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Important Note about Pet CPR and First-Aid

These instructions and the contents in this Pet First-Aid Manual are designed to help you keep the animals in your care more comfortable and aid with minor problems when you are unable to get to (or are on your way to) an animal hospital.

No liability is assumed by the author, publisher or any other party with respect to the information, suggestions and techniques described in this book. Should there be any discrepancy between the suggestions offered and the advice of a Veterinarian who has knowledge of the pet in question, it is recommended that the advice of the Veterinarian be followed since the Veterinarian has the advantage of physically seeing the pet and knowing its medical history and circumstances.

This information is not meant to be a substitute for care by a licensed veterinary professional. If you have any questions about your pet’s health, seek professional Veterinary care immediately!
Why You Should Learn Pet First-Aid and CPR

The biggest difference between human and animal first aid is that animals tend to bite. The first consideration of this first aid course is to make sure that you understand how to create a safe working environment. This means how to appropriately restrain and handle an injured animal. If the “first aid responder” (you) gets injured, there will be nothing that person can do for the injured animal. Furthermore, animals that are known to have bitten a person – even if the bite occurred during an emergency situation in which the animal was in pain – will require quarantine until Rabies has been ruled out as a cause of the bite. However, two significant differences between treating humans and animals is that animals can’t tell you where they hurt and their anatomy/physiology differs; so getting pet specific training is imperative.

Sometimes without warning, tragedy can strike a dog or cat in your care, so you must know what to do. Have you ever driven down a dimly lit road to narrowly escape hitting an animal? Has an outdoor cookout ever tempted your pooch to reach up for a sizzling treat? Has a furry tail ever been accidentally closed in a door, or have you found ticks on your long-haired cat? Did you discover a dog in a car suffering from heat stroke this summer? How about vomiting, diarrhea and bee stings – have your pets ever experienced these problems? Statistics show that preventable accidents are a leading cause of death among our pets, and 9 out of 10 dogs and cats can expect to have an emergency during their lifetime. According to the American Animal Hospital Association (AAHA), one out of four additional animals could be saved if just one Pet First-Aid technique was applied prior to the animal receiving veterinary care. What this means is that the most competent Veterinarian can not bring your pet back to life, but by knowing Pet First-Aid & CPR, you can keep your dog or cat alive until you reach professional medical help.

By knowing Pet First-Aid you can:

- Lower your pet’s body temperature if he suffers from Heat Stroke and prevent brain damage or death.
- Stop bleeding and prevent infection by properly bandaging a wound.
- Prevent your pet from losing consciousness by alleviating choking.
- Expel poison from your pet’s system by properly inducing vomiting.
• Artificially keep your pet’s heart and lungs working until you can get him to professional medical help.

By learning what can happen to your pet, you may prevent many emergencies from ever happening.

**Important Note:**
Always remember that first-aid is not a substitute for professional veterinary care. You and your Veterinarian must work together as a team for the health of your pet!
What is Pet First-Aid?

Pet First-Aid is the immediate care given to a dog or cat that is ill or has been injured. It is the first step (and often the most critical step) in an attempt to make the animal more comfortable, lower the risk of infection and stop further injury before complete medical attention can be given.

Even though you may know how to perform life-saving skills on a human, those of you who plan to spend time around animals must have pet-specific training as human, canine and feline anatomy does differ. For instance, when performing rescue breathing on a human, you pinch the nose shut and breathe into the mouth. For our cats and dogs, we do the opposite by closing the mouth and breathing directly into the nostrils to obtain the best flow into their airway. Additionally, animals and humans don’t speak the same language; when was the last time your dog said, “I ate too many cookies and my tummy doesn’t feel good” or your cat muttered, “I have a headache?” Since we can’t ask our dogs and cats, “What’s wrong?” and being animals, they often hide the signs of injury from the other pack members (including us) we have to play detective to find out what is wrong.

Triage – Assessing an Emergency Situation

Triage is the process of evaluating the needs of an animal during an emergency situation. When more than one animal is involved, this is the order of importance for providing assistance to the most critically in need animal. No matter if it's a dog, cat, ferret, horse or human, there are three questions you should ask yourself while evaluating a possible emergency situation:

1. **Is the animal breathing?** Heart is working (a pulse can be detected), but the lungs have stopped functioning. The absence of breathing should be considered a life-threatening emergency. Always check for breathing first. The rule is that if the animal is breathing, the heart is beating.
   You need to perform: Rescue Breathing

2. **Has the heart stopped beating?** No pulse can be detected and the animal has stopped breathing. Within a matter of minutes, irreparable cell damage will occur. This is always considered a life-threatening emergency.
   You must begin: CPR -- Cardio Pulmonary Resuscitation
3. **Is animal is in physical distress?** Heart & lungs are working but something is just not right. Distress may range from mild digestive upset to unconsciousness, choking, bleeding, seizures, etc. Depending upon the type of distress, this may or may not be a life-threatening situation.

   You need to perform: First-Aid (the type of distress will determine the type of first aid administered)

In disaster situations where many animals are in need of care, but minimal help and supplies are available, those animals in cardiopulmonary arrest or displaying agonal breaths (gasing or labored breaths signaling death is imminent) may be notated as deceased to allow treatment for those that can be saved.

**10 Situations Always Requiring Veterinary Care**

Regardless of what first-aid techniques you perform to alleviate pain and make your pet more comfortable, for the injuries below you must seek veterinary Care immediately. This list is not intended to all-inclusive of situations requiring the assistance of a veterinarian. If in doubt, always seek the advice of a licensed veterinarian. Later in this section, you will learn how to provide first aid care to animals for the situations listed below.

1. Trauma to head, chest or abdomen or anytime an animal in your care has been unconscious.
2. First-time Seizure, a seizure lasting more than five minutes or, in cases of an epileptic animal, a seizure lasting longer than is normal for that animal.
3. Arterial bleeding (bright red spurting bleeding)
4. Fractures or suspected muscle/tendon strains/tears.
5. Wounds that are more than 1” in length and/or ½” deep including bites and puncture wounds.
6. Suspected or known poisoning or snake bites
7. Shock (a life-threatening condition you will learn more about in this section)
8. Respiratory distress or anytime you have administered Rescue Breathing or CPR
9. Inability to walk
10. Bloat (another life-threatening condition you will be learning about)
Locate Your Nearest Animal Emergency Center

Some are open 24 hours; others open at 6pm and close at 8am the next morning to fill that gap of time when your Veterinarian is closed. Locate the one nearest your home, your favorite park or hiking location and wherever the pet spends time. Make sure you know exactly where the office is located, where to park and what entrance you will bring your pet in (if you have a 100 lbs dog that can’t walk, this can be of major importance). Know what services they offer (MRIs, transfusions, anti-venin) and how they accept payment. Research all this ahead of time because when an emergency happens, you won’t want to waste time wondering which side of the street the Animal ER is on., if they have the ability to treat your animal or if you’ll be able to pay to get him the help he so desperately needs.
Assessing Health

Learning to check your pet’s vitals can help assess his degree of pain, injury or illness. There are 5 vital checks that you should be able to perform:

1. **Pulse** – The rhythmic movement of blood through an artery.
   - Place the ball of two fingers (not your thumb) on the depression found in the animal’s upper inner thigh over the Femoral Artery.
   - Count the beats for 60 seconds (or for 30 seconds and then multiply by 2) to determine his pulse rate.

If you have difficulty feeling the Femoral Artery, place the palm of your hand over the left side of his chest – just behind his elbow – to feel his heart beat which will be the same rate.

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<td>Small dogs</td>
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<td>Medium to Large dogs</td>
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2. **Respiration** – The process of inhaling and exhaling; breathing.
   - Observe or place your hand over the animal’s chest to count the number of times his chest rises (inhales) or falls (exhales). The “rise and fall cycle” should be counted as one breath.
   - Count the breaths (rise and fall cycles) for 60 seconds (or for 30 seconds and then multiply by 2) to determine respirations per minute.
   - Do not attempt to count the respirations of a panting dog or cat.

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<th>Average Respiration Rate for Dogs and Cats</th>
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Please note: Very large dogs and/or geriatric animals may have slower respirations.
3. **Temperature** – The level of heat produced by the body.
   - After lubricating the tip of a digital thermometer with petroleum jelly or other such safe product, lift pet’s tail up and insert thermometer ½” – 1” into the rectum (slightly angled upward).
   - At the sound of the beep or according to specific instrument instructions, the animal’s temperature should range between 100.0 F – 102.5 F (38 C – 39.16 C).
   - A temperature of 103 F is considered a fever.
   - A temperature of 104 F and above is considered an emergency.
   NOTE: Feeling your pet’s nose to determine his temperature or state of health is not an accurate measurement.

4. **Capillary Refill Time (CRT)** – The amount of time it takes for blood and oxygen to refill a capillary. CRT indicates whether blood circulation is sufficient to sustain life.
   - Gently lift pet’s upper lip and press on gums above teeth with the ball of your index finger until gums lighten. Be sure not to pull too tight because this can cause the gums to appear lighter and make it much more difficult to accurately assess the CRT.
   - It is best to choose a non-pigmented part of the animal’s gums if at all possible, but if you only have dark gums to work with, you should still be able to determine CRT.
   - Release pressure and color should return to the gums within 1-2 seconds.
   - If it takes color (blood flow) longer than 2 seconds to return to gums, increase circulation by slightly elevating animal’s hind quarters with a pillow (unless there is significant bleeding to head or chest) and get immediate veterinary help.
5. **Hydration** – Sufficient water in an animal’s body to sustain health.

Dehydration is the loss of water and vital electrolytes such as sodium, chloride and potassium necessary for survival. The bodies of dogs and cats are comprised of 70% to 80% water. As a reference, a 50 pound animal requires about 5 cups (or 40 ounces) of water daily, but if he’s active that amount should be at least doubled. Animals like dogs and cats are very resilient and can survive the loss of up to 50% of their muscle and fat; but a dehydration level of more than 10% is life threatening.

