



Dog Health & First Aid Basics

Objective: Refresh skills of staff in area of dog health and first aid for life-threatening or common situations.

Content: First aid refresher information on normal dog health signs. Common causes, signs and symptoms and actions to take for five high-risk conditions your staff could encounter. Information obtained from American Red Cross book: Dog First Aid: Be Red Cross Ready Safety Series Vol. 2.

Prior to Lunch n Learn Session:

Print List of Conditions at end of this document and cut each into a strip. Put into a container or hat for each team to draw their choice at the Lunch n Learn. Bring the Know What's Normal and Condition pages from this document to the meeting. Have blank paper and pens available for the number of teams you decide upon.

During Lunch n Learn Session:

Step 1: Discuss "What's normal for dogs" in regards to their temperature, breathing rate, heart rate and gum color. Refresh on how to check each of these on a dog (i.e., you could use demo dogs here, just ensure they are comfortable with the check process)

Step 2: Divide staff into 4 or 5 teams based on the conditions you want to review. Have each team draw their condition and discuss as a team the items listed below. Group discussion will follow the initial work done in teams.

- Common Causes of the condition
- Signs and Symptoms of the condition
- Actions to Take when observing the condition

Step 3: Have each team share their list and discuss the Red Cross answers as a group (see copy for each condition included at end of this document).

Supporting Education Articles/Tools: The article listed and linked below provide additional information on the lunch n learn topic that can be introduced or refreshed as part of your training.

Prevention is Key to Healthy and Safe Dogs by Sonya Wilson of Four Legged First Aid
(Includes links to First Aid Kit for Pet Business and Health Assessment Checklist)
<https://www.thedoggurus.com/prevention-key-healthy-safe-dogs/>

Dogsafe Canine First Aid 101
(Links to eLearning course and our members save 15% on registration)
<https://www.thedoggurus.com/dogsafe-canine-first-aid-101/>

Heat Stress by Ben Day
(Great information for your staff's health and the dogs)
<https://www.thedoggurus.com/heat-stress/>

Hot Weather Safety for Pet Facilities
(Includes Heat Index Chart link to monitor temperatures)
<https://www.thedoggurus.com/hot-weather-safety-pet-facilities/>

Holistic Pet Pantry
(Common pantry items to keep on hand for first aid treatment)
<http://thedoggurus.com/wp-content/uploads/2016/04/Holistic-Pet-Care-Pantry.pdf>

Nine Point Checklist
(Health check items to observe with dogs in your care)
<http://thedoggurus.com/wp-content/uploads/2016/03/Periodic-Dog-Check-FINAL.pdf>

Bloating Akita YouTube Video – dog was saved
<https://www.youtube.com/watch?v=U1WrT2719yo>

The Dog Guru Course Supporting Lessons: Lessons from our books or courses that relate to the lunch n learn topic that can be used as refresher training.

N/A

Know What's Normal



It will be easier to recognize what is abnormal for your pet if you first become familiar with what is normal. Observe how your dog breathes, eats, drinks, walks, urinates and defecates so you will be sensitive to changes that might signal problems.

Check the Scene

Before approaching an injured dog, look around for potential hazards that may still exist and could potentially harm you. For example, if an animal has been struck by a car, make sure there are no other cars approaching before running into the street; or if your dog is in a fight, don't get between the two animals or you might become the next victim.

Check the Dog

Make an initial evaluation that should be completed in about 1 minute. Do the following:

- **Situation.** Quickly observe the animal's body; posture; presence of blood, urine, feces or vomit; breathing pattern; sounds and other materials (possible poisons around the dog).
- **Airway.** Is it open? If not, see Airway, page 36.
- **Breathing.** Is the animal breathing? If not, see Breathing, page 36.
- **Bleeding.** If the animal is bleeding, see Bleeding, page 48.
- **Circulation.** Is there a heart-beat and a pulse? If not, see Circulation, page 37.

Mucous membrane color.

