

Field Dog First Aid

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NAVHDA International Annual Meeting, Ottawa, ON
January 22, 2011



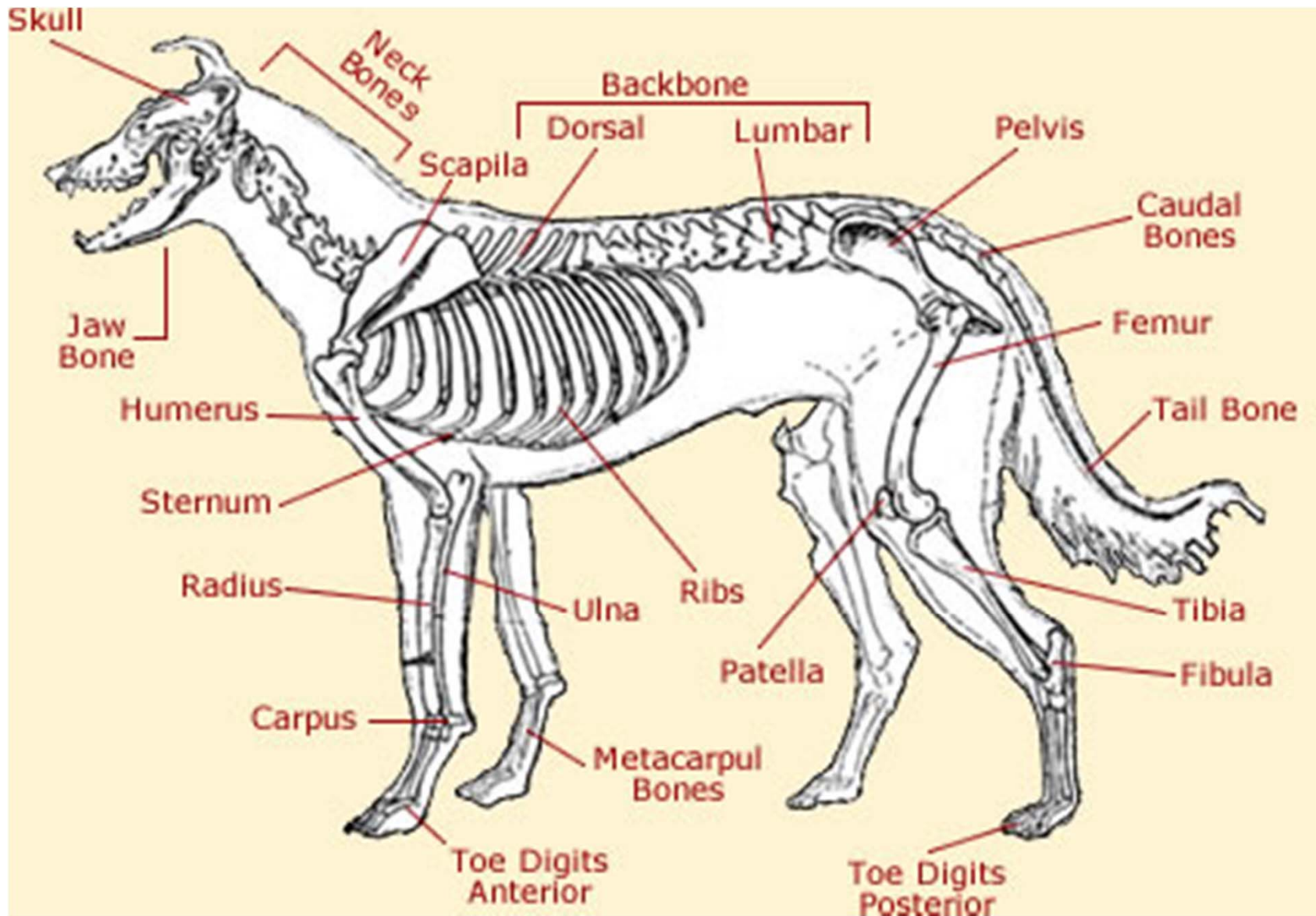
Introduction



- What is field dog first aid?
- Differences between first aid for people and first for field dogs?
- How can we be prepare for the unexpected?