To determine adequate hydration levels, use the following procedure:

- Gently pinch a fold of skin at animal’s nape of neck and release. The skin should quickly fall back into place if animal is well hydrated.
- For loose-skinned breeds and older pets whose skin may have lost elasticity, carefully feel the gums. If they are dry or sticky, the pet may be dehydrated.
- Fatigue, constipation, increased heart rate and sunken eyes can also signal dehydration.

**Head-to-Tail Examination**

In addition to checking an animal’s vital statistics, it is important to observe his body for signs of injury or illness. The more you know what is normal for any cat or dog, the more quickly you’ll recognize something that is not.

Start at the head and work your way toward the tail, observing the skin and coat, feeling for lumps, bumps, abrasions and parasites and noticing any redness or tender areas. Also notice how the animal is reacting to your touch. Dogs are more likely to tolerate a
painful touch from a human; whereas a cat will immediately let you know that she is not amused!

Gently clean **ears** of dirt and waxy debris with ear wash or a soft cloth – never use a cotton swab. If you discover redness, parasites or a foul odor have your Veterinarian assist. What may look like coffee grounds, could be ear mites.

If **eyes** tear excessively, flush with saline solution. Compare one eye to the other for any differences making sure both pupils are the same size. If not equally dilated, your pet could have a neurological condition and should be checked by a veterinarian immediately Track your pet’s eye movement by holding an index finger in front of his face and moving it from side to side. Do his eyes follow your movements? If you detect any erratic flickers or jumps in the eyes, it could also be an indication neurological issues which a veterinarian should assess.

Feel the **muzzle** for bumps and tenderness. Due to bone and cartilage, it may be impossible to feel a tumor, so if the area appears sore or there is an unusual discharge from the nostrils, get to your veterinarian for a thorough exam.

Do you brush your pet’s teeth regularly? It only takes 48 hours for plaque to turn to tartar leading to gum disease. Carefully look in the **mouth**. Gums should be a healthy pink (unless your pet has black gums like Chows, Black Labs and many cats) with no bad odor. Check for broken teeth and obvious signs of swelling or bleeding. Anything that doesn’t appear normal should be evaluated by a veterinarian. Cats (and sometimes small dogs) are notorious for eating dental floss, string and tinsel which can wrap around teeth or the base of the tongue. Foreign objects that become stuck in the mouth should always be evaluated by a veterinarian, as they can cause inflammation or damage to the oral tissues.
The rest of your Head-to-Tail Examination should be a gentle massage along the animal’s sides and back, looking and feeling for things that don’t belong -- abrasions, bumps, tenderness and sores; even parasites, burrs and foxtails that may have found their way onto your friend’s furry coat. When you reach his chest, you should be able to feel, but not see, the ribs. Breathing should be steady, it is important that you learn to check respiration and all of your animal’s vital signs so you know you are doing your best for the health of your companion.

Inspect legs and paws making sure claws and pads are not cracked and keep nails trimmed. Be gentle and go the speed that is comfortable for the pet. Many animals get uneasy when touched, but examine a little and a time, and they’ll come to enjoy this bonding experience.

With your fingertips, stroke the abdomen making sure there are no hard spots or sensitive areas. Check mammary glands, genitals and “under the tail” which should all be clean with no colored discharge. If your pet is older or arthritic and can’t perform his own hygiene, help keep him clean with a warm wet cloth. If you notice scooting, the anal glands may need to be emptied by a veterinarian.

Long or short, fluffy or hairless, the pet’s tail should also be examined for bumps and sores remembering that the base of the tail often harbors parasites.

Throughout your assessment, check the dog or cat’s skin and coat for flaking or excessive shedding. The right brush can feel like a massage and help stimulate oil glands as well as prevent fur balls. If you notice anything that is irregular or abnormal for your pet, get a professional veterinary opinion.

**Basic Signs of Illness or Injury**

During a head-to-tail check-up – or at any time – if you notice the following signs, the animal’s health needs to be addressed. In the pages that follow, you will learn how to deal with these situations. The information below is your check list for determining the basics signs of illness or injury in a dog or cat:

- Redness
- Swelling
• Tenderness/Lameness
• Open Sores
• Bleeding, pus or discharge from any orifice or wound
• Breathing Difficulties
• Rapid or Decreased Heart Rate
• Excessive Panting
• Slow CRT
• Abnormal Temperature or Hydration Level
• Frequent or infrequent Urination
• Any kind of unproductive straining to urinate or defecate
• Vomiting/Diarrhea/Constipation
• Restlessness
• Inability to walk
• Distended Abdomen
• Lethargy

Think Safety Before You Rush to the Rescue
You are no help to an injured animal if you get bitten or injured yourself. Take a breath and think before you lovingly respond with your hands and heart. Before you perform many pet first-aid techniques, it may be necessary to muzzle your pet or wrap him in a towel in order for you to safely offer assistance. Even the sweetest of animals may nip when he is scared or in pain. Practice safety first and remember that animals are very perceptive, picking up on your emotions. If you do not feel confident enough to help, you are better off getting the animal quickly to someone who can.

Restraining & Muzzling Techniques
Rule number one is that you - the handler - need to be in control. Make sure you have the animal in an enclosed area so that you are not struggling with him trying to get away while you are trying to treat an injury.

Dogs and cats are predators and many will instinctually hide their injuries to retain their position in their “pack”. Dogs tend to have a “den” mentality and may want to go hide to lick their wounds without the presence of a human or another animal.
Cats, when injured, tend to fight or flee; so chase them into a bathroom and shut the door. If your cat crawls under the sofa or bed while choking and then goes unconscious, you’ll have to move the furniture before you can get to your pet – which wastes precious time. Cats and some small dogs settle best when you wrap them in a towel because it helps them feel more secure, but they may need to be muzzled to prevent them from biting you. Another option for cats is scruffing by grasping the loose skin at the nape of your cat’s neck with a firm hold while resting your forearm against their back. Make sure your hand is close to the head and ears. If you hold the scruff too far down (towards the shoulders) the cat, can turn their head and bite. With your other hand, hold the back legs stretching them backwards to restrain the cat. If a commercially-made muzzle is not available, a temporary muzzle may be made from a length of soft cloth or a roll of gauze.

Note: Students enrolled in the Veterinary Assistant Program can also find this information in Stage 2, under the section titled “Restraining the Fractious Patient”.

To make a temporary muzzle out of a piece of soft cloth such as a gauze roll:

1. Make a loop in the center of fabric strip.
2. Slip loop over animal’s snout and tighten to firmly shut mouth, but make sure fabric does not cut into dog’s skin.
3. Cross ends of fabric under chin exchanging ends in each hand.
4. Bring ends of fabric around each side of dog’s neck and tie off in a bow – never a knot -- behind the ears.

**Important Note:**

Never leave a muzzled animal unattended. If a muzzled animal experiences breathing difficulty, vomiting or seizures, they could easily suffocate. Remove any muzzle immediately if signs or symptoms of these conditions occur.
How to Transport & Carry an Injured Animal

A towel or large triangular bandage can be place under the abdomen in front of the hind legs as a sling to support a medium to large dog’s hindquarters as you assist him walking. If the animal is immobile, you can improvise a make-shift stretcher by carefully sliding a towel or tarp underneath him and with the aid of another person. Hold the ends taut and carry the animal to safety. If you happen to be alone with a large dog (too big for you to carry), use this method to drag the animal closer to help or transportation.

Boards of all kinds can be used as backboards if you suspect back or neck injuries. Plywood, an ironing board or a dolly can all be used as a backboard for medium-sized dogs.

For small dogs and cats, if the animal is too injured to fit inside a carrier, remove the top (if possible) or place the animal into a sturdy cardboard box with an open top. Do not attempt to carry an animal on any kind of improvised backboard device if the animal is struggling or resisting the restraint as this could cause additional injury.
Assembling a Pet First-Aid Kit

Aside from possessing life-saving skills, it is vital to have the tools needed to complete the job. Precious time is often wasted looking for items. When you need to bandage a wound, pull a tick or soothe an upset canine or feline tummy, make sure you have everything in one place - in your Pet First-Aid Kit!

All pet first-aid kits should include:

- 4” X 4” gauze squares - to control bleeding.
- Rolled gauze (varying sizes) - to secure gauze squares in place, bandage a wound or make a temporary muzzle.
- Adhesive tape or self-adhering bandage (vet-wrap®) – to secure rolled gauze in place.
- Styptic powder and cotton swabs – to control minor bleeding.
- Bandage scissors or blunt-nose scissors - to carefully remove bandages, cut proper lengths of bandaging materials or safely trim pet fur.
- Tweezers - to pull ticks or remove debris from a wound.
- Hydrogen Peroxide (3%) - to induce vomiting or clean a wound site.
- Eye wash or sterile saline solution - to flush minor wounds and clean eyes.
- Chlorhexidine (commonly found as Hibiclens Liquid®) to flush cuts and wounds.
- Cold pack - to aid in Heat Stroke, swollen joints, burns and bee stings. Apply to site of injury but frequently remove to prevent over-chilling the area.
- Antibiotic ointment or diluted 15% tea tree oil or vitamin E gel or pure aloe-vera gel – to soothe and promote healing. Apply externally to minor cuts, scrapes and insect bites (not animal bites). If using medicated ointments, make sure your pet can not lick the area and ingest the medicine.
- Dose syringe (needle-less syringe) or eye dropper - to administer medications and other liquids.
- Digital thermometer - to check your pet’s temperature.
- Antihistamine tablets (diphenhydramine or Benadryl®) - for bee stings or allergic reactions.
- Antacid tablets – To soothe an upset stomach. Common pet emergencies are caused when dogs consume people food.
• Electrolyte solution – To aid in re-hydration. K9 Quencher® is best, but Pedialyte® is also good. Note: Sports-type drinks are not recommended.