See Observe Your Dog's Mucous Membrane Color, page 27.

Capillary refill time.

See Capillary Refill Time, page 28.

Level of consciousness.

Is the animal alert, awake, seizing, disoriented, hyperactive, depressed or unconscious? If the animal is seizing, see Seizures, page 101.

Always have the telephone number of your veterinarian, 24-hour veterinary emergency hospital, American Society for the Prevention of Cruelty to Animals' Animal Poison Control Center (1-888-426-4435) and animal shelter or animal care and control agency readily available!

Heart Rate and Pulse

You can feel your dog's heartbeat at about the point where the left elbow touches the chest (about the fifth rib). **Remember to use a light touch; if you press too hard you will not feel the pulse.**

1. Lay your dog down on her right side. But, if it's easier, allow her to stand.
2. Gently bend the left front leg at the elbow and bring it back to where it touches the chest.
3. Place your hand or a stethoscope (available at most pharmacies) over this area to feel or hear and count heartbeats.



You can feel your dog's pulse by lightly touching your middle and index fingers to these three additional locations.

The Inner Thigh. (This is the easiest of the three locations to feel the pulse.)

1. Lay your dog down, on either side.
2. Gently lift her upper hind leg away from the lower hind leg.
3. Place your two fingers as high up as possible on the inside of either leg, just where the leg meets the body wall.
4. Feel for a recess in the middle of the leg approximately half way between the front and back; this recess is where the blood vessels run and where you will find the pulse.



Just Below the Wrist (Carpus).

1. Have your dog sit or lie down.
2. Locate the area just above the middle pad on the underside of either front paw.
3. Lightly place your middle and index fingers at this point.



What's Normal

Normal Heart and Pulse Rates

Heart rates outside these ranges could signal an emergency:

- ☐ Puppy (less than 1 year old): 120–160 beats per minute
- ☐ Small, miniature or toy breed (30 pounds or less): 100–140 beats per minute
- ☐ Medium to large breed (greater than 30 pounds): 60–100 beats per minute

Normal Breathing Rates

- ☐ 10–30 breaths per minute
- ☐ Up to 200 pants per minute (breathing with its mouth open and tongue out)

Normal Temperatures for Dogs

- ☐ A temperature of 100°–102.5° F is normal.
- ☐ A temperature lower than 100° F or greater than 104° F is an emergency; call your veterinarian at once.



Just Below the Ankle (Hock).

1. Have your dog sit or lie down.
2. Locate the area just below the ankle on the top side of either hind paw.
3. Lightly place your middle and index fingers at this point.

Breathing Rate

1. Have your pet either stand or lie down.
2. Watch your pet and count the number of times that the chest rises and falls in 1 minute.

In an emergency, if you are not sure if your pet is breathing, try one of these techniques:

- Hold a cotton ball or tissue just in front of the nostrils and see if it moves
- Hold a mirror up to your pet's nose and look for condensation

Respiratory Pattern. When a dog inhales normally, the chest should expand. If the abdomen expands instead of the chest, that could indicate a problem. Exhaling should be an easy process with no work involved. If your pet makes loud, shallow or gasping sounds when breathing, or is not breathing, this is an emergency; see CPR, page 36.

How to Take Your Dog's Temperature

1. See Restraint Techniques, page 31.
2. Use a pediatric digital thermometer, found in any drug store.
3. Lubricate the thermometer with a water-based lubricant or petroleum jelly.
4. Insert the tip of the thermometer into the rectum (just beneath the tail).
5. Leave the thermometer inserted until it beeps.
6. Remove and read the number.



Observe Your Dog's Mucous Membrane Color

The color of your dog's mucous membranes (gums and inner eyelids) can help you determine if enough oxygen and blood are flowing to all of his tissues. To check the color of the mucous membranes, lift your dog's upper or lower lip and observe the color of his gums or inner lip.

