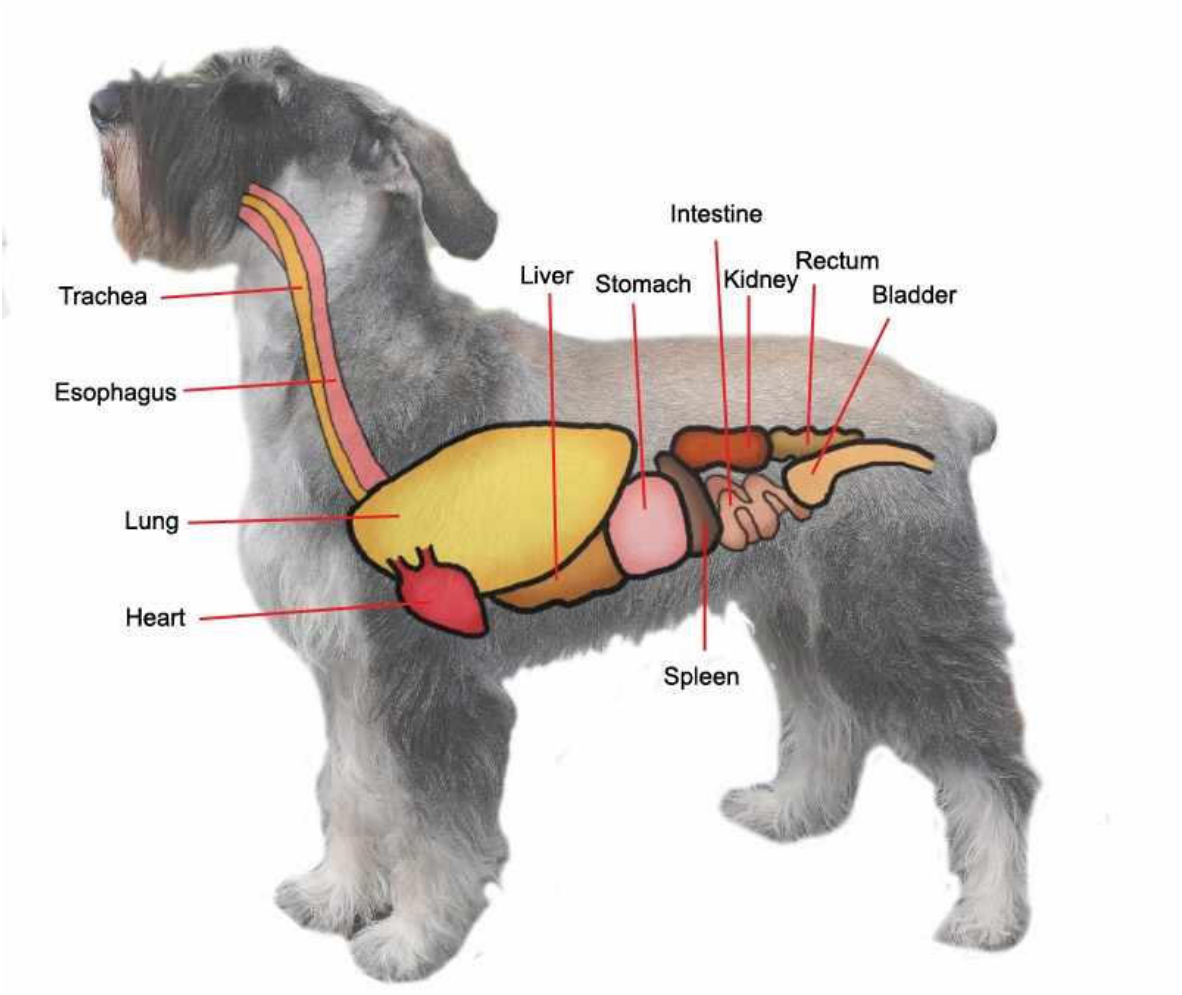
DOG

- Temp:- 100.5 - 102.5 Fahrenheit (38 - 39.2 Celsius).
- Pulse:-
  - puppies 120 - 160 bpm (maybe up to 210 bpm)
  - young dogs 110 - 120 bpm
  - large breed adult 60 - 80 bpm
  - small breed adult 80 - 120 bpm

where to find pulse

1. F*emoral artery,* which lies just below the skin on the inside of the back legs, between two large muscles where the leg joins the body.
2. A jugular pulse can be felt in the neck either side of the windpipe.

- Resp:-
  - young 20 - 25 breaths per min
  - adult 14 - 16 breaths per min



SHOCK

Symptoms of shock include:

- Pale colour in gums / inside eyelids, capillary refill time greater than 2 seconds.
- Dry lips and gums, dehydration.
- Excessive drooling in some poison cases.
- Weak femoral pulse, rapid 150 to 200 beats per minute.
- Rapid heart rate.
- Cool Extremities.
- Hyperventilation, rapid breathing generally over 25 breaths per minute.
- Confusion, restless, anxiousness.
- General weakness.