• Nylon slip-leash - to restrain a pet in need of help. Can also be used as a temporary muzzle because even the gentlest of pooches may need to be restrained to safely allow care to an injury.

• Towel or blanket - to treat for Shock or help transport pet. Can be used to cover a pet so as to maintain body heat and/or elevate his hindquarters to promote circulation. Can also be used as a temporary stretcher or a sling to aid a pet who cannot walk on his own.

• Pet First-Aid handbook – to assist with the important details you need to know.

• Important names and phone numbers - keep this information regarding your Veterinarian, nearest veterinary emergency center and animal poison control readily available.
How to Handle a Choking Pet

Just like humans, dogs and cats can choke when an object gets lodged in front of their trachea (windpipe) instead of passing down the esophagus. Sometimes the obstruction prevents air from getting to the pet’s lungs and can cause them to go unconscious – a life-threatening condition. Dogs are more affected than cats since they play catch and run with balls and sticks as well as chew on toys, rawhides, bones and other items that can be easily swallowed.

Cats are more apt to choke on a fur ball or a piece of ribbon, yarn or thread. Do not yank such an object out of your cat’s mouth. Occasionally a sewing needle may be attached to the other end!

Signs of a Choking Animal

• loud noise or cough as an animal exhales
• rasping noise as he inhales
• gagging or retching as if trying to vomit
• pawing at the mouth
• drooling
• outward stretching of the neck
• staggering and eventually rapid/shallow breathing
• pale/blue gums
• collapse

NOTE: If the animal’s tongue is swollen it may have resulted in choking due to a blocked airway; but the choking may have been induced by an allergic reaction.

Initially, give the dog or cat a few moments to cough. The pet may expel the object on its own. If the cause of choking is not removed by the pet’s own coughing action, a careful sweep of the mouth with your fingers to dislodge the object is recommended. Make sure you can see inside the animal’s mouth. Do not blindly reach into an animal’s mouth because you could push the object deeper, tear tissue by pulling an embedded object or get bitten.
If necessary, use a roll of medical tape as a wedge to keep your dog’s mouth open allowing better access and protecting you from teeth but make sure it is not swallowed. If the obstruction can’t be safely removed, try one of the techniques below:

**Lower Head to Expel Object**
Place a small cat or dog on his stomach in your lap and lower his head in front of your knees. With the palm of your hand, deliver a firm blow between the shoulder blades to expel the object.

For a larger conscious animal, you can pick up his hind legs in a wheel-barrow method to try to expel object. Do not attempt this if the animal is extremely resistant or showing visible signs of aggression. It is not safe to muzzle a choking animal.

**Abdominal Compression (for medium to large sized dogs)**
Stand behind animal and place your arms around his waist keeping his head down. Close your hand making a fist and place your fist in the soft part of the stomach just behind the last rib. Grasp the fist with your other hand and compress the abdomen with 5 quick thrusts similar to the Heimlich Technique performed on humans.
Chest Thrusts (for small dogs and cats)
An alternative method, especially for small animals since your fist may cover too much surface area (lower abdomen) in above technique, is to place your hands or several fingers on each side of the animal’s chest and thrust inward, pushing with your shoulders and elbows in the direction you want the object to go – out the mouth. After 2-3 thrusts, give the animal a moment to cough and/or look in his mouth to see if the object is now reachable. If not, repeat.

Unconscious Choking Victim
Place animal on his side and thrust with hand over hand on just one side of chest to squeeze the lungs. Alternate these thrusts with Rescue Breathing & CPR as described below and get to a veterinarian immediately.

Rescue Breathing and CPR
Cardio Pulmonary Resuscitation (CPR) is the most commonly known method of artificial life support. Recent research has lead to the advancement of a faster more efficient method of artificial life support called Cardio Pulmonary Cerebral Resuscitation (CPCR). Both of these techniques utilize a combination of chest compressions and artificial respirations, however, CPCR focuses more on chest compressions and less on artificial respirations. CPCR utilizes the theory that the action of compressing the chest facilitates the movement of oxygen through the lungs, lessening the need for the administration of breaths via the nasal passage. Classic CPR uses a combination of two
to ten compressions and the administration of one breath, whereas the CPCR procedure calls for 30 to 100 or more vigorous chest compressions between the administration of Rescue Breathing.

CPCR is used in cases when an animal has lost consciousness and both heartbeat and breathing are absent. Emergency situations where CPCR is indicated include:

- Smoke Inhalation
- Heat Stroke or hyperthermia (internal body temperature of 106.0 F or higher)
- Electrocution
- Hit by Car
- Drowning
- Poisoning
- Choking
- Gunshot
- Hypoglycemia (low blood sugar)

Know that even under the best circumstances (in an animal ER with trained and experienced staff, medications, access to oxygen, tracheal tubes and IV catheters) the outcome may not always be successful; but you never know unless you try and an animal could be depending on you. According to the American Heart Association, human survival rates range from 6.4% - 20%. In a hospital setting, 4% of dogs and 9.6% of cats are successfully resuscitated via CPCR.

Although you may have taken a human CPCR course, dogs and cats don’t share our anatomy. The concept is the same, but the technique is different. Below you will learn the latest guidelines established by the North American Veterinary Conference (NAVC) in 2011 (published in Handbook of Veterinary Procedures Emergency Treatment, Kirk & Bistner’s 8th edition).

You may be familiar with the “ABC’s of CPR” (airway, breathing, circulation); however, recent studies by the American Heart Association have shown that keeping the blood flowing to the brain (circulation) is more valuable as a life-saving tool than the
administration of artificial respiration. In light of this research, the newest recommended protocol is “CAB” (circulation, airway, and breathing). Following this recommendation from the American Heart Association, the veterinary community has also adopted this new protocol.

CAB = CIRCULATION, AIRWAY, BREATHING

Tips for Performing CPCR

- Place animal on a flat surface on their side and slightly extend head by pulling back on chin to stretch out throat area.
- Take front leg, gently bending it at the elbow and bring it towards the chest. Where the elbow touches the chest is the proper spot to place your hands for compressions.
- Compress approximately 1/3 the width of the chest diameter.
- When giving breaths, use 1-2 hands to seal off mouth and breathe directly into the dog or cat’s nostrils. For neonates, use a small puff breath only.

Extend the animal’s head to open the airway.

Finding where the heart is located
**CPCR Technique**

**Important Note:**
Never perform CPCR or rescue breathing on a conscious animal.

For all medium to large sized dogs more than three months old:

1. Place pet on a solid surface with their right side down.
2. Begin chest compressions immediately, with 30 compressions (where elbow touches chest).
3. Follow the compressions with 2 breaths into nostrils.
4. Repeat compressions.
5. The prevailing theory is “fast and hard” to do the job.
6. Do not check the animal’s status any sooner than 2 minutes unless there is visible sign of recovery.

![Demonstration of chest compressions on a large dog](image)

For small dogs, cats, and animals less than three months old

Follow above CPCR technique but place their chest in the palm of your hand (use two hands if the animal's chest is too wide). Four fingers should be on one side, your thumb on the other side of the chest. Squeeze your fingers together to compress the chest. The number of compressions should increase to 50 compressions per minute, followed by the administration of two breaths. Cats, small dogs and young animals do not require as much pressure during chest compressions.
For neonates (newborn puppies and kittens)
Follow the same CPCR technique for small dogs, but administer 1 compression and 1 puff breath at a time. If your hand covers the entire torso (when trying to attempt chest compressions as mentioned above), place your thumb on one-side of the chest and use only two fingers (index finger and middle finger) on the other side. Squeeze the chest with the flat tips of your fingers.

Three-person Technique (works most efficiently in larger animals)
This technique is known as Interposed Abdominal Compression and utilizes one person performing chest compressions, one breathing and the third compressing the abdomen cranially (towards the animal’s head).

1. Person #1 administers 30 vigorous chest compressions as described above.
2. Person #2 administers 2 breaths into the nostrils at the end of each 30-chest compression cycle (administered by person #1).
3. Person #3 compresses the abdomen with one hand during the chest compression and breathing cycles. This pushes the blood from the spleen and abdominal area towards the heart and brain.

NOTE: Rapid initiation of CPCR is critical and must be started within 4 minutes after the heart stops beating to avoid brain damage. If the brain does not receive oxygenated blood and 10 minutes have elapsed, brain damage is irreversible.

Quickly transport pet to the nearest animal emergency center or veterinary hospital. Realize that you may not get the animal to breathe or resume a heart beat on his own and may need to continue CPCR while someone else drives. Do not stop administering CPCR until the animal shows signs of recovery or until a veterinary professional can take over the administration of the CPCR.
Tips for Performing Rescue Breathing

- Rescue breathing in animals is done via the nasal passage (not the mouth as in humans).
- Always make sure the mouth is adequately closed and sealed.
- Evaluate the size of the animal to judge the volume of artificial breaths to be administered. It is important that the lungs are not over-inflated.

Rescue Breathing Technique

With pet on his side, gently close his mouth with one or two of your hands until his “smile line” – the portion of his lips that wrap around his face – are sealed.

- For a cat or small dog, you may just be using your thumb and index finger to make this seal.
- Close your hands around the animal’s nose and create a tube-like space between the animal’s nose and your mouth. If it is not your own animal, try not to make direct contact between the animal’s snout and your mouth.
- Deliver two slow full breaths into the nostrils, making sure you ventilate (actually see the lungs rise) the animal and allow time for exhalation (lungs fall) between the breaths.
Basic First-Aid Techniques
Now that you have a good understanding of vital signs, breathing, circulation and choking management, we will discuss the basic first-aid techniques for an assortment of other injuries and illnesses that could befall an animal in your care.