- If your dog has black (pigmented) mucous membranes, place your thumb on the skin just under the lower eyelid and gently pull down to observe the inner eyelid membrane color. It should be pink, which means the tissues are receiving enough oxygen.
- If your dog's mucous membranes are blue, pale, yellow, cherry red, white, brick red or brown, this is an emergency. Call the veterinarian immediately. If your dog's mucus membranes are any other color, see Poisoning, page 96.



Allergies and Allergic Reactions

Insect Bites

During warm weather, dogs are susceptible to spider bites and bee stings. Insects often sting the soft, less hairy areas of your pet, such as the nose and feet. These sometimes cause allergic reactions.

Signs and Symptoms.

- Collapse (See Collapse, page 63.)
- Difficulty breathing
- Pain, itching, licking at the site
- Redness, discoloration or hives (bumps in the skin) around the site, sometimes spreading to other body parts
- Red bumps on the abdomen, vomiting or diarrhea and swelling at the sting site, which may spread and include the face, especially around the eyes, and neck

NOTE: A severe allergic reaction can lead to anaphylactic shock. This could occur immediately or progressively over several hours. (See Shock, page 102.)

What You Can Do.

1. If your dog's face and neck are swollen, check his airway, breathing and circulation (ABCs). (See Airway, Breathing and Circulation, pages 36–37.) If your dog cannot breathe, begin rescue breathing. (See Cardiopulmonary Resuscitation, page 36.) If your dog's breathing is noisy or labored, take him to a veterinarian immediately.

2. Check for signs of shock. (See Shock, page 102.)

3. Check if the stinger is still present; it's usually black and very small. Do not attempt to pick it out, as this may release more toxin. Instead, scrape it off with a firm object, such as your fingernail or a credit card.

4. Apply cold compress or ice packs wrapped in a towel to help control swelling.

5. Transport your dog to a veterinary hospital. (See How to Approach, Capture and Restrain a Dog, page 28.)

6. It may be appropriate to give your dog the over-the-counter antihistamine diphenhydramine (Benadryl®), **if your veterinarian has given approval.** Many over-the-counter products contain diphenhydramine along with other cold or allergy medications (i.e., acetaminophen or pseudoephedrine). **It is extremely important to ensure that the**

product contains diphenhydramine ONLY.

Diphenhydramine (Benadryl®)

Dosing. In general, the dose is 2 mg per dog's weight in kg. You can convert your dog's weight by the equation: 1 kg = 2.2 pounds.

- Small dogs (less than 30 pounds): 10 mg
- Medium dogs (30 to 50 pounds): 25 mg
- Large and giant dogs (greater than 50 pounds): 50 mg

Give oral medication only if your dog is conscious, able to breathe and not vomiting!



The Most Common Causes. Bloat and torsion are thought to be associated with eating large meals, exercising just before or after eating and gorging on large amounts of food or water. However, the exact cause is unknown.

What You Can Do.

1. Check the dog's ABCs; perform CPR as needed. (See CPR, page 36.)
2. Check for signs of shock. (See Shock, page 102.)
3. **Take her to a veterinary hospital immediately.**

Your dog must have anti-shock fluid therapy, be assessed for stomach rotation (with an x-ray) and have her stomach decompressed. **Once your dog is stable, emergency surgery will be necessary for a rotated stomach.**

Prevention. Although there are no foolproof ways to prevent bloat, some things may help:

- Feed your dog more than once daily. Two meals of equal size are best.
- Do not allow your dog to exercise immediately before or after a meal; wait at least 1 hour.
- Do not give your dog access to bulk food sources from which she might gorge herself.
- Do not allow your dog to drink a large volume of water at one time, particularly immediately after exercise or eating.

Bloat and Torsion

Bloat and torsion are life-threatening conditions that are more common in deep-chested large and giant dogs. Gastric dilation, or bloat, is when the dog's stomach overfills with air or food.