Dog Anatomy



Normal Values



- **Capillary refill time** – less than 1 second
- **Mucous membrane color** – generally pink
- **Temperature** – 101 to 102 degrees F (38.3333 – 38.8889 Celsius)
- **Pulse rate at rest** –
 - Young dogs 110 – 120 bpm
 - Large breed adult 60-80 bpm
 - Small breed adult 80 – 120 bpm
- **Respiratory rate** –
 - Young 20 – 25 /min
 - Adult 14 – 16 /min
- **Hydration** – pick up skin and release, it should return within 1 second



Capillary refill time is measured by pressing on the gums over the canine tooth. Using one finger, press down firmly until the gums turn white under your finger and release. You are looking for the time it took for the color to return. Also, note the colour of your dogs gums and mouth. Dogs gum colour can vary from black, pink, reddish brown or any combination of colors.

Temperature is taken rectally with an adult rectal thermometer. You should hold it in place for 1 to 2 minutes. If you get a temperature of less than 100 degrees F, re-take the temperature to make sure the thermometer was in place long enough.

The pulse rate and respiration rate will vary from dog to dog, and will also vary if the dog is at rest or working. So, it is a good idea to get normal values for both.

Common Field Emergencies



- Cut pads
- Lacerations
- Eye/Ear FB
- Puncture Wound
- Bite Wounds
- Allergies
- Hot spots
- Bacterial Infections
- Porcupine Quills
- Toxic Ingestions
- Torn Nails
- Fish Hooks
- Abscess
- Hematomas
- Heat Stress / Stroke



Non Specific Conditions



- Vomiting
- Hemorrhage / Bleeding
- Diarrhea
- Coughing / sneezing
- Discharging Eyes / Nose



Severe or Life Threatening Emergencies



- **Fractures**
- **Gun Shot Wounds**
- **Bloat**
- **HBC**
- **Snake Bite**



Wounds & Bleeding



Abrasions

- Usually minor.
- Some bleeding.
- Always a possibility of infection.



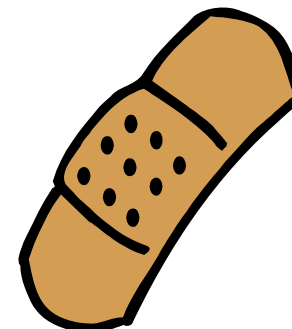
Treatment

- Carefully remove foreign objects and debris.
- May have to cut or clip hair away from area.
- Clean wound liberally with water and Chlorhexidine or Betadine scrubs or solutions if available. If not, any soap will be beneficial. Solution does not have to be rinsed, scrub must be rinsed copiously. Avoid using hydrogen peroxide. It can damage tissue.

Bandaging Principles



- Protect wound from further injury or infection.
- Discourage licking.
- Restrict movement.
- Secure splint.
- Prevent weight bearing.
- Provide compression to control bleeding and edema.
- Verify circulation is maintained to toes, make sure to cushion pads.



Major Lacerations & Bleeding



- **Can be life threatening.**
- **May need to be sutured by a Veterinarian.**

Treatment

1. Control bleeding.
 - Additional direct pressure
 - Elevation
 - Pressure points
2. Get professional help right away.



Fractures & Suspected Fractures



Signs and Symptoms

- Obvious pain
- Loss of use of the limb
- Protruding bone
- Swelling
- Irregularity or deformity
- Limping



Treatment

- Remember, shock and bleeding should be controlled first.
- Treat dislocation as fracture.
- Do not push bone back through skin.
- Cover an open fracture with clean dressing.
- No agreed upon or standard for first aid for a fracture of the humerus or femur.
- Transport to appropriate facilities ASAP.

Stings



Signs/Symptoms

- Pain
- Swelling and redness
- Pawing at face
- Snapping in the air
- Treatment



If you see the stinger, get it out. Cool compression will help alleviate the sting. Give oral benedryl (diphenhydramine 2-4mg/kg orally every 8 hours). Seek medical attention if swelling persists/gets worse or if the sting is near the head/neck/throat area.



Heat Exhaustion



Signs/Symptoms

- Fatigue
- Circulatory collapse
- Red mucous membrane (gums)
- Excessive panting
- Dehydration
- Shaking



Treatment

- Seek shade, rest the dog, offer small amounts of water.
- Seek Veterinary care if condition does not improve.