Again, first-aid is not intended to replace professional veterinary care. The administration of first-aid is done in order to prevent further injury to the animal in your care. It is also important to remember that, as the first responder, your first responsibility is to ensure your own safety. Do not attempt to administer first-aid if it will obviously pose an imminent threat to your health.

Birthing Difficulties (Dystocia)
Pregnancy in dogs and cats lasts approximately 63 days (anywhere between 60 and 65 days is considered normal). A common part of prenatal care for dogs and cats is to take an x-ray after the 42nd day of pregnancy to determine the number of fetuses.

The vast majority of canine and feline births go smoothly; so resist temptation to step in unless you are really needed. If a pregnancy lasts longer than 67 days, seek veterinary advice immediately. It is also important to note that it is normal for bloody vaginal discharge to persist for up to 4 weeks after birth.

Signs that the animal is nearing delivery:
• Mammary gland enlargement and milk secretion - 1 to 2 weeks prior to delivery
• Restlessness, seeking seclusion, anorexia, nesting - 12 to 24 hours prior to delivery
• Rectal temp decreases to less than 99F - 8 to 24 hours prior to delivery

During the final stage, the fetuses will begin to move through the birth canal. The animal will experience obvious straining and involuntary contraction of the abdominal muscles.

Some dog breeds are prone to difficult deliveries and are therefore more likely to require surgical intervention. The brachycephalic breeds, like Bull Dogs and Pekingese, are born with large heads and broad shoulders which could make it difficult for them to fit through the mother’s pelvic canal.
Situations When You Should Offer Assistance

- If the neonate comes out only part-way despite the mom’s efforts. To assist, grasp the emerging puppy or kitten with a clean washcloth and gently pull him free. Do not attempt to remove a neonate in this way if you cannot see both the front legs and head.

- If mom doesn’t instinctively tear off the amniotic sac within 30 seconds. Carefully peel away the amniotic sac from around the neonate’s face. Clean the mucus from puppy or kitten’s mouth with your finger and then rub newborn vigorously with a clean cloth. Encourage mom to lick her baby and sever the umbilical cord.

- Mom doesn’t sever the umbilical cord within one minute. This typically happens when the mother doesn’t immediately remove the amniotic sac. To sever the umbilical cord, tie two pieces of embroidery thread (dipped in rubbing alcohol) around the umbilical cord. The first thread should be tied about 1 ½ inches from the tummy and the second should be tied about an inch farther down the umbilical cord from the first thread. Clean a pair of sharp bandage scissors with rubbing alcohol and snip the umbilical cord between the threads.

Signs of a life-threatening emergency

- The animal passes dark green fluid (called lochia) before the birth of the first puppy or kitten. This could indicate that placenta has separated prematurely.

- The animal has been straining without delivering for more than an hour without delivering a neonate. This could indicate that the neonate is too large or is in the wrong position to pass through the birth canal without assistance.

- If mom seems weak, nervous or restless for more than a half hour after the major labor signs have stopped. There may still be another puppy or kitten waiting to see the world.

- Mom experiences muscle tremors days or weeks after giving birth, begins to vomit or has trouble standing up. These could be a sign of Eclampsia – a life-threatening calcium deficiency that sometimes occurs after giving birth.
Bleeding Injuries

Arterial bleeding is of the utmost urgency. Arteries are the largest vessels carrying blood and oxygen throughout the body. Arterial blood appears bright red due to oxygen saturation. A severed artery will result in:

- Large volume of blood lost very quickly
- Spurting blood (as arterial blood comes directly from the heart)

Injury to a vein (another large blood vessel) can also result in massive loss of blood. The differences include:

- Darker blood as it has traveled through the body and picked up toxins along the way
- Steady stream as opposed to spurting

Capillary bleeding is the easiest to manage as blood flow generally oozes. This situation however requires you to flush out the wound to prevent infection, whereas your goal in arterial or venous bleeding is to stop the bleeding and prevent blood loss!

For minor cuts and scrapes:

- Flush with water, saline solution, eye wash or Chlorhexidine. If animal starts to lick obsessively at wound, bandage loosely or apply a cone collar to prevent pet from getting to injury.
- Use styptic powder to control bleeding toe nails and watch to make sure injury doesn’t become infected.

For severe bleeding injuries to the legs/limbs:

- Apply direct pressure with gauze pads over the wound to stop bleeding.
- Elevate the limb if bleeding hasn’t stopped by placing a pillow or folded towel under injured body part allowing it to remain elevated above animal’s heart.
- If above steps do not control bleeding,
apply pressure to one of the 5 arterial pressure points to diminish blood flow. The pressure points are located in areas where arteries are closest to the surface of the skin.

<table>
<thead>
<tr>
<th>Pressure Point</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Leg</td>
<td>Above the elbow joint, toward the inside of the front leg (arm pit area)</td>
</tr>
<tr>
<td>Rear Leg</td>
<td>The inside of the upper thigh where the leg meets the body</td>
</tr>
<tr>
<td>Front Foot</td>
<td>Behind the front foot, just above the largest pad.</td>
</tr>
<tr>
<td>Rear Foot</td>
<td>Behind the rear foot, just above the largest pad.</td>
</tr>
<tr>
<td>Tail</td>
<td>The underside of the tail, at the base.</td>
</tr>
</tbody>
</table>

Select the pressure point that is in direct correlation to the injury.

- Wrap flat gauze with rolled gauze, overlapping each layer by about ¾ widths each time around the leg, then secure with self-adhering elastic bandage making sure you can slip a finger underneath so as not to cut off circulation, then get professional medical help.
- Never apply a tourniquet to control severe bleeding.

Paw Pad Wounds
- Remove obvious debris and flush to clean.
- Elevate if needed to control bleeding.
- Dry paw and bandage by placing a non-stick pad on the wound.
- Wrap paw with gauze going between each of the toes - in a figure eight pattern - to hold it in place.
- Secure firmly but not tight with self-adhering wrap.

Ear Injuries
- Ears are higher than heart so you have built-in elevation.
- Press upright ears down against the cheek to apply direct pressure.
- Flip downward ears up and fold onto top of head to apply direct pressure.
- Bandage in place using the good ear as an anchor (go around front of good ear first, then behind) to secure in place.
• A helpful final step is to use the sleeve off a cotton t-shirt or cut the toe off a cotton sock and use as a “headband” over the ears to hold bandage in place.
• For small nicks or cuts to the ear, styptic powder may be used to control bleeding.

Tail Injuries
• Apply direct pressure with gauze pad and lift tail to elevate.
• If needed, press on pressure point at base of tail to diminish blood flow.
• Wrap tail with gauze roll to secure flat pad, then slip a cotton tube sock (children’s size may be needed depending on size of animal) over the gauze roll.
• Beginning at tip of tail, wrap sock in a figure-eight pattern with adhesive tape going up the tail and 2” beyond sock and directly onto fur.
• Complete the figure-eight back down the tail being careful not to wrap too tightly.

Chest Injuries
• Apply direct pressure with a flat square of gauze directly over the wound.
• There are no applicable pressure points.
• When applying gauze roll, wrap it around entire torso to hold in place then secure it to itself with adhesive tape.
• You can doubly secure by placing a triangular bandage under pet’s chest on top of bandage and knot at back/shoulders to hold in place.
• An alternative is to fit the pet with a child’s cotton t-shirt on top of the bandage.

**Important Note:**
If bleeding does not stop within 15 minutes after application of direct pressure, seek veterinary care immediately.
Burns

Cats love heat and will lounge on surfaces well over 100.0 F and are even attracted to gas stoves and candles. Dogs usually shy away from heat and don’t get burned as often.

Just like humans, our pets can obtain first, second and third degree burns as well as tissue damage from chemicals and electrical sources. Depending on the severity, a Vet visit may be in order, but your priority is to stop ‘the cooking’ of your pet’s skin and tissues as well as alleviate discomfort which can range from uncomfortable to intensely painful. Remember first and foremost to safely restrain pets before assisting and do all you can to prevent these injuries in the first place.

First Degree Burns (caused by a heat source) – skin appears dark pink or red

- This is the least-severe type of burn and is most commonly caused by sunburn
- The first goal is to cool the pink skin with room temperature water (applying ice to a burn restricts blood flow and is not advised).
- Apply pure aloe-vera gel to promote healing after carefully trimming fur away with blunt-nosed scissors.
- If skin is unbroken, home care should suffice, just prevent pet from obsessive licking or scratching injured area open.

Second Degree Burns (caused by a heat source) – Identified by the presence of blisters and/or serous fluid (clear fluid commonly found in blisters)

- Flush gently with cool (not ice-cold) water for 5-10 minutes. Burns can continue to cause damage even after the initial source of the burn has been removed. The flow of cool water reduces temperature below the skin surface to help prevent further damage.
- Pat dry with a soft cloth (not cotton balls which leave fibers behind)
- Bandage loosely (using a non stick pad) and seek veterinary help immediately.
- Second degree burns are painful and susceptible to infection since there are open sores.
- Do not apply any gels, ointments or sprays – medications are best determined by a Veterinarian.
Third Degree Burns (caused by a heat source) – Surface of the skin will appear charred, white or leathery and brown

- Third degree burns go through all the layers of skin and into the muscle underneath.
- This type of burn always requires immediate veterinary care.
- Although third degree burns are very serious, they are often less painful than second degree burns. This is because these burns typically destroy the nerve endings in the burn area.
- Restrain the pet and bandage loosely (wrapping animal in a clean sheet will do) and get to professional veterinary help as quickly as possible.
- As with second degree burns, do not apply any gels, ointments or sprays – medications are best determined by a Veterinarian.
- During transport to the veterinary facility, monitor the animal for signs of shock (which you will learn more about in this book) along the way.

