Rescue Breathing and CPR for Pets

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THE BASICS

Determine if the animal is responsive to your voice or touch. If responsive, continue with First Aid

AIRWAY, BREATHING, CIRCULATION

NOT RESPONSIVE

DOGGIE DOGGIE ARE YOU OK?

If your pet does not respond, begin CPR

Open the airway. Grab the tongue. Pull it forward (Try a cloth if you can’t get a grip)

Make sure mouth is clear of food, vomit or other obstruction.

Determine if animal is breathing. LOOK, LISTEN, FEEL.

NOT BREATHING.

ARTIFICIAL RESPIRATION:

Give 2 breaths. Watch for rise and fall of the chest. Make sure you’re getting air into the lungs.

NOT BREATHING BUT HAS A PULSE

Continue artificial respiration (15-20X per minute—or one breath every 3 seconds—depending on the size of the animal) Breaths should be slow and last about 1 to 1 ½ seconds. After one minute, take pulse. LOOK, LISTEN, and FEEL for 5 seconds to see if breathing has resumed.

BREATHING NOT RESUMED

Continue artificial respiration, stopping to monitor the pulse and breathing after a minute.

(Sometimes air collects in the stomach—remove by pushing down lightly, just behind the ribs—check every few minutes)

NO BREATHING—NO PULSE

Begin chest compressions. (120 X per minute depending on the size)

If you’re working with someone, you can coordinate chest compressions and respiration so that breaths can be done during the compressions. Breathing about every 6th compression.

If you are by yourself, this can be done at the same rate.

If you’re with a partner, Artificial respirations can also be given every 3rd compression.

SUMMARY:

PULSE/NO BREATHING

15-20 Breaths per minute (every 3 seconds)

NO PULSE/NO BREATHING

120 compressions/minute (2 compressions every 1 second)
Rescue Breathing, CPR, and Basic Life Support

**CPCR** Cardiopulmonary-cerebral resuscitation

**Defibrillation** - Shocking the heart to restore a coordinated heart beat and pulse.

**Mouth to Snout** - The first and most important step.

**Advanced Life Support** - Restablishing a heartbeat. The animal does must begin to breathe on its own or have a heartbeat after 5-10 minutes. CPR must begin. In a large dog external compressions might not be enough. Open-chest CPR can be performed. (Emergency Thoracotomy)

**Airway/Breathing/Circulation**

**Airway** - Obstruction of the airway can be life-threatening. If the large airways (trachea, and the bronchi) are obstructed, the animal will not be able to breathe and will become unconscious. If the large airways are partially obstructed, the breathing will be noisy. (stridor) The animal will appear fearful and its skin may have a bluish tinge. Capillary refill takes a long time. With small airway obstruction an animal might wheeze and push out his diaphragm when exhaling. He can appear fearful and nervous. Skin, eyes, nailbeds and some tissue might appear blue. (In trauma-can use tracheal intubation).

**Breathing** - When animals have difficulty breathing, they breathe faster and it takes more effort. Breathing patterns change, as well as changes in posture. A dog might stand with elbows spread out at the back. A cat might crouch and raise his chest or sit on their haunches and extend his head and neck. Other obvious signs are open mouth breathing and a blue tinge to the skin. Oxygen can be administered through a tube, a mask, a hood or other method. (Firefighters now have masks for dogs).

One cause of breathing problems is pleural space disease. In this condition, air, fluid or abdominal contents are in the pleural space. You can hear muffled lung sounds over the affected regions. Fluid is usually removed with a needle or catheter.

**Circulation** - Several indicators determine the function of the circulatory system. Several types of shock can cause circulatory problems. The goal is to deliver blood to the tissues, bringing oxygen with it as well as other nutrients so that the body does not shut down.
CPR Flowchart

Animal Does Not Respond

OPEN AIRWAY

Is Animal Breathing

YES

Check: Pulse, Gum Color, Capillary Refill Time, Do Head to Toe Exam, Notify Your Veterinarian

NO

GIVE TWO RESCUE BREATHS

Does Animal Have a Pulse?