Heat Stroke



Signs/Symptoms

- Excessive panting
- Rectal temperature above 105-106 degrees F
- Disorientation
- Weakness
- Rapid pulse/breathing
- Brick red mucous membranes



Treatment

- Get the dog into shade, into a creek if available.
- Use same precautions as with human, don't use ice water bath.
- Slowly cool down the body temperature, immerse in a cool water bath. Ice can be placed, with caution, under armpits, head, neck, and groin area, being sure to wrap in cloth first.
- Monitor temperature, avoiding cooling too much.

Poison



Signs/Symptoms

- Breathing difficulty
- Unusual actions
- Digestive upset
- Irregular heart, rapid, or weak
- Shivering
- Convulsions
- Salivation



There are many different types of poisoning, each will affect your dog differently. Many do not produce immediate symptoms. Find out what your local poison control number is and call them.

Do not make the dog vomit if it is a caustic poison or you do not know what kind of poison the dog has consumed.

Consult poison control or a Veterinarian for further instructions.

Poisons - Anti Coagulant Rodenticides



Warfarin

These rodenticides will cause the dog's blood to stop clotting in hours or a day. This does not show immediate signs like other poisons. Make your dog vomit.

Other Rodenticides

- ANTU
- Thallium
- Pindone
- Strychnine
- Sodium Fluoroacetate (1080)
- Zinc Phosphide

May cause fatal pulmonary edema, seizures, liver or kidney destruction, or severe hemorrhagic gastroenteritis. If the dog is conscious, induce vomiting, give Toxiban, collect the product label, and transport to a Veterinarian.

- Pesticides
- Arsenic
- Chlorinated Hydrocarbons
- Organophosphates
- Carbonates
- Rotenone
- Metaldehyde

SIGNS: General profuse salivation, stomach pain and cramps, laboured breathing, bluish mucous membranes, seizures/convulsions, rigidity, extended legs and many other signs.

Other Poisons



Antifreeze (Glycols)

Signs may not be readily apparent. The dog may actually appear a bit “drunken”.

The fatal effect of ethylene glycol occurs hours later and is irreversible at that point. Immediately rinse the dogs mouth, feet and any other points of contact.

Induce vomiting if conscious and give Toxiban. Transport immediately to veterinarian.

Miscellaneous poisons

- Acid
- Alkalies
- Garbage
- Toxic plants
- Chocolate
- Acid – Clean off what you can see, do not induce vomiting, transport to vet.
- Alkalies – Clean off what you can see, **do not** induce vomiting.
- Garbage – Remove what you can, induce vomiting, give activated charcoal....do not give lomotil.
- Toxic plants – Take a sample of the suspected plant to a local veterinarian.
- Chocolate – If more than 1 oz/kg of baking chocolate is consumed, or 2 oz/kg of semi-sweet chocolate, or 4 oz/kg of Milk chocolate, **induce** vomiting, give activated charcoal. (Note: the fat content of some milk chocolate products can cause life threatening pancreatitis).

Bloat



Bloat is the common terminology for Gastric Dilatation / Torsion. This is most common in larger – deep chested dogs (aka **FIELD DOGS!!**).

Gastric dilatation is the enlargement of the stomach beyond its normal dimensions.

Gastric dilatation volvulus is when the stomach actually rotates on itself. ***This is a life threatening situation.***

Signs/Symptoms

- Dry retching/unproductive vomit
- Restlessness
- Anxiousness
- Distended abdomen (hardened)
- Drooling excessively
- Depression
- Shock



Bloat



Treatment

- Take to the veterinary hospital immediately.
- To monitor the bloat you can take a measuring tape (webbing or leash could work) and measure the distance around the dog, just caudal (past) the last rib. Monitor and make sure it is not enlarging, mark it with a pen to keep accurate.

Prevention

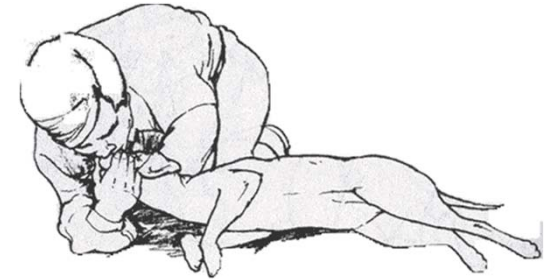
- Feed your dog his/her ration of food in, at least, two feedings a day (am/pm).
- Avoid giving lots of water at once, offer water more frequently. Avoid exercise approximately 1-2 hours before and after feeding.