Chemical Burns

- Flush liquid chemicals from pet’s body with copious amount of cool to lukewarm (water that is too hot may speed up the absorption of the chemical through the skin while water that is too cold can cause hypothermia) for about 10 minutes.
- If you believe that an animal in your care has been exposed to a chemical agent that may affected their lungs, monitor the pet’s breathing for 24 to 48 hours after initial exposure. If you notice abnormal changes in breathing, seek veterinary care immediately.
- If chemical is oily/greasy by nature, dishwashing liquid into the fur/skin first to dissolve grease before flushing with water.
- If it is a dry chemical (powdered or granular), brush away or even vacuum out of the animal’s fur if he will allow you to do so safely. Adding water may further activate the chemical, so do not flush with water until any dry chemical has been removed.
- Seek veterinary advice immediately if the burn appears to be either second or third degree (as described above).
- Bring the chemical container (if possible) with you to the veterinary facility.
Electrical Burns

**Important Note:**
Do not touch an animal that is/has been electrocuted until the electricity is off or the source of electrocution is safely away from both you and the animal.

- Immediately check if the animal is breathing and has a pulse.
- If the animal is not breathing, administer Rescue Breathing or CPCR (if heartbeat is also absent) and get to veterinarian immediately.
- Even if the animal is conscious after electrocution, it is still advisable to seek veterinary attention because even minor electrical shocks can damage blood vessels in the lungs which could cause a slow leak of fluid that can make breathing difficult. It can take anywhere several hours to two days before symptoms (shortness of breath, loss of appetite, lethargy) set in. Do not delay veterinary care.
- Check the animal for burns to the face or in the mouth.
- Bite marks on an electrical cord or a burning odor in the room could imply your pet was burned or received a shock, so don't delay.

**Drowning**

Not all dogs and cats know how to swim. Dogs with short necks have difficulty keeping their heads above water. Make any water environment safe for Fido and Fluffy by fencing it off, attaching a pet ramp to the side of swimming pools or making pets wear a life-jacket when at the lake or boating.

If you find an animal in a body of water, quickly remove him by pulling his collar with a pool skimmer or whatever implement you can find.

Hold cats and small dogs securely by the hind legs to drain water from lungs, windpipe and mouth. For larger animals, place in wheelbarrow position (front legs on ground while you hold up hind legs) taking care not to hit snout or head of unconscious animal on ground. If this method is unsafe for the handler or is unsuccessful, lay the dog on its side and elevate hind quarters with cushions to help drain water. With animal on his side, it may help release water if you place the heel of your hand in the dip behind the
last rib and thrust up sharply towards the head 3-4 times. Do not spend more than a
minute doing this however since the lungs quickly absorb water and any water that does
not come out quickly probably won’t come out.

If there is a heartbeat but the animal is not breathing, begin rescue breathing
immediately. Wrap the animal in towels or blankets to keep from going into hypothermia
and continue rescue breathing until the animal shows signs of recovery or until a
veterinary professional can take over.

If the animal is not breathing and there is an absent heartbeat, begin CPCR and get
prompt veterinary attention. Do not stop CPCR unless the animal shows signs of
recovery or until a veterinary professional can take over.

**Falls or High-Rise Syndrome**

Contrary to popular belief, falling cats do not always land on their feet. Cats can sustain
injuries such as broken bones & jaws, ruptured organs and even death from falling out of
open windows, off balconies and from rooftops. Even if you don't see an animal in your
care fall, a limp or refusal to move or eat could alert you to a broken bone or internal
injuries; some of which may not be apparent immediately.

Cats have a fluid-filled organ in their inner ear (vestibular apparatus) that helps them
"right" themselves during a fall. In a study from the Journal of American Veterinary
Medical Association, 132 cats were studied who fell out of high-rise windows. On
average, the cats fell 5 1/2 stories yet 90% of them survived. Many suffered severe
injuries. The number of broken bones and other injuries appeared to increase with the
number of stories the cat fell, up to 7 stories. Above 7 stories, the added time falling
gave cats time to slow themselves down and relax so that the abdomen and chest
absorbed more of the impact rather than their head and legs. During the shorter falls,
cats often landed on their feet with their legs rigid. This resulted in multiple fractures,
chest, jaw & spinal injuries, concussions and ruptures of internal organs.

Dogs are just as likely to be injured in the event of a fall. Unlike cats, they do not typically
land on their feet and their bodies are typically much denser than a cat’s body. This
means that they fall faster and harder; exponentially increasing the likelihood of severe injury.

If you witness a cat or dog fall from any elevation – even if the animal did land on it’s feet:

- First check to see if the animal is breathing and has a heartbeat. If not, administer CPCR or rescue breathing as previously learned and get veterinary attention immediately.
- If animal is conscious, check for bleeding and internal injuries and treat accordingly. Know that any blood in the eyes, nose or mouth could mean a possible head injury.
- A pet that can’t get up or refuses to get up could have a back injury. Keep your dog or cat as still as possible. Do not try to pick him up to move an animal if back or neck injury is suspected. Instead, slide a flat rigid object such as a cookie sheet or cutting board underneath him and then secure him with a towel or gauze roll to hold him in place.

NOTE: The best cure for High-Rise Syndrome is prevention. Make sure you have screens securely in place on all windows and don’t give pets unsupervised access to balconies, rooftops or other high places.

**Frostbite**

Dogs and cats are not immune to extreme-weather ailments. They cannot tell us when their paws are getting numb. We usually only find out once it hurts for them to step and the tissue is hard (frozen) and dark which generally requires surgery.

Monitor the animals in your care and promptly get them out of the cold and into warmer environment. Wrap frozen paws with blankets (tumbled briefly in a warm—not hot -- clothes dryer) but do not massage area if tissue is hard as it will hurt. Lower legs, paw, tail (if affected) by having pet lay in your lap or on a sofa to promote circulation to frostbitten parts and seek veterinary assistance immediately.
Heat Stroke

It only takes a short period of time for an animal left in a car to get into a deadly situation. Pets don’t sweat to regulate their body temperatures (normally 100.0°F – 102.5°F). They release heat through their tongue, nose and foot pads. Dogs pant to exchange cooler outside air with the warm humid air in their lungs while cats don’t usually pant until they are overwhelmed by the heat. If the outside air isn’t cooler than an animal’s body temperature, the animal can succumb to Heat Stroke. Without prompt attention, Heat Stroke can result in brain damage, kidney failure, cardiac arrest and death. Older and overweight pets as well as short-nosed breeds are at the greatest risk.

Symptoms of Heat Stroke include:

- heavy panting
- gasping
- vomiting (if not yet dehydrated)
- foam around the mouth
- weak or high pulse
- inability to drink
- bright red or suddenly bluish gums
- loss of consciousness

Heat Stroke is a life-threatening emergency that requires veterinary treatment. If you suspect an animal in your care is suffering from Heat Stroke:

- The goal for the administration of first-aid to a suspected heat-stroke victim is to remove the animal from the source of the heat-stroke, prevent internal body temperature from continuing to rise and transporting to a veterinarian as quickly as possible.
- Move the animal to a cooler environment. Indoors is best with a cool fan blowing on your pet but even a shady sidewalk or grassy area can help.
- Immerse in lukewarm water (not ice) beginning at the paws on up if animal is too large or if you don’t have appropriate size tub. Getting the skin on the paws, pits, groin and belly skin cooled is most imperative. Water often skids off fur on breeds with undercoats and does not cool skin when applied to their back.
• Rubbing alcohol wipes applied to the inner flaps of the ears and pads of the feet have a cooling effect. Do not douse a dog with an entire bottle of rubbing alcohol. This could cause a sudden change in body temperature and result in shock.

• Placing a cool pack (or bag of frozen peas) on dog or cat’s neck and groin can prove helpful in cooling him off. Remove pack every few minutes to make sure you don’t cause frostbite to animal’s tissue.

• Do not force pet to drink as he could aspirate fluid into his lungs. At the Vet’s office he will receive IV Fluids.

• Check your pet’s temperature and if it is 103.0°F or higher, get to the Veterinarian immediately! Wrap animal in wet sheet or towel, turn on car air conditioning and drive quickly but safely.

• If pet goes unconscious, rub a little honey or Karo Syrup® on his gums to increase blood sugar level, and be prepared to administer CPCR.

• If the pet cools too quickly and temperature drops to 100°F, cover him with a blanket and place a 2-liter bottle filled with warm (not hot) water next to him as you immediately transport him to your Veterinarian.

**Hot Spots and Lick Sores**

Cats seldom get hot spots, but dogs develop red, wet sores that make their skin look raw that can be caused by a wide range of things when a spot on their skin begins to itch and they start licking and chewing at it. Bacteria grows and spreads quickly creating a wound that can be painful but generally only involved the top layer of skin so can heal quickly with first-aid.

Trim fur around sore with blunt-nosed scissors so that you can easily clean area with warm water. Gently pat the area dry with a soft cloth. Do not apply ointments to a hot spot as these products seal in infection while medications containing alcohol will burn in an open wound. Instead use an antibacterial spray or cream that dries up the sore or apply a tea bag (black tea, not herbal, that has cooled after being soaked for 5 minutes in hot water). The tannic acid is a natural astringent that dries and heals. Use this treatment 3-5 times per day until healed.
Hot spots that persist without obvious signs of improvement for more than 7 days should be evaluated by a veterinarian.

**Imbedded Objects**

If you find an animal in the unfortunate situation of having a stick, arrow or other object imbedded in a body part:

- Keep the animal as still as possible.
- If area is bleeding externally, secure the object in the exact position it is in by placing gauze rolls on each side and wrapping with a third roll.
- Make this wrap snug enough to hold the object in place but not tight enough to restrict blood flow or breathing.
- Place a brace around the imbedded object by cutting a hole in the top or slit the side of a plastic margarine tub or Styrofoam cup – the slit allows the object to penetrate up and through the container but remain still. Then tape the container firmly to the pet’s body to prevent movement.
- Do not attempt to brace or stabilize an imbedded object if the animal is struggling, resistant or showing obvious signs of extreme pain and/or aggression. The animal could either cause the object to become imbedded further or cause physical harm to you (the first-responder).
- Transport the animal to the veterinary hospital immediately.