Torsion, or volvulus, is a worsening of this condition in which the stomach turns around upon itself, often displacing the spleen with it. This cuts off the blood supply to both organs and prevents blood from returning to the heart. **Know the signs of bloat so you can save your dog's life by getting her to the veterinarian sooner.**

Signs and Symptoms. The signs of bloat often occur within hours after a meal. These include: drooling or salivation; distended abdomen (enlargement of the stomach area); non-productive retching or vomiting; restlessness and pacing; and shock.

- Small dog left unattended during a bath in the bathtub
- Swimming too far out and getting fatigued or a muscle cramp

What You Can Do.

1. For an unconscious small dog, lift your dog up by the hind legs (you can suspend him if he is small enough) to allow water to come out the nose or mouth.
2. For an unconscious larger dog, lift the hind legs with the front end on the ground so gravity can help expel the water.
3. Lay your dog down, on either side, with the head slightly lowered.
4. Check the dog's ABCs; perform CPR as needed. (See CPR, page 36.)
5. Place a blanket (thermal, if possible) around your dog.
6. Transport to a veterinary hospital immediately.

Even if you revive your dog, an examination by a veterinarian is still necessary because fluid buildup in the lungs, as well as the effects of hypothermia, may result. (See Hypothermia, page 84.)

Drowning

Even though dogs are generally good swimmers, they can experience near-drowning, especially if they have been heavily exercised before swimming or if they fall through thin ice. Always keep an eye on your dog when near any body of water.

The Most Common Causes.

- Animal abuse
- Boating accident
- Disasters, such as floods
- Falling through thin ice or falling into water from which they cannot escape
- Not being able to exit a swimming pool (if your dog has access to a swimming pool, be sure he knows how and where to get out)

turns warm and the dog has not yet acclimated to it. The good news is if the heat stroke hasn't advanced too far (with a body temperature of more than 104° F), you can help your dog recover.

NOTE: Dogs don't have sweat glands, so they can dispel heat only by panting and through the pads of their feet. Make sure your pet has plenty of cool water and shade during hot weather.

Signs and Symptoms.

- Collapse
- Body temperature 104° F or above (See How to Take Your Dog's Temperature, page 27)
- Bloody diarrhea or vomit
- Capillary refill time that is too quick (See Capillary Refill Time, page 28.)
- Depression, stupor (acting drunk), seizures or coma.
- Excessive panting or difficulty breathing
- Increased heart rate (See Heart Rate and Pulse, page 24.)
- Increased respiratory rate (See Breathing Rate, page 26.)
- Mucous membrane color is redder than normal (See Observe Your Dog's Mucous Membrane Color, page 27.)
- Salivation

Heat Stroke (Hyperthermia)



Heat stroke, or hyperthermia, occurs when a dog severely overheats—most commonly in the spring and summer months—when the weather

The Most Common Causes.

- A previous episode of heat stroke
- Breed predispositions (Dogs with short snouts, such as bull-

dogs, are particularly susceptible to hyperthermia.)

- Dog left in a parked car
- Dog not acclimated to the warmer weather
- Excessive exercise in hot, humid weather (This may be exercise that your dog can usually handle, but not in the warmer weather.)
- Lack of appropriate shelter for an animal outdoors
- Prolonged seizures
- Thick-coated dogs in warm climates
- Underlying disease state, such as upper airway, heart or lung disease

IMPORTANT: Never leave your pet in a parked car! Even with the windows cracked, your pet can quickly suffer heat stroke—and even die.

Temperatures can exceed 120° F in parked cars!

What You Can Do.

1. Get your dog out of direct heat.
2. Check for shock. (See Shock, page 102.)
3. Take your dog's temperature. (See How to Take Your Dog's Temperature, page 27.)
4. Spray your dog with cool water. If using an outdoor hose, run the water for a minute or so to cool it off before spraying your pet. Spray him for a minute or two, then retake his temperature.
5. Place water-soaked towels on the dog's head, neck, feet, chest and abdomen.

