

First Aid for Small Animals

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National Animal Control Officers Training Manual
Chapter 13

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Important phone numbers

Northwest Animal Clinic & Hospital
Alameda Blvd & Rio Grande Blvd
1000 Alameda Blvd NW
Albuquerque, New Mexico 87114
505 898 1491

Poison Control Center phone numbers
1 800 222 1222
Pet Poison HelpLine (*app*)

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The rule of thumb (or paw in this case) is if your pet is sick or injured, you should seek veterinary care as soon as possible. That stated, it is always helpful to be prepared to do what you can for your pet or a found pet as you would with any emergency which is why we have prepared the First Aid Kit for Small Animals to assist you in case of an emergency that you must handle on your own until you can get professional medical care. (Keiko to write this)

Crisis Issues

Handling an Injured Animal

Handle the injured animal with care. Pain and fear will cause the most docile animal to strike out and attempt to bite or scratch you. To prevent bite injuries, you may create an emergency muzzle by using a strip of gauze bandage, necktie, hosiery, leash, belt or some other similar material. Form a loop as in the first step of tying a shoelace and slip the loop over the animal's jaws with the knot up. Tighten and draw the ends down under the animal's lower jaw and cross the ends, securing them at the back of the dog's neck (behind the ears). If you are dealing a cat or a short-muzzled dog, you may wrap it in a blanket, a large towel or coat, covering the head. Keep your face away from the animal's head.

Fractures and Shock

Unfortunately fractures are fairly common in animals and can be potentially life threatening. Most fractures are caused by direct trauma, such as automobile encounters, falls, or gunshot wounds, but some can result from improper diets and invasion of bones by cancer cells.

Recognition of a fracture is usually fairly obvious. Common findings are pain, inability to support weight, blood loss from the bone and surrounding tissues, and shock. This blood is not immediately available for the heart and circulatory system and is effectively "lost." Should there be sufficient blood loss, shock may occur. Shock is best defined as "inadequate

circulation to the tissues of the body.” Along with internal bleeding, certain organs are also notorious for further trapping blood, removing more blood from circulation, and complicating the shock state. It is probably safe to assume that there will always be some degree of shock in severe trauma cases such as in fracture cases.

An animal in shock usually has pale mucous membranes. The easiest way to note this is to gently pick up the animal's lip and check the color of the gums. Remember the animal is in pain, so you must be careful not to be bitten. If the gums are pale, you can check his circulation by gently pressing your finger on the gums. The area where you touched will normally blanch and become pale, but will return to the color of the surrounding tissue in less than two seconds if the circulation is adequate.

The heart rate also will speed up and panting is often noted. The pulse in the artery of the rear leg will be weak, and the tips of the ears and feet may feel cold. These are signs that the animal needs prompt and rapid professional assistance.

Temporary support of a fractured limb can be accomplished fairly easily if the fracture is below the elbow or stifle. Cardboard, newspaper and tape can be used to provide a temporary splint. Be careful not to aggravate the fracture further and if you are in doubt about splinting, move the patient promptly, gently and safely to a veterinary hospital.

Control of Hemorrhage

Bleeding associated with a wound may either be of venous or arterial origin. Venous blood is usually darker in appearance and oozes from the wound. Arterial blood tends to be bright red and gushes or spurts from the wound. Both types of bleeding can be life threatening.

When hemorrhage occurs, an attempt should be made to control it. Venous bleeding can usually be controlled by direct application of pressure over the wound. Avoid introducing contamination when applying pressure. A clean handkerchief or sterile gauze pad will be useful for applying pressure and preventing contamination. When arterial bleeding occurs, direct pressure may be ineffective in controlling the hemorrhage. It may be necessary to locate an arterial pressure point. Important pressure points are located on the upper inside of the front leg (for bleeding in the lower foreleg) and on the upper inside of the rear leg (for bleeding in the lower part of the hind limb).

If bleeding is severe, rapidly but safely transport the animal to a veterinarian so that the bleeding may be controlled and an assessment of the wound's seriousness can be made.