**Important Note:**

Never attempt to remove an object that has punctured all layers of the skin. This could cause more severe bleeding or tissue and organ damage.

**Vomiting and Diarrhea**

Although vomiting and diarrhea can be the result of poisoning or illnesses; most of the times it is a simple digestive upset for our four-legged friends. The dog or cat may have eaten too much, too fast or they may have eaten something that was spoiled – like out of the garbage can.
If an animal in your care is experiencing vomiting and/or diarrhea and you know that it is not the result of poisoning:

- Rest the stomach by withholding food for 24 hours but always provide fresh water – preferably in small but frequent doses as drinking a lot at once could cause it to come right back up.
- If all is well in 24 hours, you probably have a hungry animal on your hands so feed a bland diet for a few days (plain steamed rice and boiled white chicken is a good option) before getting pet back on his regular diet.
- If vomiting/diarrhea persist beyond 24 hours, or if at any time you notice blood, get to your Veterinarian and bring a vomit/diarrhea sample along.

**Constipation**

When an animal is constipated, feces are not leaving the animal's body and have compacted in the colon. If constipation occurs frequently, get the pet checked out by your Veterinarian. If this is a first time occurrence, try one of the following methods of relief:

- Encourage increased water consumption, particularly if adding fiber (like Bran Cereal) to the diet
- Bran Cereal (no sugar type) - Add 1 tablespoon for a cat or small dog and up to 3 tablespoons for a large dog to their daily meal
- Pureed Cooked Pumpkin - Give 1 tablespoon to a cat or small dog and up to 3 tablespoons for a large dog daily
- If animal has not resumed normal bowel movements in 24-48 hours, seek veterinary care

NOTE: Giving cats ½-1 teaspoon of cooked pure pumpkin daily also assists in the elimination of fur balls along with good brushing.

**Bloat (Gastric Dilation & Volvulus or GDV)**

Bloat is a life-threatening condition where the stomach fills with gas. It occurs rapidly and can be fatal within 30 minutes. It mostly occurs when dogs consume large quantities of food or swallow excess air while eating. It can also occur when the valve at the bottom of the stomach becomes blocked and gas or other material produced by the digestive process can't exit the stomach.
When the stomach becomes dilated (gastric dilation) it presses against other organs; including the diaphragm, making it extremely difficult to breathe. This dilation makes it easier for the stomach to twist a quarter to a full turn onto itself; this twisting is called *volvulus* or torsion.

When an animal experiences this condition, all materials are prevented from entering or leaving the stomach. Tissue in the stomach walls quickly die and the animal has difficulty breathing as there is little room for his diaphragm to expand. GDV most often occurs in large-breed deep-chested dogs like Great Danes, Saint Bernards and Weimaraners, but has also been documented in some small dogs and cats.

The most obvious signs of Bloat are:

- distended, swollen-looking belly that appears quickly
- retching or the dry heaves; animal tries to vomit but can only get up saliva
- restlessness or collapse
- difficulty breathing

**Important Note:**

Bloat is considered a life-threatening emergency must be treated by a veterinarian immediately. There are no first-aid treatments which are recommended for gastric dilation or torsion. Do not delay getting prompt veterinary attention.

Many things can contribute to Bloat including genetic predisposition – large deep-chested breeds appear more susceptible, but additionally:

- Feed two small meals rather than one large meal daily so that the stomach is never overly full.
- Do not allow your pet to exercise for 45 minutes to an hour after meals. When animals run, roll on their backs or move quickly, a full stomach can swing like a pendulum and flip.
- If pet has been exercising, do not allow him to eat or drink until his breathing is back to a normal rate as he will gulp too much too quickly (including air).
Insect Stings and Snake Bites

Dogs and cats are natural hunters and may seek out insects and snakes as prey. Just as with humans, dogs and cats can experience an allergic or inflammatory reaction if bitten or stung. Should your dog or cat experience this kind of reaction, follow the steps below for a healthy outcome.

Bee Stings

Most pets, especially dogs, are bitten or stung on the face or in the mouth. Dogs are inquisitive and inspect objects, including insects, with their nose and mouth. Sometimes dogs are even stung inside their mouth because they snap at bees. It is also possible for an animal in your care to sit or step on a stinging insect.

- If you see the stinger, flick it away with a credit card, popsicle stick or even your finger nail. Do not attempt to pull it with fingers or tweezers as you are likely to puncture the poison sac allowing the toxin to enter the animal’s body. If you can’t find it, don’t worry. The animal probably already pawed it away.
- Administer 1 mg Benadryl®/antihistamine per pound of pet’s body weight. Be advised that this will make the animal sleepy and hopefully prevent him from further scratching. This dose can be repeated in 6-8 hours if swelling persists. Beyond that, seek veterinary care.
- Apply cold pack to any swelling, but remove every few minutes to avoid frostbite or place a damp washcloth between cold pack and pet to dissipate coldness.

If sting is in the mouth:

- Offer pet an ice cube or ice water to minimize swelling.
- Flush pet’s mouth (using an eye dropper, turkey baster, or gentle spray of a squirt bottle) with a teaspoon of baking soda diluted in a pint of water to help neutralize insect toxin.
Important Note: Anaphylactic shock

Some animals, like people, are highly sensitive to insect toxins and can go into anaphylactic shock (a severe allergic reaction which can cause the circulatory system to shut down). If you notice any of the following symptoms, which usually occur within one hour, you must seek veterinary assistance immediately:

1. Severe and profuse swelling (i.e. The entire face as opposed to just the lip)
2. Difficulty breathing or increased respiratory effort (possibly due to the throat swelling shut.
3. Very pale or blue-tinged mucous membranes (cyanosis)
4. Rapid and/or irregular pulse
5. Prolonged capillary refill time (CRT)
6. Below normal body temperature (less than 100.0 F)

Spiders

Most spider bites can cause painful swelling but should be treated like bee or wasp stings. Several species of spiders are venomous and in addition to the painful bite, pets can experience fever, chills, breathing difficulties and shock within 30 minutes to several hours.

First aid helps but if you suspect your dog or cat has been bitten by a venomous spider, apply ice, restrain his movement (movement hastens the spread of venom) and get him quickly to your Veterinarian. If you can, bring the dead spider with you unless you already know what kind of spider it was.

Fly Bites or Fly Strike

Dogs with upright ears seem to hold the biggest temptation for flies. The stable fly – which looks like a regular house fly – has bayonet-like, needle-sharp mouthparts which it uses to get blood from your pet. Dogs with fly bites don’t bleed much but the ear tips get crusty form the inflammation and serum that leaks from the bites.

- Soften the scab with a warm wet washcloth. Take 2-3 minutes until it can be gently wiped away.
- Clean with an antiseptic liquid soap like Betadine® or Chlorhexidine. For cats, plain warm water is safest.
Apply an antibiotic ointment to prevent infection and keep your pets fly-free.
If your pet must be outside, consult with your Veterinarian in regards to a topical fly repellant that can be applied to your animal.

Snakes
Both poisonous and non-poisonous snakes can be problematic to your pet as even those without venom carry bacteria in their mouths which can result in infection. The physical appearance of each snake species varies, and it may be difficult to tell which species you’ve encountered unless you are familiar with herpetology (the study of amphibians and reptiles). Here are general guidelines to help you determine if what you are seeing is a poisonous snake:

- A broad, triangular head with a noticeable “neck”.
- Vertical pupils while non-poisonous snakes have round pupils (hopefully you won’t be close enough to evaluate this).
- “Pit Vipers” have heat-sensing “pits” on their faces between the eye and nostril which help them locate prey.
- Two fangs which leave puncture wounds; Non-poisonous snakes leave a bite or bruise mark that resembles a row of teeth – like when you bite out of a sandwich.

As with many other scenarios requiring first-aid, prevention is the key; and your best safety device is keeping control of the animals in your care. Try to prevent pets from exploring holes or digging under logs or rocks where snakes may hide out. When on walks, stick to open paths and keep down the rodent population in your outdoor area by eliminating garbage, wood piles and ivy.

Venomous snakes (Rattlesnakes, Copperheads, Coral Snakes, Cotton Mouths, and Water Moccasins to name a few) can be found in rural areas as well as suburban areas where there is sufficient natural habitat. In cold climates most hibernate from November through March.

Venom is a toxic fluid created in specialized oral glands that comes in two forms: Hemotoxic venom disrupts the integrity of the blood vessels causing swelling as blood seeps into the tissue and prevents clotting. Neurotoxic venom results in paralysis including that of the respiratory muscles ending in suffocation.
The degree of severity of any venomous snake bite depends on several factors:

- The species & size of snake (Baby snakes are born with fangs and venom and generally give all they have and hang on longer).
- The size of the animal bitten
- The amount of venom injected (approximately 20% of bites are "dry" meaning no venom has been injected; 50% of bites are severe and approximately 5% fatal).

If an animal in your care is "struck" (bitten) by a snake, it is best to assume it is a poisonous bite and proceed as follows:

- Keep bite wound below level of heart to prevent speedy absorption to heart.
- Keep animal calm – the faster he moves, the faster the venom circulates.
- Get the animal to an emergency veterinary hospital immediately. Treatment with antivenin will be required if an animal has been bitten by a venomous snake.
- Part of your pet first-aid kit should include the phone number for your nearest emergency veterinary hospital. Call the hospital to make sure they have antivenin on hand.

Do not do the following:

- Cut over the bite and try to suck out the poison. You will probably not be successful and by cutting tissue, you are more readily allowing toxin to be absorbed into tissue.
- Manipulate the bitten area any more than needed.
- Allow the pet to move about freely.
- Place an ice pack over the bite. This will keep the concentrated toxin in one place causing extensive, irreparable tissue damage.