6. Turn on a fan and point it in your dog's direction.
7. Rub Isopropyl (rubbing) alcohol 70% on the dog's foot pads to help cool him. Do not use large quantities of alcohol (more than half a pint), as it can be toxic if ingested by dogs.
8. Immediately take your dog to the nearest veterinary hospital.

NOTE: The goal is to decrease the body temperature to about 103° F in the first 10–15 minutes. Once 103° F is reached, you must stop the cooling process because the body temperature will continue to decrease and can plummet dangerously low if you continue to cool the dog.

Even if you successfully cool your pet down to 103° F, you must take him to a veterinarian as soon as possible because many consequences of hyperthermia won't show up for hours or even days. Some of these conditions can be fatal if not treated medically. Potential problems include—

- Abnormal heart rhythms.
- Destruction of the digestive tract lining, leading to bloody vomiting and/or bloody diarrhea.
- Kidney failure.
- Neurological problems, including seizures and swelling of the brain.
- Problems with blood clotting.
- Respiratory arrest.

first seizure, take her to a veterinarian as soon as possible for an evaluation. If it's not your dog's first seizure, but her seizures last longer than 2 minutes or there are multiple, repeating seizures, take her to the veterinarian immediately. This is a medical emergency.

Signs and Symptoms. Phases of a seizure:

- Before a seizure (pre-ictal), your dog may seem dazed or anxious, may seek you or seek a safe place.
- During an active seizure (ictal), the animal often will fall over, twitch, urinate, defecate and drool. In addition, she may not recognize you or may fall over and be stiff and rigid (grand mal seizure). Some seizures may look like the dog is just staring into space or biting at invisible things (chewing gum seizures).
- After a seizure (post-ictal), the animal may be disoriented, walk into walls or appear to be blind. Dogs may also behave normally following a seizure.

The Most Common Causes.

Central nervous system causes include the following:

- Abscess
- Epilepsy
- Infection in the brain (bacterial, fungal, viral or parasitic)
- Inflammation in the brain
- Malformation of the brain (birth defect)

Seizures

As terrifying as they may be to watch, most seizures don't harm your dog. Many have no residual effects at all. But if it's your dog's

- Scar tissue in the brain (may occur after a head injury)
- Tumor

Non-central nervous system causes include the following:

- Glandular disease causing blood sugar to be too low or too high (as may occur in diabetics)
- Low blood calcium
- Organ failure, particularly of the liver and kidney, which are the waste treatment plants of the body (When they malfunction, a large build-up of toxic waste products can occur, causing seizures.)
- Poisoning—such as from certain drugs, plants, lead, heavy metals, antifreeze and chocolate

The seizure's cause must be identified to determine if the collapse was due to primary respiratory, heart, orthopedic or neurological problems.

What You Can Do.

1. Make sure your dog is in a safe place (not on top of a staircase or anywhere from which a fall is possible).
2. Record how long the active phase of the seizure lasts.
3. Keep a log of your dog's seizures. Include the date, time of day, time after a meal and how long the active seizure phase lasts.
4. Keep your hands away from the animal's mouth. Do not attempt to hold your dog's tongue (the

animal will not swallow her tongue). Your dog may not know who you are during a seizure. Many pet owners are bitten while attempting to handle their pets during a seizure.

5. Do not disturb your dog during and after an active seizure.
6. If this is your pet's first seizure, call your veterinarian. Your dog should be examined as soon as possible.
7. Seizures lasting longer than 2 minutes or cluster seizures (seizures repeated one after the other) are medical emergencies; these animals are at risk for very high fevers and brain damage. A veterinarian must examine an animal having cluster seizures immediately.

NOTE: If your dog is placed on anti-seizure medication, understand that the medication does not cure the cause of the seizure; it simply helps to reduce the number or severity of episodes. Your dog will probably have future episodes and require frequent veterinary checkups.

Possible Emergency Health Conditions

Bloat

Heat Stress

Seizure

Allergic Reaction

Drowning