If you judge that professional assistance is not warranted, there are several facts to consider in managing the wound. Surface hair around the wound may be a source of infection. Wet the hair with warm soapy water and carefully clip away the hair, avoiding introduction of this hair into the wound. Gently wash the wound and surrounding area with warm water and a gentle soap. Carefully remove any foreign debris. Hydrogen peroxide is probably not a good agent for use in open wounds, because it will provide excessive heat to the wound and may actually delay healing. Also hydrogen peroxide has been shown to be dangerous because of the possibility of creating air bubbles in the blood vessels. Deaths have been documented to occur with these complications.

After cleansing the wound, cover the wound with a sterile gauze pad and bandage gently but firmly. A bandage applied too tightly will cause severe complications. Use several thicknesses of gauze or cotton. The bandage required good management. Keep the bandage dry; if the bandage gets wet, change it immediately. Replace the bandage on a daily basis. If odors or abnormal discharges are noted on the bandage, seek professional advice.

Bleeding from the nose is immediately obvious. Trauma to the head can disrupt the vessels and structures, causing bleeding from the nose. It can also be the result of tumors, serious nasal passages, and failures of the clotting mechanism. The animal with a bloody nose is best kept quiet until it can be discovered whether the bleeding is chronic or acute, profuse or scant, and traumatic or non-traumatic. Bloody noses caused by trauma carry a good prognosis. Bleeding from the nose from other causes can be serious, even fatal.

Blood in the stool may be seen with normal formations or with diarrhea. Blood in the stool will be visible as a black stool or a normally colored stool with streaks of blood. Blood in the stool is usually caused by infections, parasites or obstructions. Other causes can be cancer and metabolic diseases. Bland foods, such as chicken and rice or lamb and rice should be given until the cause is diagnosed.

Blood in the urine can be seen in normal or scant urine volumes. It may be seen as a trace of pink in the urine, bright red urine at the beginning or mid-stream or at the end of the stream, or as blood clots mixed with the urine. Bloody urine is usually the result of infections, stones or trauma. It can also be caused by cancer and prostate conditions. Blood in the urine cannot be specifically dealt with until the cause is known.

Eye Injuries

Eye injuries in dogs and cats may result from mechanical causes such as scratches, foreign body penetration, automobile accidents, fights, or exposure to chemical irritants. Immediate attention to an eye injury is critical and can make the difference between preservation or loss of an eye. If you have witnessed the specific injury occurrence, the details should be related to the veterinarian. It is helpful for a veterinarian to know the cause, for abrasions and puncture wounds are handled quite differently from alkali or soap burns.

Injury to the eye results in sudden and acute signs. These include swelling of the eye or tissues surrounding the eye, pain (often very intense), presence of a discharge, partial or complete loss of vision, and color changes in the eye or tissue around the eye.

Initial handling is important, and the following guidelines provide specific first aid measures the you can use. However, it is extremely important that the eyelids, their eyelid, and the eye itself be thoroughly examined by a veterinarian. Often sedation or anesthesia may be required to examine the eye, especially when the animal is experiencing moderate or intense pain.

When chemicals such as soaps, detergents or other agents come in contact with the eye, it should be flushed with large amounts of a saline solution, eye wash, artificial tears, or tap water immediately. Many chemical irritants (especially alkali) are very damaging to the cornea and may result in continued damage for several days following exposure. The extent of the damage is related to the concentration of the chemical as well as length of contact with the eye.

Animals that spend most of their time outdoors are more likely to have injuries from foreign bodies, such as weed seeds, grass awns, or sticks. Foreign bodies may lodge under the eyelids, causing extreme irritation and potentially serious damage to the eye. Signs may include swelling and redness of the conjunctiva (inner surface of the eyelids), heavy discharge and pain. The animal may squint and attempt to rub the eye frequently. Flushing the eye may be helpful and if the foreign body is visible, it maybe carefully grasped with small tweezers and gently removing. Even if removed or flushed, it is important that the eye be checked for additional material and damage.

Acute or severe swelling of the eyelids and face usually indicate some sort of allergic reaction. Insect stings, ingestion of garbage, and snake bites are common causes of acute swelling. Severe swelling from allergic causes usually involves both sides of the face and may occur within a few minutes. First aid may consist of applying cold packs to the affected area. Injectable anti-inflammatory drugs given by a veterinarian will result in the swelling subsiding in 8-12 hours.