Advanced stages of shock:

- Continued depression and weakness to the point of not being able to move or becoming unresponsive or unconscious.
- Dilated pupils.
- Capillary refill time greater than 4 seconds.
- White mucous membranes.
- Body temperature below 98 degrees F, taken rectally.

Treatment

- ABC's
- Insure adequate ventilation.
- Control any bleeding.
- Keep dog quiet and calm to prevent further injury.
- Keep body temperature normal.
- Get dog to vet so fluid replacement and medication can be started.

BLOAT

Bloat is the common terminology for Gastric Dilatation/Torsion. This is most common in larger - deep chested dogs. Gastric dilatation is the enlargement of the stomach beyond its normal dimensions. Gastric dilatation volvulus is when the stomach actually rotates on itself. This is a life threatening situation.

Signs/Symptoms

- Dry retching/unproductive vomit
- Restlessness
- Anxiousness
- Distended abdomen (hardened)
- Drooling excessively
- Depression
- Shock

Treatment

Take to the vets immediately.

To monitor the bloat you can take a measuring tape (webbing or leash could work) and measure the distance around the dog, just caudal (past) the last rib. Monitor and make sure it is not enlarging, mark it with a pen to keep accurate.

Prevention

Feed your dog his/her ration of food in, at least, two feedings a day (am/pm). Avoid giving lots of water at once, offer water more frequently. Avoid exercise approximately 1-2 hours before and after feeding.

RESUSCITATION

1/ Is it safe to approach the animal? **Always make sure your safety comes first.**
2/ Assess the animal.

- Is the animal alert and responsive? Is it aware of you and what you are doing?
- Is the animal semi-conscious? It may have some idea it has been approached but behaves inappropriately or does not respond at all. Animals can be very dangerous at this level of consciousness, particularly cats with their sharp claws, as they tend to thrash around.
- Is the animal unconscious?

If the animal is unconscious the next step will be to start the steps towards Cardio-Pulmonary Resuscitation (CPR). It may not be necessary to complete all these steps.

3/ STEPS OF RESUSCITATION

AIRWAY

Clear the animal's airway, removing any foreign material, or blood clots from the animal's mouth. Be very careful if the animal is semiconscious as it might accidentally bite you. In the unconscious animal pull the tongue forward.

BREATHING

- Look for the rise and fall of the chest.
- Listen for air movement.
- Feel for air movement from the nostrils. Fine, light material, such as a torn piece of a tissue can be held close to the nose. It should move back and forth as the animal breathes in and out.

If you witnessed the animal go into respiratory arrest start nose to mouth resuscitation now.

If you don't know how long your pet has not been breathing you are going to have to quickly decide if it is worth continuing. Quickly assess for heart function. If your pet is in full arrest then it may not be revivable.

- If the animal is stiff the animal has been dead for a while. No amount of wishing or CPR will help. The smaller the animal the faster it will go into rigor mortis. The stiffness is also not permanent. As the muscles start to break down the stiffness will disappear.

- Have a look at the eyes. In our pets the eyes remain open after death. As the brain is deprived of oxygen the pupils (the central dark area of the eye) enlarge until they can go no further. The eyes fix centrally in the socket and the pupil does not respond to bright light by constricting. The eyes also quickly loose their gleam, and the sense that there is a life within the body disappears. By this stage the animal has been dead for minutes at least and brain damage must have occurred. Resuscitation would not be warranted.

NOSE TO MOUTH RESUSCITATION

- Remove any foreign material from the airways (nose and mouth) such as vomit.

- The tongue needs to be pulled forward so the tip is just beyond the front teeth. The mouth is then held closed with the lips positioned over the teeth. This should make an airtight seal.

- Extend the head and neck gently so that roughly nose to tail is a straight line.

- Blow firmly into the nose using your lips to seal around the nose.

- Look at the chest to see it rise. Feel for the resistance of the animal's lungs as you breath into it. Once resistance is felt allow the air to escape. Over-inflating the animal's lungs will damage them.
  If there is leakage of air from the mouth reposition the lips and tongue.
  If there is resistance without the chest rising then look for a foreign object in the airway. Small pets can be lifted by their hind legs to try and dislodge the object.
  Once the object has been removed recommence resuscitation.

- Give 5 full quick breaths and then quickly assess cardiac function.

- If the heart is beating continue mouth to nose resuscitation.

- As pets vary in size from a cat or a small dog to a large dog like a St Bernard the rate and volume of air for each size does differ.
  - For a cat or a small dog give a breath once every 3 seconds (20 breaths/min).
  - For a medium dog give a breath once every 4 seconds (15breaths/min).
  - A large dog requires 12 breaths/min (1 every 5 seconds) and usually every bit of air in your lungs.

- After one minute stop and reassess the animal. Watch for signs of breathing and check the heart.

