

Notes from the CEG

Information for Pet Owners

February 2015

Monitoring Your Pet's Respiratory (Breathing) Rate

WHY SHOULD I EVALUATE MY PET'S BREATHING RATE AT HOME?

Increased breathing rate while resting quietly or sleeping is a very important early indication ("clinical sign") that your pet may be developing heart failure and should be evaluated by your veterinarian. Increased breathing rate (also called "respiratory rate") is an early clue that heart failure is developing; by noticing the increased rate, you can help limit how sick your pet will get, reduce the chances that your pet will have to stay overnight in the hospital, and help reduce the costs associated with heart failure treatment.

WHAT IS A NORMAL RESTING/SLEEPING BREATHING RATE FOR DOGS AND CATS?

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 may be much higher than this when normal dogs and cats are hot, stressed or active.

Resting/sleeping breathing rates that are consistently greater than approximately 30 per minute are considered to be increased and abnormal. In some cases, rates lower than 30 per minute may be considered abnormal by your veterinarian. Ask your veterinarian what rate is considered increased and abnormal for your dog or cat.

CLINICAL SIGNS THAT MAY BE ASSOCIATED WITH HEART DISEASE OR HEART FAILURE INCLUDE:

Dogs and Cats

- ✓ Fast breathing when resting or sleeping (> 30 breaths per minute)
- ✓ Increased effort associated with breathing
- ✓ Restless sleeping, moving around a lot and changing positions
- ✓ Coughing or gagging
- ✓ Weakness
- ✓ Reduced ability to exercise
- ✓ Collapse or fainting

- ✓ Decreased appetite
- ✓ Weight loss
- ✓ Distended belly
- ✓ Depressed attitude or quiet and not interactive

Cats only

- ✓ Hind leg lameness or weakness
- ✓ Hind end paralysis
- ✓ Pain

HOW DO I COUNT THE RESTING/SLEEPING BREATHING RATE IN MY PET?

- 1. Wait until your pet is sleeping quietly (preferred) or resting calmly and quietly. It is important that cats not be purring when you count their breathing rate. The sleeping breathing rate is typically a little lower than the resting breathing rate.
- 2. Watch the chest. It moves in and out as dogs and cats breathe. One breath is counted when the chest has moved in and out once.
- 3. Use your watch or phone to time 30 seconds then count how many breaths occur in 30 seconds.

- 4. Next multiply the number of breaths that you counted in 30 seconds by 2 to get the number of breaths in 60 seconds (1 minute). (Alternatively, you can count the total number of breaths that occur in 60 seconds without multiplying.)
- 5. Keep a record of the breathing rates you count by writing them down somewhere such as on your calendar.

The following link will take you to a video that demonstrated how to count your pet's resting breathing rate. http://www.youtube.com/watch?v=uEptzj6G-Jk.

WHAT SHOULD I DO IF THE RESTING/SLEEPING BREATHING RATE IS INCREASED IN MY PET?

The first thing to do is to count it a few times over the next couple of hours to be sure it is a consistent finding. If the breathing rate is consistently increased then you need to contact your veterinarian. Typically your veterinarian will recommend a recheck appointment in the next day or two so medications can be adjusted.

Note: If the resting/sleeping breathing rate is increased and other "clinical signs" as outlined in the box are also observed, the situation may represent an emergency and require urgent action. In this case, you may need to go to a veterinary emergency center.

HOW TO CALCULATE HOME BREATHING RATE:

breaths in 30 sec x 2 = breaths per minute (normal = less than 30 breaths per minute)

HOW OFTEN SHOULD I COUNT THE RESTING/SLEEPING BREATHING RATE IN MY PET?

Typically your veterinarian will have you count the breathing rate once per day for a week when you are learning so that you get comfortable doing it. This way you and your veterinarian can also learn your pet's individual resting/sleeping breathing rate.

IF YOUR PET HAS ASYMPTOMATIC (EARLY, WITHOUT CLINICAL SIGNS) HEART DISEASE:

Home breathing rates need not be evaluated in all pets with asymptomatic heart disease. Your veterinarian will tell you if and when it is time to start doing this in your pet. In general it is most important to start in pets with advanced asymptomatic heart disease that have a high risk of developing heart failure within the next year. In this case breathing rates are typically recorded once or twice per week although sometimes your veterinarian may ask you to do it once per day.

IF YOUR PET HAS HEART FAILURE:

Home breathing rate should be evaluated once per day in all pets that have heart failure and are now taking medications such as furosemide. Home breathing rate can also be taken at any time if a pet appears to be breathing "differently".

WHERE CAN I FIND FREE SMARTPHONE APPS FOR HOME BREATHING RATE?

There are free smartphone apps for the iPhone OS and Android OS called "Resting Respiratory Rate" that can help you keep track of your dog's home breathing rate. Search your app store for "resting respiratory rate".