Prolapse of the eyeball out of the socket or laceration of the eyeball requires immediate professional attention if an attempt at salvage of the eye is to be made. Situations such as this are considered true emergencies and extreme care should be used in the transport of these animals to a veterinary hospital. While you seek emergency care, a prolapsed eye can be kept from drying by application of gauze which has been coated with ophthalmic ointment or petroleum jelly. A lacerated or punctured eyeball is evident by the appearance of a bloody discharge, acute pain or visible intra-ocular contents, which may appear as dark gelatinous tissue. Nothing should be applied to the eye as a "seal" may have formed which prevents further loss of ocular contents. Seek professional care immediately.

Heatstroke

This is a condition characterized by heat retention (hyperthermia) and is encountered when the rectal temperature reaches between 105 and 110 degrees Fahrenheit. It is generally a condition of dogs, but also is seen in cats. It generally occurs when the ambient temperature is between 90 and 115 degrees Fahrenheit, humidity levels are high, or the animal is confined in poorly ventilated areas such as cars or in extreme exercises or excitement states. The first signs noted are a rise in body temperature, panting and fast heart rate. If allowed to progress, the animal will become stuporous and will progress to a comatose state and death. The first objective is to lower the body temperature. This may be done by submerging the trunk and limbs in cold water or hosing a big dog with cold water. Care should be taken after the body temperature is lowered to 103 degrees Fahrenheit. Further rapid cooling may complicate the animal's condition due to a failure of the heat regulating system of the body. The body temperature should be monitored closely for at least an hour and the animal should be kept in a cool environment for 24 hours. The second objective in heatstroke treatment is to prevent swelling or edema of the brain. This is best done with intravenous medication by your veterinarian.

Additional Medical Emergencies

The following alphabetical listing of other types of medical emergencies in small animals will serve as a reference for you.

Appetite, Excessive

Starved and very thin animals can be expected to eat a great deal of food. A well-nourished or obese animal that is continually searching for and eating large quantities of food is likely to have a medical problem. An animal will overeat if it is hungry and needs food. Less common causes will be emotional problems, inability to properly absorb food, diabetes, and side effects of certain medications. Give unlimited food to an undernourished animal; seek the cause if the animal is in good condition.

Appetite, Loss of

The thin, malnourished animal that refuses food is clearly ill. A small appetite is not by itself a cause for alarm. It is important only when accompanied by other symptoms. An animal with a depressed appetite might have a number of clinical problems, including serious infections, poisoning and metabolic disease. Simple loss of appetite does not need treatment. Look for other symptoms.

Breathing, Difficulty

Extremely exaggerated breathing motions are noticeable with dyspnea, difficulty in breathing. The tongue and gums may or may not be "blue." Trauma to the chest that injures the lungs and diaphragm often causes difficult breathing. Serious infections can also cause the condition. Less common causes are metabolic diseases, poisonings, obstructions and mild infections. Allowing the animal to rest in a quiet place is helpful. Difficult breathing with blue tongue and oral mucous membranes (cyanosis) is cause for great alarm as death is close. (Some breeds such as Chows, naturally have black tongues).

Chest Injuries

The chest is quite resilient to trauma, but the enclosed heart, vessels, lungs and diaphragm can be torn by the ribs, if they are broken, or be severely bruised. Visual inspection of the chest shape and gentle palpation with the hands will find the obvious injuries. Trauma is the leading cause of chest wall injury. This can be blunt trauma, such as maybe inflicted by automobiles, or tearing trauma, such as sustained in dog fights. Less common are piercing traumas, such as from bullets or stab wounds. Animals with chest injuries need extremely gentle handling. Place a disposable diaper over wounded regions, using the adhesive tabs to hold it in place. Place an Ace bandage over the diaper, firmly enough that it is kept over the injury, while still allowing the animal to breathe. Animals with chest injuries have a prognosis ranging from good to grave. Medical treatment should be sought immediately.

