



## Animal Cardiology Specialists of Nevada

8851 W. Sahara Avenue, Suite 100, Las Vegas, NV 89117  
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### **MONITORING RESPIRATORY RATE & OXYGEN THERAPY ADMINISTRATION**

- One of the easiest and most important things you can do in caring for a pet with heart disease or pulmonary hypertension is to count their breathing rate once a day while they are in a deep sleep.
- It does not matter what time of the day you count the rate and it does not need to be counted at the same time each day. The most important part is that your pet is in a deep sleep when you count their rate.
- Watch them from a distance or take a 15-second video on your smartphone and you can go back, watch the video and count the rate
- Do not place your hand on your pet to feel their breathing as this will draw them out of their deep sleep.
- Each time their chest goes in and back out counts as one breath.
- Count the number of breaths you see in 15 seconds
- Write down that number or multiply it by 4 to calculate how many breaths they are taking in a minute.
- These numbers may fluctuate a little from day to day, which is normal, but ***if the rate increases*** and does not drop back down into the normal range you have been tracking, ***or the effort to their breathing increases*** (abdomen moves more forcefully), notify Dr. Forney via email: sforney@animalcardiologynv.com or phone: 725-252-4244 and provide supplemental oxygen therapy if you have this at home.
  - If there is ever a concern about their breathing, please also contact your regular veterinarian or an emergency center for examination, as it is also never wrong to have them evaluated by a veterinarian to ensure that they do not need more immediate and/or advanced care.

### **FLOW BY OXYGEN THERAPY**

- Flow by oxygen may be beneficial when your pet becomes overly excited or exerted and they begin to have difficulty breathing or after episodes of collapse while they are recovering from their event.
- During times of respiratory difficulty, you may see your pet's tongue or gum color become pale, or change to a dark/muddy pink, purple, or blue, indicating that they are not oxygenating well.
- You can use an oxygen tank (if available) or an oxygen concentrator to administer the oxygen
- An oxygen tank will run out of oxygen and need to be refilled whereas an oxygen concentrator will not, but typically needs to be plugged into an outlet.
- Place your pet in a comfortable, non-restricted position, typically sitting or lying on your lap.
- If you try to restrain them or hold them tightly while they are having difficulty breathing, they tend to become more anxious and agitated, so allow them to get comfortable
- Turn on the tank or the concentrator, usually to 2-4 liters per minute
  - Every machine and length of tubing is different, so hold the end of the oxygen line up to your face as you turn on the oxygen and turn it up an increment at a time until you feel a comfortable flow of oxygen. Once felt, place the oxygen line in front of your pet's face at that same distance to enrich the air in front of them, allowing them to breathe in more oxygen. We do not typically recommend placing an oxygen mask over their face as they may feel restricted causing their anxiety to increase rather than allowing them to relax and recover from their stressful event.
  
- Administer the oxygen until your pet is relaxed, breathing normally, and their tongue color has returned to normal.
- You cannot administer too high of a concentration of oxygen or too long of a duration of oxygen therapy when you administer oxygen in a flow-by manner as they are not in an enclosed environment so can freely discharge waste gas.
- Flow by oxygen can also be beneficial and provided to patients while they are sleeping if they tend to stay in one position for a while. You may place the tubing in front of their face as directed above allowing them to breathe in the enriched air while they rest.



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### **OXYGEN CAGE THERAPY**

- Oxygen can also be administered at home using an oxygen cage.
- We recommend the Buster Oxygen Cage for home use which can be found on Amazon.com and pawprintoxygen.com.
- The medium size cage is also available at our office.
- You must have an oxygen concentrator with a 5-10 liter continuous flow to utilize an oxygen cage and maintain the correct oxygen concentration
  - We have found that they are most readily available at pawprintoxygen.com, but may also be found at other venues online.
  - You can try local human medical supply stores to purchase an oxygen concentrator, but they will not rent supplies to pet owners.
  - Small and medium cages required a 5-liter continuous-flow oxygen concentrator.
  - Large cages require a 10-liter continuous-flow oxygen concentrator.
- Setting up the oxygen cage is easy using the included manufacturer's instructions.
  - There are also several videos on YouTube by KRUUSE.com that demonstrate how to set up the Buster Oxygen Cage
  - We recommend using the venturi that will allow for 40-50% oxygen concentration with appropriate venting.
- Depending on the size of your pet and whether they tend to pant, you may need to place an ice pack off to the side in the oxygen cage to help cool the air inside the cage.
  - Check the temperature of the air by inserting your hand into the kennel periodically; frequently if your pet is panting.
  - Place the ice packs into the cage in such a way that allows the pet to move away from the cold packs if they choose
  - You may need to completely vent the cage and start over if the temperature becomes too warm. This is more likely to be needed with larger dogs that are panting.

### **PETS SHOULD NEVER BE LEFT UNSUPERVISED IN AN OXYGEN CAGE.**

- Pets can receive oxygen therapy in the oxygen cage for minutes to hours at a time depending on their level of need as long as the temperature and ventilation are monitored closely.