

Sleeping Respiratory Rate

Sleeping Respiratory rate (SRR) is the number of breaths per minute.

Animals that develop Congestive heart failure (CHF) have a build-up of fluid in their lungs which causes fast and laboured breathing. Breathlessness is one of the most important issues for quality of life for our patients.

Measurement of SRR is a simple way to monitor the onset and progression of CHF, and also the response to medical treatment.

How to measure respiratory rate

Normal SRR (less than 30 breaths per minute-bpm) is assessed when the dog or cat is asleep in a quiet environment. Watch the chest and flank rise and fall. A breath in and then out is recorded as one breath. Count the number of breaths for a minute, or for 30 seconds and double the figure to get the SRR. It's important to do this when your pet is asleep (but not dreaming).

If your pet's SRR increases consistently over a few days, or if their breathing appears laboured, this could be a sign of CHF. Other conditions can increase the SRR, such as a hot environment, exercise, excitement and pain, or lung disease.

We need to know how slow the rate can get, it's when it is never going below 30 (or a 50% increase from baseline) that we need to be concerned.

Have a look at the video clip here (<https://www.pdsa.org.uk/pet-help-and-advice/pet-health-hub/other-veterinary-advice/how-to-record-a-resting-respiratory-rate>) from the PDSA website for a nice example in a cat and at the VIN video here (Video credit: <https://veterinarypartner.vin.com/default.aspx?pid=19239&id=8401142>) for a dog example.

There are also a number of Apps for a tablet or Smartphone that can be really useful – they work for dogs or cats but are usually labelled dog because they have been developed by drug companies for use for their own products.

<https://apps.apple.com/us/app/cardalis/id569166179>

https://play.google.com/store/apps/details?id=com.ceva.cardalisv2&hl=en_GB&gl=US

or via this page <https://www.healthyheartfordogs.com.au/measure-health/>

In general, all dogs and cats, with or without heart disease, have a breathing rate of between 15-30 breaths every minute. Lower rates are possible and are no cause for concern as long as your pet is otherwise healthy. Breathing rates can be much higher than this when dogs and cats are hot, stressed or active but that is OK.

Resting/sleeping breathing rates that are consistently greater than approximately 30 per minute are increased and abnormal. Trends are important and in dogs often the raised rate develops over several days or longer. Some cats with heart disease can get breathless very quickly (a few hours) (see the PDSA video link above). So if your cat has laboured breathing they will often be withdrawn and sit on their fronts with their elbows stuck out with the flanks going in and out. This can be an emergency situation.

If you are unsure of the breathing you can record a video which can be helpful – and if your animal has difficulty breathing you need to speak to your vet.