**Important Note:**

Antivenin is an antidote; a biological product consisting of antibodies made by horses in response to exposure to four common *Crotaline* (rattlesnake) venoms. The antibody serum is reconstituted into an intravenous drip that is run into the patient over at least 30 minutes or so. It is expensive (approximately $800 per vile in most areas) and a large dogs likely to require 3-4 vials.
Rattlesnake Vaccine is not a cure-all but can minimize the severity, which has the two-fold benefit of giving more time (before death occurs) to get to a veterinarian and may reduce the number of antivenin vials needed for treatment. For these reasons, the vaccination is beneficial if you live in a snake-prone area. Check with your Veterinarian for details.

It is easier to prevent snake bites than it is to treat them.
- Stick to open paths when walking a dog.
- Don’t let them sniff under rocks and logs.
- Eliminate garbage, wood piles and even ivy from pet play areas.
- Look into a Rattle Snake Aversion Class to see if it can deter your dog from going after a snake in the first place.

**Low Blood Sugar (Hypoglycemia) / Fading**

Low blood sugar can be an issue caused by your pet's pancreas malfunctioning, but liver disease and even parasites can cause hypoglycemia. Toy breeds and juvenile animals (less than 4 months of age) may develop this condition when their livers can’t produce the sugar needed.

The ability to recognize the signs of Fading is critical:
- Twitching, shaking or wooziness
- Head tilt
- Seizures
- Loss of consciousness

The quickest way to reverse hypoglycemia is to give administer sugar by mouth (honey, Karo Syrup®, pancake syrup) – 1 teaspoon for pets under 50 lbs and 2 teaspoons for animals over 50 lbs.

If pet is unconscious or can’t swallow, rub the syrup on the lips and gums. If animal is not alert and breathing normally within 5 – 10 minutes, seek immediate veterinary attention.
Muscle and Joint Injuries (Breaks, Sprains and Strains)

You will probably not have immediate access to an x-ray machine when an animal in your care begins limping, you may not know if the animal has experienced a break, tear or muscle strain. A broken bone (which requires emergency care) results when a bone is cracked or actually separated due to trauma. A compound fracture (broken bone that has penetrated the skin) can cause severe bleeding, so you should try to control the bleeding as much as possible while transporting the animal to the nearest veterinarian.

A sprain or strain occurs when a ligament is over-stretched. Although sprains and strains are painful, they will often resolve on their own without surgical intervention. Should a ligament become torn, it will require surgical repair. All of these injuries are painful and can cause a great deal of swelling. Even if you do not suspect a broken bone, animals showing signs of lameness should have their activity restricted to minimize use of the injured limb.

As soon as you notice that an animal in your care is limping:

- Restrict exercise immediately.
- Apply cold compress to alleviate swelling. If needed, the compress may be applied three to four times daily at five to ten minute increments. Do not do this if the animal is resistant or showing obvious signs of extreme pain.
- If the animal does not show obvious signs of improvement after 24 hours of rest and intermittent application of a cold compress, it is recommended that you seek veterinary care.
- If you suspect a break (i.e. you can see bone penetrating skin or a limb is hanging very loosely), immobilize the limb immediately by securing a rolled-up newspaper to a large dog’s leg or a popsicle stick to a cat’s limb with gauze and/or self-adhering wrap. Again, do not attempt to apply any kind of immobilization device if the animal is resistant or in extreme pain. Seek professional veterinary help immediately.
Poisoning

It is important to be proactive in making sure that an animal’s environment is free of potentially hazardous substances. The animals in your care depend on you to keep them safe.

- Examine your house & yard from an animal’s point-of-view. Keep harmful items out of reach.
- If the animals in your care are curious, install childproof locks on cabinet doors.
- Read labels and purchase “Pet Friendly” chemicals.

Dogs love to chew. That spray bottle, aerosol can or other container under your cabinet can be deadly if an animal punctures it and ingests the liquid inside. Many cats may love spending time pouncing in the greenery – but did you know that many species of lilies are fatal to our feline friends? Knowing what to do and having the necessary tools on hand can avert a minor injury or a major disaster.

Size does matter when it comes to poisoning. What could kill a Chihuahua may have no affect on a Saint Bernard. The ability for any potentially poisonous substance to cause health issues is proportional to the animal’s body weight.

Chocolate is most poisonous to dogs, cats and ferrets. Although antioxidants in dark chocolate are considered good for human hearts, the darker the chocolate, the worse it is for many animals. The culprit is theobromine -- both a cardiac stimulant and a diuretic, which can speed up the heart while pulling fluids from the body resulting in vomiting, diarrhea, rapid heart rate, seizures and death.

One ounce of milk chocolate per pound of body weight can be fatal to dogs. The darker the chocolate, the higher the concentration of Theobromine; which means that it takes a smaller amount to produce the same ill effects.

The standard rule of thumb for the rate at which chocolate becomes toxic to dogs is as follows:

- Milk Chocolate - 1 ounce per pound of body weight
- Dark Chocolate – ½ ounce per pound of body weight
- Baker’s (unsweetened) Chocolate – ¼ ounce per pound of body weight
• Dry Cocoa Powder – 1/8 ounce (less than one teaspoon) per pound of body weight
• Cocoa Bean Mulch – Due to the variation in manufacturing, the concentration of theobromine can vary depending on the manufacturer. However, if you suspect that an animal in your care has ingested cocoa bean mulch, seek veterinary advice. The concentration of theobromine in some cocoa bean mulch can be similar to that of unsweetened Baker’s chocolate.

Every year thousands of pets needlessly suffer, and many die, from ingesting substances in our homes and even from human food. Learn what to do before it’s too late and do not assume that an animal will know how to avoid potentially harmful substances.

The following are common signs of poisoning or toxicity in dogs and cats:

• Muscle tremors or seizures
• Vomiting and/or diarrhea, sometimes with blood
• Drooling or foaming. Pawing at the mouth
• Redness of the skin, ears, eyes
• Lethargy or anxiety
• Blisters on the mouth or skin where poison made contact
• Swelling
• Elevated or decreased heart rate, breathing and body temperature

As outlined for inclusion in your pet first-aid kit, make sure you have the following information close at hand in the event of a suspected poisoning:

• Have phone numbers for your veterinarian and poison control easily accessible.
• ASPCA Poison Control Center Hotline (888) 426-4435
• Know the weight of the animals in your care so that you can properly administer solutions (only on the advice of a veterinarian).

If you know (or suspect) that an animal in your care has been poisoned, immediately gather the following information (if possible):

• Determine the type of poison, how much ingested and how long ago.
• Check the animal’s vital signs (temperature, heart rate, respiration, capillary refill time, gum color).
• Observe symptoms (difficulty breathing, vomiting, diarrhea, seizures, bleeding, etc).

It is important to stay calm and react to the situation in a reasonable manner. If possible, read the container label of the substance that you suspect the animal has ingested. Immediately call your veterinarian or poison control and do as instructed exactly as instructed.

**Important Note:**

In some instances, you may be advised by a veterinarian to induce vomiting. Never induce vomiting unless directed to do so by a licensed veterinarian.

**To Induce Vomiting** (may be recommended if the animal has ingested chocolate):

• Give your pet 3% Hydrogen Peroxide (1 tablespoon for every 10 - 15 lbs of the animal's body weight) with an oral syringe or turkey baster by dribbling the liquid onto the back of his tongue or into his cheek pocket until swallowed.
• Once the animal has swallowed all of the hydrogen peroxide, have the animal stand in front of you and give them a vigorous belly-rub. They should vomit within 10-15 minutes.
• Collect vomit and take it, the poison container and your pet to the veterinarian ASAP.

If you suspect that an animal has ingested a potentially caustic substance, do not induce vomiting. Proceed immediately to your veterinarian.

**Other ways an animal in your care can be poisoned**

In addition to what goes in their mouths, dogs and cats can be poisoned by toxins that are absorbed, inhaled or injected into their bodies. Therefore knowing what, where (which body part) and how much Fido or Fluffy got into determines your course of action.

• **Absorbed Poisons** are substances that get on our pet’s paws and coat and are absorbed through their skin. These poisons may also be ingested once the
animal licks and grooms himself. Wash the area thoroughly and visit your veterinarian to prevent long-term effects and discomfort. For oil-based toxins (petroleum products) use a gentle dishwashing liquid before flushing with water. If the poison is powdery (such as sink scrubs or granulated swimming pool chlorine), dust or vacuum away most of the substance before washing the area. If the irritant is in your pet’s eye, carefully flush the eye with purified water/eye wash.

- **Inhaled Poisons** include aerosol sprays, carbon monoxide, gases, and other fumes inhaled into your pet’s lungs. Quickly get the animal into fresh air and administer Rescue Breathing if needed by holding his mouth shut and breathing into his nostrils – every other second for animals 40 lbs and more while twice as quickly for smaller animals but with smaller puff breaths.

- **Injected Poisons** include insect stings and snake bites already discussed in this unit.

**Common Household Poisons Include:**

- Alcoholic Beverages
- Antifreeze (Ethylene glycol)
- Batteries
- Detergents, Fabric Softeners and Cleaners
- Fertilizers and Insecticides, especially snail/slug bait pellets and rat poisons
- Foods – chocolate, coffee, tea, grapes & raisins, Macadamia nuts, onions, bread dough, fruit seeds & pits, gravies and high-fat foods
- Medications (over-the-counter and prescription)
- Plants
- Trash

Visit www.aspca.org or www.hsus.org for a more complete list of things that can harm your pet!

**Prolapse**

A prolapse occurs when a part of the body (typically an internal structure) slips or moves out of place. Injuries, illness and trauma can sometimes cause the breakdown of vulnerable areas of the body and result in prolapse.
The body parts that most commonly protrude are:

- The rectum - generally due to straining/constipation
- The urethra – usually occurs in young male dogs and is generally associated with poor development of the urinary tract.
- Paraphimosis - inability to completely retract the penis into the sheath.
- The vagina (may include the uterus) – generally due to straining associated with birth (whelping in dogs and queening in cats)
- The eyes (often caused from too much pressure placed above the eye socket – especially in dogs with prominent eyes like Pugs or Pekingese).