Constipation

The classic symptom of constipation is when an animal strains to defecate without success. Constipation might be caused by a plug of matted hair over the anus. Other causes are a bone obstruction in the bowel, structural problems in the colon or metabolic conditions of the colon. Colitis, an inflammation of the colon, can cause the animal to strain, although the colon is empty. Pediatric enemas available from drug stores without prescription are safe for dogs if they are administered according to package directions for children. Cats requiring enemas respond best to Dioctyl Sodium Sulfosuccinate-based preparations. Avoid using phosphate-type enemas on cats. Animals usually recover from constipation, but the underlying cause needs to be diagnosed.

Coughing

A harsh, hacking cough is the most common problem, although a soft, moist cough can also cause concern. Coughing is a normal defense mechanism, usually caused by an infection. Less common causes include lung cancer, smoke or chemical irritation, obstructions in the trachea (windpipe), congenital problems, heart disease, heartworms. It is not wise to totally suppress a cough. With dogs, it can be useful to blunt a harsh, hacking cough, using cough syrups made for children. Coughing cats are best kept quiet and isolated. Humidifying the air will help the animal's lungs cope with disease processes. Older animals have a fair chance of recovering from a cough; younger animals have an excellent prognosis.

Dehydration

Dehydration can be recognized by dryness around the mouth, eyes sunken into the head and loss of skin elasticity. To determine the skin characteristics, pinch some skin gently between thumb and forefinger for two seconds. If the animal is not dehydrated, the skin will fall back into place immediately when released. A severely dehydrated animal's skin will still be standing 60 seconds after being released. Dehydration is a symptom of serious problems and is itself a serious condition. Severe dehydration requires an infusion of fluids. Less severe cases can be relieved by giving the animal one-half strength Gatorade® by mouth. A guide for giving fluid by mouth is to administer 2 fluid ounces for every 12 pounds of body weight every hour for 6 hours. After that, 2 ounces per 12 pounds can be given every three hours for a 24 hour period. Animals with simple dehydration have a good prognosis if properly treated, however the diseases that causes dehydration carry a less optimistic prognosis.

Depression (aka lethargy)

Diarrhea

Diarrhea can take different forms. The pudding form can be yellow, brown, reddish brown or color of raspberry jam. Watery diarrhea is yellow, brown, reddish brown or bright red. Yellow or brown diarrhea is usually caused by parasitic diseases, diet problems, poisonings and some infections. Reddish brown, raspberry jam and bright red diarrhea often indicate life-threatening infections and metabolic conditions. Watery diarrhea is associated with more serious conditions. Animals suffering from diarrhea need free access to water, orally-administered doses of Pepto-Bismol or Imodium A-D and no food. After 24 hours, bland foods can be offered. Half-strength Gatorade® can be useful if the animal is seriously affected. A diet of boiled chicken and rice or lamb and rice is useful. Diarrhea of the yellow and brown pudding type carry an excellent prognosis. Watery diarrhea is a cause for significant concern while any diarrhea with reddish brown coloring or blood is cause for alarm as if untreated it maybe fatal.

Discharge, Prepuce

Normal male prepuce discharge looks like yellow-white pus. Discharges that have normal color but are in sufficient quantity to matt the surrounding hairs and those that look brown or bloody are cause for concern. Abnormal discharge from the male prepuce is usually associated with infections, tumors, or foreign bodies, such as grass awns or stickers. Clean excessive regularly with a moistened towel.

Discharge, Vaginal

Discharge in the female may be thin and bloody, clear amber, thick and bloody, or thick and yellow-white. Watery, bloody and amber discharges usually means the animal is in heat (estrus) and the vulva will also be swollen. Discharges that are thick and bloody or thick and yellow-white usually mean the animal has a vaginal or uterine infection. The vulva will look about normal. A female in heat should be kept away from males. Animals with thick vaginal discharges would be examined and treated by your veterinarian. Pregnancy is the likely outcome when the animal is in heat. Discharges that are thick are associated with serious, possible, life-threatening situations.

Drinking and Urinating Excessively

Excessive drinking and urinating – polydipsia and polyuria – can best be seen by someone who knows the animal well. These symptoms are paired for discussion because they are usually more significant when they occur together. The most common causes are diabetes and kidney problems. Less common causes are liver diseases, cancer, metabolic diseases and emotional conditions. Provide plenty of water and opportunity to void urine. Simply drinking and urinating excessively has an excellent short-term prognosis and a fair to good long-term prognosis. It is important to diagnose the cause.