YES

Continue: Artificial Respiration
Monitor: Pulse, Gums, Refill Time

NO

BEGIN CPR
TRANSPORT & CONTINUE
Primary Pet Assessment - ABC's

After you have a safe approach, it is time to take action. This Primary Pet Assessment-ABC's takes approximately 15 to 25 seconds and will direct you to your next course of action; First Aid, Rescue Breathing or CPR. Keep in mind that it can take even less time. If a pet is whimpering in pain, does it have breathing? ... does it have heartbeat? Sometimes we can move right over the ABC's of Primary Pet Assessment to begin treatment for bleeding and other obvious physical traumas. Quick action can be everything when dealing with life-and-death situations. Never hesitate to contact the nearest emergency animal hospital or veterinarian for advice or assistance.

Airway (or Arterial Bleeding)

Tap Foot & Shout, "Doggie! Doggie! Are you OK?" If unconscious and unresponsive, call for help. Position patient on side as long as it doesn't aggravate any obvious injuries. Place one hand on chest and place other hand under jaw to extend the head, opening the airway. Arterial bleeding will be obvious. Go directly to bleeding protocols.

Breathing

Check for breathing. Look, listen and feel. Look for the rise and fall of the chest, movement of the abdomen or mouth. Listen for air exchange and feel for the warm breaths against your fingers. If the patient is not breathing, pull its tongue out past the canines, make an airtight seal with your mouth over the pet's nose and give two slow full breaths, "mouth-through-nose". Be careful not to over ventilate.

Circulation

Check for circulation at the femoral pulse. Check the pulse for 5-10 seconds. If there is no pulse, begin CPR. If the pet has a pulse, but no breathing, begin Rescue Breathing.
Rescue Breathing

Definition: Mechanically inflating the lungs to mimic the respiratory function.

Causes: Many things can cause a pet to stop breathing, such as poisoning, head trauma, electrocution, drugs or drowning.

Signs: The pet patient will be unconscious with no respirations and will have a pulse.

Actions For Survival: Begin Rescue Breathing.

RESCUE BREATHING

Has Heartbeat  No Breathing

♥ Extend the head to open the airway.
♥ Pull the tongue out past the canines, grasp the pet's snout firmly and compress the lips and mouth together holding the muzzle firmly shut.
♥ Place your mouth and lips over the pet's nose, making an airtight seal.
♥ Give the pet a slow, full breath, taking care not to over ventilate. Watch for the chest to rise.
♥ Remove your mouth and look, listen and feel for the air to expel. Give another breath. Repeat for about one minute and reassess.
♥ Transport to veterinarian or emergency animal hospital immediately.

Always start with Primary Pet Assessment to determine course of action.

If pet has heartbeat but no breathing, begin Rescue Breathing. Repeat for one minute and then reassess.

Extend Head Open Airway
Pull Tongue Out Past the Canines
Compress Lips and Mouth Together
Airtight Seal, Give Slow, Full Breath
Look, Listen and Feel Give Another Breath

Drowning: Most dogs and cats are able to swim and most dog breeds have a love for the water. The majority of pet drownings in urban situations occurs in swimming pools. The pet either jumps in or accidentally falls into the pool and is unable to get out. This can be prevented by teaching the pet how to get out of the pool.

Actions for Survival: Hold the pet by the hind legs and hang the pet upside down to drain out the water. If it is a large dog, prop the hind end up so the head is lower. Do the Primary Pet Assessment - ABC's and begin Rescue Breathing or CPR as warranted. Always treat for shock.

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Cardio Pulmonary Resuscitation - CPR

**Definition:** Externally compressing the heart to facilitate circulatory function and mechanically inflating the lungs to mimic respiratory function.

**Causes:** Many external causes can be attributed to stopping the heart, including electrical shock, poisoning, trauma or allergic reactions.

**Signs:** The pet will be unconscious with no heartbeat and no breathing.

**Actions for Survival:** Begin CPR (Cardio Pulmonary Resuscitation). Transport immediately to emergency animal hospital.