Should you notice a protrusion, the first course of action is to contact your veterinarian and get your injured pet there promptly, but before you head out, soak gauze squares with saline solution and apply to protruding area. This helps keep the organ's tissues from drying out and increases the chance that the veterinarian will be able to revitalize the damaged organ tissue. It also prevents the dog from chewing on the exposed organ.

When the eyeball is displaced outside of the eye socket, the eyelids are curled back and trapped behind it. This is a very serious condition because the lid cannot cover the eye and the surface of the eye rapidly becomes dry and discolored. Rinse with saline every 5 minutes to keep moist until you reach your Vet’s office.

For rectal prolapse, you may apply water-soluble lubricating jelly to ease discomfort while en-route to the veterinarian. In many instances, the veterinarian will be able to replace the prolapsed rectum surgically.

For the urethra, applying a water-soluble lubricating jelly to the end of the penis and gently move any hairs that might be preventing retraction may allow it to return to its sheath. If however you are uncomfortable attempting any of these procedures, do as first mentioned and cover with a saline soaked cloth and get pet to prompt medical attention.

In cases of paraphimosis, initial treatment is similar to treatment for a prolapsed urethra. Rinse the extruded penis with copious amounts of saline solution to help decrease inflammation of the tissues. Next, apply water-soluble lubricating jelly and seek
veterinary attention. Medical intervention is generally necessary, as the prepuce may constrict blood flow which could cause tissue death in the penis.

NOTE: For any of these injuries, it is advisable to apply an Elizabethan (cone) collar to prevent the animal from chewing, licking or disturbing the injured area.

**Punctures and Bite Wounds**

Although they can look minor from the outside, it is best to get an expert’s opinion on puncture and bite wounds as radiographs or ultrasounds might be needed to diagnose internal bleeding and damage. Objects that pierce the skin (nails, teeth) leaving small hole(s) on the surface are considered puncture or bite wounds. When this occurs, bacteria enters the wound and can quickly cause infection. Cat bites are 10 times more likely to become infected than dog bites. It is always best to obtain professional veterinary care.

Dog bites can create damage involving the tearing of skin and deep layers of muscle. Large dogs are capable of inflicting bone crushing injuries. Deep injuries around the neck and chest are commonly seen if a smaller animal is attacked (picked up and shaken) by a large dog. Bite wounds on dogs are often disguised by fur and can develop into an abscess if they are not immediately treated.

Degloving injuries result when skin is torn away and include significant tissue damage and blood loss. Cats that climb into car engines suffer this injury from fan belts; dogs from animal attacks, entanglement in barbed wire fencing and even being hit by cars. If blood supply in not quickly returned to the skin, necrosis may occur and skin grafting may become necessary.

Stop bleeding by applying direct pressure. If the wound is not bleeding, rinse with saline solution. Puncture wounds that penetrate all layers of the skin can allow bacteria to penetrate deeply into the body. As the tissue begins to close, the bacteria can quickly cause infection.

If the puncture is from an animal bite, find out if other animal is current on his vaccinations (if possible). Pain, redness and infection can occur around untreated areas.
and your pet may develop a fever, loss of appetite and become lethargic. Antibiotics most likely will be needed to get him through this episode.

**Punctures to the Chest (Sucking Chest Wounds)**

If a chest wound exposes the lung or if there is a puncture that allows “sucking” of air into the chest when the animal inhales, you must act quickly before obtaining medical assistance. Wounds that penetrate the chest wall are called “sucking chest wounds” because often a very distinct “sucking” sound can be heard as the animal breathes.

If the wound has a tiny entry, seal it with a big glob of K-Y Jelly® to prevent incoming air from collapsing the lung. If lungs collapse, it will be very difficult for the animal to breathe. Next put a clean cloth or plastic wrap/baggie on top of the opening and hold in place with tape on 3 of the 4 sides, this allows one side to lift up if necessary to allow air to escape (on inhalation, lungs push air out of the chest cavity and back through the hole – the plastic will lift on that side and let it escape but when animal exhales and lungs deflate, the sucking of the wound will pull the plastic back against the hole and prevent additional air from entering).

If the wound is too large for water soluble lubricating jelly, cover tightly with plastic wrap to form a seal and tape it in place until you reach the vet. If possible, have the pet lay on the injured side to keep pressure on the bleeding and help seal the hole.

**Seizures / Convulsions**

A seizure or convulsion is a sudden excessive firing of nerves in the brain. It causes a series of involuntary muscle contractions and abnormal behaviors lasting from seconds to minutes.

The severity can range between a glazed-over look to the eyes, twitching in one part of the face to the animal falling on his side, barking, gnashing his teeth, urinating, defecating and “running” in place. Seizures are symptoms of some neurological disorder and are not in themselves a disease.

Some underlying causes are mentioned below but often seizures are *idiopathic* meaning the cause cannot be determined.
• Poisoning (chocolate for instance)
• Low blood sugar
• Brain Tumor or Head Trauma
• Liver Disease
• Inflammation or an Infectious Disease of the Nervous System
• Epilepsy

Stages of a Seizure

• Aura - restlessness, whining, shaking, salivation, affection, wandering or hiding. These signs may persist from seconds to days in duration.

• Ictus. – when seizure occurs

• Post-ictal - immediately after the seizure the animal appears confused, disoriented and may be unresponsive

Once a seizure starts, there is nothing you can do to stop it. The goal is to keep the animal from injuring itself.

• Stay away from animal’s mouth. During a seizure the animal will not be in voluntary control of its actions. However, the jaws perform involuntary muscle contractions, and if you get in the way, teeth will meet flesh.

• Toss blankets or pillows around the animal for cushioning especially if the seizure is happening on a hard surface.

• Stay calm and make environment calm (lower stereo and dim bright lights if possible).

• Time the seizure (including all three stages). If the seizure last longer than 5 minutes, the animal will require veterinary care.

• During the post-ictal stage the animal may not have control of motor skills or bodily functions and may need assistance getting up or walking.

• Do not leave an animal that has just experienced a seizure alone and make sure that access to stairs and elevated surfaces is restricted.

• It may help to comfort the animal with a soothing voice.

• If this is a first-time seizure or out of the normal length of time for an epileptic animal, have him checked out by your Veterinarian. Also, if multiple seizures are occurring in a 24-hour period, get immediate veterinary help.
Shock

Shock is a life-threatening condition that occurs when the body doesn’t get enough oxygen. The body then tries to compensate for the inadequate blood and oxygen flow by increasing heart and respiratory rates, maintaining fluid by restricting urinary output and constricting blood vessels near the skin.

Causes of shock may include heart failure, sepsis (blood infection), traumatic injury and blood loss. You will recognize the initial symptoms of shock as being similar to those of an animal who has over-exerted himself:

- Wooziness and/or weakness
- Panting
- Rapid heart rate
- Bright red gums

Late stage signs of shock include:

- Pale skin and gums
- Drop in body temperature – cold extremities
- Slow respiratory rate
- Weak or absent pulse
- Depression or apathy
- Unconsciousness

If you believe that an animal in your care may be exhibiting symptoms of shock, stay calm and take immediate action. As stated previously, this should be considered a life-threatening emergency.

- Check capillary refill time (CRT) by pressing on the animal’s gum. If it takes more than two seconds for color to return to gums (or if the gums are too pale to evaluate CRT), the animal may be experiencing shock.
- Elevate animal’s hind quarters slightly by placing a pillow or folded blanket underneath to increase circulation. Do not elevate if you suspect a broken back or if there is a bleeding head or chest injury.
- Retain animal’s body heat by covering him with a sheet or blanket. Be sure blanket is underneath animal if laying on a cold surface.
• Transport to a veterinary hospital immediately.

Hopefully you now feel more confident and prepared to help any dog or cat in your care. Knowing first aid isn’t enough — developing the confidence to calmly and effectively react is critical to the animal’s chances for recovery, diminishing his pain and suffering and even saving his life!

Familiarize yourself with this material and practice as many of the techniques as you can. It is perfectly safe and advisable to practice bandaging on the family dog or cat if they will allow. If a live animal is not available (or not willing), use a stuffed animal, a baseball bat or even a human friend to polish your technique. The first time you have to administer emergency care should not be during an actual emergency.

Practice muzzling and restraining healthy animals until you know you’ll be confident with these procedures in an emergency situation. Do not attempt to induce vomiting, perform a choking maneuver or CPCR on a healthy animal (feel free to try on a stuffed animal, though!). Make this information second nature so that when an emergency occurs, you will know exactly what to do to help the four-legged friend in need.
About the Author

Denise Fleck has trained with seven national organizations in animal lifesaving skills as well as being a long-time rescue volunteer and animal response team member. She has assisted Homeland Security with their K9 Border Patrol First-Aid Program, has developed her own line of Pet First-Aid Kits and is the author of Quickfind Books’ Pet Care Series.

Currently, Denise serves as President of the Volunteers of the Burbank Animal Shelter in Burbank, CA and is the recipient of the Burbank Police Department’s Volunteer of the Year Award for her work with the animals. Denise is also a freelance writer for numerous animal publications and has received the Award of Excellence from the Cat Writers Association as well as the Maxwell Medallion from the Dog Writers Association of America. Denise has shared Pet First-Aid & CPR skills on CBS-TV’s The Doctors, Animal Planet’s Groomer Has It and Pit Boss, A&E’s Kirstie and Alley’s Big Life and appears twice monthly on the KTLA Channel 5 News in Los Angeles sharing pet tips. Denise is owned by two rescued Akitas named “Haiku” and “Bonsai”. Visit her website at www.sunnydogink.com.