Drooling and Foaming

Drooling, slobbering and foaming are noticeable when there are stringy ropes of thick saliva and white foam hanging from the mouth. The liquid is usually clear but blood and pus might be present. The most common causes are infected teeth, foreign bodies in the mouth, poisoning and some intestinal infections. Less common causes are throat conditions including obstruction by foreign bodies or by stomach bloat and salivary gland problems. The dog or cat with rabies frequently drools and if an animal drools and show unprovoked aggression, rabies should be suspected. Look for foreign bodies in the mouth or “dangling” teeth. Simple drooling is not a cause for alarm, but if it is accompanied by diarrhea, seizures and labored breathing, there is cause for concern. Use extreme caution when examining the mouth. (There are at least a dozen dog breeds that tend to be constant “drool offenders” including boxer, mastiff and bulldog type breeds. If you have a breed that fits this profile, normal drooling and slobbering is of no concern).

Frostbite

If an animal has frozen skin and extremities, the frozen tissues will be hard and cold to the touch. The ears, tail and toes are most commonly affected. Prolonged exposure to the cold or contact with extremely cold substances such as liquid nitrogen will freeze body parts. Frozen tissues should be handled gently and slowly thawed with cool or warmed wet towels. The frozen tissues have a guarded to poor prognosis, but the prognosis for overall health is excellent.

Gagging

Typically, the animal stands with its mouth open, straining to expel matter. A coughing gag involves the lungs and vomiting involved the stomach. Serious respiratory infections, foreign bodies in the mouth or throat and tonsillitis are the most common causes. Some stomach conditions may also cause gagging. Treat the animal calmly and remove any visible foreign bodies if the animal is quiet. The outlook is good but the underlying cause needs to be determined and removed.

Jaundice

The most common sign of jaundice is yellow mucous membranes of the mouth and genitals, yellow “whites” of the eyes and general yellowing of the skin. Jaundiced animals are usually suffering from liver disease or severe blood problems, and should be fed bland food. Jaundiced animals have a guarded prognosis because of the seriousness of the underlying cause.

Lethargy (See Depression)

Lethargic dogs and cats seem sad, despondent, dejected and listless. As different animals behave differently, the best assessment comes for comparing the behavior to the animal's normal behavior. The lethargic animal may or may not be in trouble. The longer the duration and more profound the lethargy, the more serious is the clinical situation. Profound lethargy is more often noticed when the animal has a serious infection, has been poisoned or is undergoing a metabolic crisis. Mild lethargy is most often a symptom of cancer, slight infections, parasitic diseases and various other medical problems that are not life-threatening. If the animal has reduced water and food consumption, aspirin might be helpful. Recovery will depend on the nature of the primary underlying disease. Clinically speaking dog rarely get depressed

Lameness

Lameness is obvious when the animal will not use one or more legs. Common causes of lameness are systemic and local infections, broken bones, ligament injury, arthritis and injury to the foot pads and web. Other causes can be cancer, bone diseases and nervous system problems. The animal should be allowed to rest. Aspirin can be used but as this can mask the pain, the animal should be kept quiet. When lameness is a result of a draining wound in a foot, this can be soaked for 30 minutes at a time in Epsom salt solutions twice daily. If only one limb is lame, the prognosis is excellent. If more than one limb is involved, it is important to quickly identify the cause.

Mouth Ulcers

Ulcers in the mouth are craters in the normal mucous membranes, ranging from 2 mm to 3 cm in diameter. Mouth ulcers usually accompany oral infections, serious dental disease, foreign body injuries, cancer and metabolic diseases. An animal that has chewed an electric cord usually develops an oral ulcer. Keep affected areas clean with a moistened towel. Generally, the chances for recovery are good.