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**CPR**

**Cardio Pulmonary Resuscitation**

- Pull the tongue out past the canines with your fingers.
- Grasp the pet’s snout firmly and compress the lips and mouth together, holding the muzzle firmly shut.
- Place your mouth and lips over the pet’s nose, making an airtight seal. Give the pet two slow full breaths, taking care not to over ventilate them. Watch for chest to rise.
- Give 15 compressions.
- Continue compressions and breaths for about one minute and then reassess.

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**Taco Techniques:** (For Cats & Toy Dogs)

Hand around chest, squeezing thumb and middle two fingers together.

**Large Dog:** Lay dog on side. Compress the heel of one hand over heart and the other hand beneath the chest, compressing against the floor.

**Barrel Chested Breed:** Pugs, Bulldogs or Bassets can be positioned on their back with compressions similar to human CPR.

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**Three Types of Compressions**

- "Taco Technique"
- Large Dog
- Barrel Chested

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The depth of compression is approximately ¼ to ½ the width of the pet’s chest. Larger dogs may require two hands for adequate compressions.
Choking Management - Conscious

Definition: Insufficient exchange of air caused by a foreign body obstruction.

Causes: Pets can choke on small toys, bone fragments, rawhides and many other small objects. Dogs are at greater risk of choking than cats.

Signs: The pet will violently paw at its face, gasping, gulping for air or frothing with a stridor-like sound (high pitch wheezing sound) with great agitation and anxiety.

Actions for Survival: Follow protocols below for conscious choking.

Dogs are 3-4 times more likely to choke than cats.

CONSCIOUS CHOKE

Has Heartbeat No Breathing

Pet is Conscious and Can Cough or Gag

If the pet can cough or can gag, they have a better chance of getting the object out themselves.

- Confine to a small area for observation such as a bathroom or utility room.
- If, after several minutes, the object does not come out, take the pet to its veterinarian immediately. The airway is open enough that it has adequate air exchange. Be prepared for the pet to go unconscious or not be able to breathe.

Pet is Conscious and Cannot Cough or Has Stridor

- Perform chest thrusts until the object comes up or the pet goes down (unconscious).
- Chest thrusts are performed by placing your hands on each side of the pet’s chest and thrusting inward. Thrust in the direction you want the object to go (Much like a fireplace bellows).
- After several attempts, if the object does not come out, take the pet to its veterinarian immediately. Be prepared for the pet to go unconscious.
Choking Management - Unconscious

**Definition:** Pet becomes unconscious due to lack of air exchange caused by a foreign body obstruction.

**Causes:** Toys, bone fragments, rawhides and other small objects blocking the airway.

**Signs:** Pet will be nonresponsive with no breathing and attempted breaths will not go in.

**Actions For Survival:** Immediate action is to establish an open airway. Follow protocols below for Unconscious Choking and Unwitnessed.

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**UNCONSCIOUS CHOKE**

![Heart](heart.png) Has Heartbeat  ![No Breathing](no_breathing.png) No Breathing

- Open the pet's mouth using your fingers and pull the tongue out past the canines.
- While holding the tongue, look deeply down the pet's throat (use a flashlight if available). If you see any debris, meat or foreign objects, reach in and pull the object out with your fingers or a pair of pliers or tweezers, if available.
- Give a slow, full breath. If the breath goes in, give another breath. If both breaths go in, you have established an airway; check pulse. If no pulse, begin compressions and breaths (follow CPR guidelines). Reassess and continue as warranted.
- If the first breath does not go in, reposition the head and attempt another breath. If the second breath does not go in, begin compressions. Continue compressions and 2 attempted breaths (follow CPR guidelines) until the object comes up or the object goes down or until you have established an airway. Look for object before attempting breaths each time. Always reposition the head and attempt one more if the first breath does not go in. If the second breath still does not go in, begin CPR. Reassess and continue as warranted.
- If after several minutes, you have not removed the obstruction or established an airway, transport the pet to its veterinarian.

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**Extend Head Open Airway**  **Pull Tongue Out Past Canines**  **Remove Obstruction if Visible**  **Attempt 2 Breaths**  **If Breaths Don't Go in, Begin Compressions**

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