

Measuring Sleeping Respiratory Rate At Home

Sleeping respiratory rate (SRR) is probably the most sensitive indicator of developing pulmonary oedema (fluid on the lungs) or pleural effusion (fluid around the lungs) in dogs and cats. It is a very useful home-monitoring technique for owners to perform.

Once a diagnosis of congestive heart failure (CHF) has been made (and is now controlled), or where we suspect CHF may develop, we use SRR to monitor your pet's condition.

How is it done?

- Record the sleeping respiratory rate by counting the number of chest movements your pet makes over a minute. Often it is OK to count for 15 seconds and multiply by four to give the per-minute rate.
- The recording should be done when the animal is comfortably asleep, in a thermo-neutral environment (ie, not too cold, not too hot). This should be repeated 2-3 times, a few minutes apart, every day for 2-3 days (to get a baseline variation), and then once or twice weekly.

If the SRR changes substantially between measurements, please repeat the measurement to confirm the change, or to document a trend. If you notice a change, contact the practice for further evaluation.

What is the normal SRR?

Normal SRR in dogs and cats is <30 breaths/min, often in the high-teens or low 20s. Consistent SRR >30 breaths/min in patients with underlying heart disease is strongly suggestive of developing CHF. However, other problems may be to blame and your cardiologist will want to assess your pet in more detail.

What else should you look for?

Cats often have very subtle changes in demeanour or respiration prior to developing congestive heart failure (CHF). You may not be aware of these changes until your cat presents with respiratory distress. Changes in appetite or activity or loss of weight in cats with known heart disease are often warning signs that CHF is imminent.

Coughing is a variable finding in CHF in dogs, and is not a feature of CHF in cats. Rarely, a cat with CHF will cough, however, coughing is much more commonly seen with primary airway disease such as asthma. Dogs will cough as the CHF progresses, but this is often an intermittent or inconsistent finding. Additionally, many other conditions cause coughing.

What do I do if SRR is high?

If your pet has a high SRR (>30/min) and this is repeatable over several measurements, contact the practice to speak to your cardiologist. If you cannot get through to the practice, give an extra dose of FRUSEMIDE at the normal dose – i.e. if your pet normally gets half a tablet twice a day, give an extra half a tablet. Please then contact the practice as soon as possible.

Adapted from VIN SRR Information sheet by HeartVets, 2013