Pain

Pain is the body's demand that an injured area be protected. There are two types of pain, a dull ache and a sharp, specific pain. The first is typically felt by someone suffering from flu and the second from an injury such as a broken bone. A dull pain may result from cancer or an infection. A sharp pain is often caused by a bone or joint injury, a serious local infection, some gastrointestinal diseases (such as pancreatitis) or back and neck disc disease. Aspirin is useful. Animals feeling pain should be kept in a calm, quiet environment. The prognosis for acute painful conditions is excellent. Animals with chronic pain will likely continue suffering.

Panting

The panting animal keeps its mouth open and tongue out, while breathing rapidly. Although dogs pant naturally, it can also be a sign of fever, heat prostration, poisonings and some metabolic conditions. Cats that pant are always experiencing distress, such as emotional problems or heat prostration. In dogs, panting of itself is not treated. Panting cats are best placed in a quiet stable environment while the animal is checked for other symptoms. For dogs, the prognosis is good, if they are kept cool. Panting cats need prompt attention.

Scotting

The animal sits on tail, holds its back legs like skids and pulls itself along with its front legs. Scotting usually indicates anal sac irritation and impaction, but can also be a sign of anal infections, worms or skin irritation. Draining the anal sacs is a simple procedure and is easily done in the veterinarian's office. Clean the area with a moistened towel. If the skin is slightly red or if the animal scoots persistently, use Preparation H as directed for humans. Any visible parasites should be identified and treated. Scotting problems carry a good prognosis, except when blood and pus are present near the anus.

Scratching

An animal may rub or claw at an itch or irritation on its body, most often the eyes, ears or irritated skin. The areas the

animal scratches may be discolored, red, or show pus or scabs. A number of common problems can lead to scratching, including infections, allergy, external parasites and lack of grooming. Less common are irritations caused by tumors and metabolic skin diseases. The first aim is to prevent the animal from damaging itself. If there are no visible lesions, flea control procedures are probably indicated. Nonprescription antihistamine might provide some relief. When the animal has red, irritated and painful lesions, it can be treated with Epsom salts soaks for 30 minutes and twice a day, followed with application of antiseptic or surgical soap. Scratching has a good prognosis when no lesions are present. When there are signs of extensive involvement of the skin and body parts, medical investigation is needed to determine the prognosis, which may be good to poor.

Seizures

An animal experiencing a convulsion is usually found lying on its side, unaware of its surroundings and with its body and limbs jerking erratically. Seizures are always a cause for concern. They can be caused by infections, such as distemper; poisonings, such as from strychnine or insecticides, and by metabolic states, such as epilepsy. Less commonly, they can be caused by cancer, parasites and a foreign body that has been carried into the brain, such as a grass awn. Put the animal in a quiet, darkened environment where it can be comfortable. Do not stimulate. Prevent self-injury. Occasionally, a puppy suffering a seizure between 3 and 12 weeks may respond to a teaspoon of honey placed in the mouth. Do not grab the animal's tongue. If a seizure lasts for less than 5 minutes, the prognosis is good. If a seizure lasts from between 5 and 15 minutes, it is cause for concern. A seizure that lasts for more than 15 minutes is cause for alarm and prompt medical attention. If an animal is having a seizure more often than once a month and for more than 5 minutes at a time, medical investigation is needed.

Shaking of Head and Ears

An animal that is shaking its head and ear usually has the affected side closest to the ground. The most common causes of head shaking are ear infections, foreign bodies in the ear, ticks or irritations from flies. Less common causes are allergies, ear injuries and external parasites, such as stick-tight fleas. Remove any visible crust and pus gently with moistened towel and antiseptic or surgical soap. Seek medical attention to determine cause and begin treatment.

Skin Lacerations

Lacerations are tears or cuts of the skin. They can be simple or may involve underlying tendons, muscles, bones, joints or the deeper structures of the chest or abdomen. Skin lacerations are usually the result of fighting or trauma, although cancer, infections and other dermatological problems may resemble lacerations. It is important to determine how deeply a laceration penetrates the underlying tissues. Protect lacerations with non-stick dressings, such as Tefla pads with cotton overlay, or disposable diapers slightly moistened with saline. Simple lacerations have an excellent prognosis for recovery. Lacerations penetrating deep into underlying tissues, including chest and abdomen, have a more guarded prognosis.