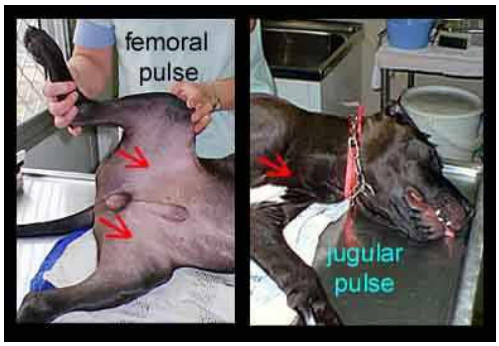
- If not breathing continue mouth to nose resuscitation. Continue the resuscitation in transport to the **nearest** vet, reassessing approximately every minute.

CARDIAC MASSAGE

Cardiac arrest is nearly always secondary to respiratory arrest in domestic pets.

- Feel and listen for the heart beating in the chest. The heart is most easily felt on the left side of the chest. If you bend the front leg upwards gently, the elbow comes back and the point of the elbow is roughly where the heart is loudest and mostly easily felt. Or with the pet on its side with its legs straight out the loudest spot is a third of the way up the chest and about 1/2 way between the back of the front leg muscles and the last rib.

- A pulse can be felt for in the groin but practice on a healthy dog first as it is sometimes very difficult to find. The femoral pulse is located on the inside of the dog's leg, about 1/3 of the way towards the back of the leg. The muscles of this area make up a triangle coming off the pelvis onto the leg and the femoral artery is located here.



- A jugular pulse can be felt in the neck either side of the windpipe.

If you can't feel or hear a heart beat or pulse continue with mouth to nose resuscitation and start cardiac compression.

CATS AND SMALL DOGS

- The cat or dog can be put on a table or kneel beside the animal.
- Turn the cat or dog on its side.
- Grasp the chest in one hand so the breastbone is resting in the palm of your hand and the thumb is over the chest wall. The hand should be in the centre of the chest.

- Compress the chest firmly between your thumb and fingers at a rate of 120 beats a minute or 2 beats a second. This is actually very difficult to achieve but the point here is the rate is extremely rapid and it is important to give as many compressions as you can.

- An alternative hold is to place both hands around the chest one on top and one below with your palms lying on either side of the lower 1/2 of the chest. Compress the chest between your palms.

- Give a breath once every 5 - 6 compressions. If there are 2 people, it is not necessary to stop compressions while a breath is given.
- Assess every minute for return of heart function.
- At 5 minutes assess the eye position and pupils. If the pupil is completely dilated (enlarged) and the eye central in the socket then oxygenation to the brain has been unsuccessful. Brain damage will have occurred. Further effort is unlikely to be rewarding. If the animal is still in arrest but the pupils have not dilated then it is worth continuing CPR.

MEDIUM TO LARGE DOGS

- Turn the dog on its side.
- Kneel beside the dog, with the dog's back against your knees or place the dog on a low table, with its back against your stomach.
- If it is possible place a wedge under the dog's chest. A wedge can be made from a towel, jumper etc just balled up and shoved under the lower 1/3 of the chest. It gives you a bit more to push against.
- Place the palm of your hand in the middle of the dog's chest. The other hand can be placed over it to add strength.
- Compress the chest firmly at the rate of 60 - 80 beats a minute. Your shoulders should be directly over your hands and the compressing arm should be straight.

- Give a breath every 3 - 4 compressions.
- Assess your pet every minute for return of heart function.
- Assess the eyes at 5 minutes in the same way as a cat or small dog.

LARGE DOGS

External Cardiac Compression in dogs over 20 kg (about 45 pounds) (Lab size and bigger) is usually not very successful. This is not the fault of the person doing CPR rather it is due to the shape of the dog's chest and the strong rib cage around the heart and lungs.
However it has been found that a dog or cat with respiratory arrest the heart beat gets slowly weaker and more rapid as the heart runs out of oxygen. The heart may be beating but it is so weak that it is not detectable even with a stethoscope (however can be detected with an ECG). This means that if you can't detect a heartbeat it doesn't mean there isn't one, especially in a large dog. If you think your dog has just gone into full arrest then it is worth trying CPR as the heart might be beating. And even if your dog has fully arrested your pet may be the rare dog that does respond. The technique is the same as the one for medium dogs though the rate of compression is slower, about 60 beats a minute.

A SUITABLE POSITION FOR A STABLE BUT UNCONSCIOUS PET

Lay the pet on its side with head and neck slightly extended. Fold a blanket or towel and place it under the shoulder (not the neck) so that the chest is above the head. This is to prevent fluids from the mouth from going into the lungs. Keep the pet warm by covering it with blankets. Transport the pet as soon as possible to a vet.

It is very important NEVER to practice CPR on a normal animal be that human or pet. While you can decide where to put your hands and where the pulses are felt, artificial respiration or cardiac massage can seriously harm your healthy pet.