Skin Problems

Skin problems show up as hair loss, blood, pus, or abnormal appearance of the coat, ranging from dullness and brittleness to discoloration. Skin problems may be signs of cancer, infection, contact irritation, metabolic disease, parasites, inadequate diet or poor husbandry. A specific diagnosis is recommended, but water is often a fine remedy. Clean any damaged skin with warm saline and surgical soap and institute flea control.

Sneezing

The debris expelled when an animal sneezes may be clear, cloudy or bloody. Sneezing is usually caused by allergies and infections. Less common causes are foreign bodies, tumors and draining sinus infections. A quiet, dust free environment will minimize the sneezing. Over-the-counter antihistamine can be used two to four times a day if the sneeze discharge is clear. Simple sneezing carries an excellent prognosis. Sneezing that is prolonged or accompanied with blood and mucus have a fair to good prognosis.

Swelling of Abdomen

A distended abdomen is most obvious to someone who knows the animal well, as different breeds have different shapes – greyhounds and bulldogs, for instance. When the abdomen is felt firmly (palpated), it may seem tight and resonant (like a gas balloon), spongy, watery or simply hard. Pregnancy is the only good reason for a distended abdomen. Other causes are cancer, obstructions, liver disease, heart disease, malnutrition and parasites, as well as some metabolic conditions. A diagnosis is needed before treatment can be given. If the cause is pregnancy, the prognosis is excellent. Otherwise, an acutely distended abdomen may cause death and a chronic situation probably indicates a serious underlying metabolic disease.

Swelling of Legs, Face and Ears

Any increase in the size of a normal body structure is cause for concern. Likely causes are trauma, infection, allergic reactions and certain metabolic diseases. The swollen area may be filled with fluid, hard or mushy. If the cause can be identified as an allergic reaction, cold (ice) compresses and over-the-counter antihistamine may be used. If the body part has been swollen from between 24 and 48 hours, cold, wet compresses will help. If the swelling has been present for more than 48 hours, the compresses should be warm. Gentle application of Ace bandages over the compresses is recommended. Swellings that are known to be caused by trauma or infection should be treated with warm compresses and specific therapy, such as antibiotics for infections or splints for broken bones. A swollen limb or ear has a good prognosis. A swollen face also has a good prognosis, but medical attention is indicated. Multiple swollen parts require medical attention and have a fair prognosis.

Temperature, High and Low

The normal temperature of dogs and cats is between 100 and 102.5 degrees Fahrenheit (F), taken at the anus. Temperature ranging from 103 to 105 degrees F are cause for concern; temperatures of 106 degrees F and over are extremely alarming. Animals that are chilled and seriously ill may have temperatures of below 99 degrees F. High body temperature can be seen with infections, poisonings, heat prostration and physical exertion. Low body temperature is commonly seen with serious illnesses, including excessive exposure to cold. If the temperature is 106 degrees F or more, ice compresses can be applied to the head, feet and between the back legs. If the temperature is in the 103 to 105 degree F range, aspirin can be given. Animals that are chilled need to be warmed with blankets to gradually raise the body temperature to 100 degrees F. Animals with temperatures between 99 and 104 degrees F have a good prognosis. An animal with a temperature of 105 degrees F or more needs prompt medical attention.

Urination, Difficult

Stranguria, or difficulty in producing urine, is most often noticeable when females squat or male dogs lift their legs but only a few drops of urine are produced. Difficult urination is most often the consequence of infections or stones causing obstructions. Occasionally, neurological conditions cause stranguria. The cause of the condition must be identified and addressed. Until then, aspirin might be useful to relieve pain and reduce inflammation. Difficulty in urinating has a good prognosis, but the underlying problem must be identified and corrected.

Vomiting

Typically, the animal is standing and expelling materials from the stomach which may be white foam, yellow foam, clear liquid, bloody liquid, blood, partially digested food, coffee grounds, or other foreign bodies. Animals usually vomit because they have systemic or gastrointestinal infection, poisoning, obstruction and/or foreign body or a serious metabolic disease, such as kidney failure. Less common causes are cancer, abnormal stomach function (including motion sickness), parasites, diet and adverse reaction to a drug. Do not give food for at least 24 hours after an animal has vomited. Provide ice cubes, preferably made of half-strength Gatorade® instead of water. If the animal does not vomit again, give soft, bland foods or chicken broth in small quantities for 48 hours. If the animal vomits only about once a month, this can be

considered normal. If vomiting occurs weekly, there is cause for concern and close observation. Daily vomiting requires a medical opinion. Hourly vomiting is cause for alarm and medical care. Blood in the vomit is cause for immediate and prompt medical attention.

Weakness

The weak animal will stumble about, have difficulty rising and will show strain in trying to walk. Generalized weakness can be a sign of central nervous system problems, cardiovascular disease, neuro-muscular disease, serious metabolic disease, serious infection, cancer, poisoning or parasitic diseases. Keep animals in a comfortable, quiet place and look for a specific diagnosis. Weakness of itself has a fair prognosis, but other symptoms must be considered and treated.

Worms in the Stool

Usually, if the worms can be seen in the stool they are tapeworms or roundworms. Most worms can only be seen through a microscope. If they can be seen, tapeworms will resemble grains of rice and moving in the stool and roundworms will look like spaghetti. The parasite must be identified before treatment is selected. Simple parasite problems can be cleared up with the appropriate anthelmintics.

References

Fenner, W.R. *Quick Reference to Veterinary Medicine*, Philadelphia, Pennsylvania: J.B. Lippincott Company, 1982.

Kirk, R. W., and S. I. Bistner, *Handbook of Veterinary Procedures and Emergency Treatment*. Philadelphia, Pennsylvania: W. B. Saunders Company, 1985.

Merck Veterinary Manual, Rahway, New Jersey: Merck and Co., Inc, 1979.

FIRST AID KIT SUPPLIES *for small Animals*

Ace Bandages

3", 4" and 6" sizes

Aspirin

Dogs — 1 tablet per 30 pounds once or twice a daily

Cats — 1 baby aspirin every 96hours

Do not administer aspirin to animals that are vomiting

Band-Aids

Bandaging supplies

Benzyl Peroxide Cream

For topical skin problems

Betadyne Solution	Dilute solution, 1:10 to 1:20 with distilled water
Charcoal Tablets	For use on direction of veterinarian or poison control authority
Clippers	With 10 or 40 blade
Bandage Tape	2" or 4" inch rolls
Cotton Batting	#1 roll
Cough Syrup	Robatussin, pediatric
Disposable Diapers	Newborn size, non-scented
Distilled Water	1 gallon
Enemas	Disposable, Fleet for dogs & DSS (dioctyl sodium sulfosuccinate) for cats
Epsom Salts	To be used 2 cups to 1 gallon
<i>Eye Ointments</i>	A variety of over-the-counter products
<i>Flashlight</i>	
Gatorade	To be given half-strength, 1:1 with tap water
<i>Disposable gloves</i>	
<i>Honey</i>	
Hydrogen Peroxide	To induce vomiting when appropriate – 1 teaspoon to 1 tablespoon
Ice Cubes	
Imodium A-D	½ tablet per 30 pounds, once
<i>Ky Jelly, plain</i>	
<i>Kwik Stop</i>	
Leash and Collar	Chain type preferred
Metamucil	1 tablespoon per 30 pounds
Mylanta	1 teaspoon per 30 pounds
Neosporine	
Nylon Rope	48" length of 1/8" Rope

Pepto Bismol Dogs – 1 tablet per 30 pounds every 8 hours, or 1 tablespoon per 30 pounds
Cats – 1/4 tablet or 1 teaspoon liquid per 10 pounds, once
Cats prefer Pepto Bismol chilled.

Pet Carriers

Pliers Needle nose

Plywood 24" X 48" sheet

Poison Control List of telephone numbers for poison control agencies

Preparation H

Radiant Heater

Rubber Gloves Small, medium and large sizes

Saline Solution 1 liter

Scissors

Splints Assortment

Storage Box or Cart Store First Aid Kit supplies safely as possible

Tarpaulin 6' X 6' size

Thermometer

Telfa Pads 3" X 4" size

Turkish Towels

Tweezers Assortment

Wire Cutters