CPR and Rescue Breathing



Airways

The first priority is to establish an unobstructed airway. Open airways by extending head and neck. Check and remove any foreign materials from the mouth and pull the tongue forward.



Breathing

Look and listen for signs of breathing. If none, place your hands around the muzzle to prevent air from escaping and breathe forcefully into the nostrils. The chest should expand and fall if you are getting air into the lungs. Do not be too forceful with small animals. Rescue breathing should be given at a rate of 8 to 10 breaths per minute (or one breath every 6 seconds).

Cardiopulmonary resuscitation (CPR)

If there is no pulse, place the dog on a hard surface with its right side down. Use the heel of your hand to compress the chest on the lower side immediately behind the elbow. The compression should be firm and not a sudden blow. It helps to have 2 people; the first gives the cardiac massage, the second does the breathing. CPR should be given at a rate of 80 to 120 compressions per minute with two ventilations being given every 15 compressions of the chest.

Outfitting a First-Aid Kit



NECESSARY ITEM

1. Vetwrap / Cling Gauze
2. Gauze (rolls/pads)
3. White Tape
4. KY Jelly
5. Thermometer
6. Shoe Lace
7. Hemostats/Needle Nose Pliers
8. Needles & Syringes
9. Disposal Gloves
10. Alcohol / Iodine
11. Hydrogen Peroxide
12. Epsom Salt
13. Disposable Razor
14. Scissors
15. Sterile Eye Wash
16. Side Cutting Pliers / Leatherman

ADDITIONAL SUPPLIES

1. ASA
2. Activated Charcoal
4. Dimenhydrinate
5. Cimetidine / Ranotidine / Famotidine
6. Diphenhydramine Hydrochloride (HCl)
7. Metronidazole
8. Laxatives
9. Eye Ointment



NOT FOR THE FAINT OF HEART

1. Suture Material
Absorbable vs. Non-absorbable
2. Tissue Glue
3. Surgical Stapler

Drug Chart



GENERIC NAME	TRADE NAME	DOSE	USES
Acetylsalicylic acid (ASA)	Aspirin	10-12 mg/kg twice a day with food	Pain relief, anti- inflammatory, reduces fever
Antihistamine	Next slide		Allergic reactions, anti- itch
Activated Charcoal	Charcodote	6 – 12 ml/kg orally	Absorbent to prevent toxin/poison absorption
Dimenhydrinate	Gravol/Dramamine	4-8 mg/kg orally every 8 hours	Anti-motion, motion sickness
Antacids			
a) Cimetidine	Tagamet	10 mg/kg every 6 – 8 hours	Gastritis
b) Ranitidine		2 mg/kg every 8 hours	
c) Famotidine	Pepsid	.1 - .2 mg/kg every 12 hours	
Metronidazole	Flagyl	15 mg/kg every 12 hours	Mild antibiotic , anti- giardial (intestinal parasite)
Laxatives			
a) Lactulose	Cephulac	1 ml/5 kg every 8 hours	Constipation
b) Magnolax			
Ophthalmic Antibiotic Ointment	Polysporin ophthalmic	1 cm 3 – 6 times daily	Eye infection/injury/lubricant
Eye Flush	Eye Stream	As necessary	Flush eyes
	Contact lens saline		
Ear Wash	Epiotic, Oticlens, etc.	Twice a week as necessary	Ear cleaning solution
Antibiotics	Amoxil, Clavamox, Cephalexin	As per individual drug	Infections

Antihistamine Therapy



GENERIC NAME	TRADE NAME	FORM	5 - 10 kg 11 - 22 lbs	10 - 15 kg 22 - 33 lbs	15 - 25 kg 33 - 55 lbs	> 25 kg > 33 lbs	DAILY MAX
Diphenhydramine	Benadryl	25 mg	1 cap	1.5 tab	2 tab	2 tab	3 x
Chlorpheniramine	Chlortripolon	0.5 mg/mL 4 mg tab	1/2 tab	1 tab	2 tab	3 tab	2x
Cetirizine	Reactine	5 mg	1/2 tab	1 tab	2 tab	3 tab	1x
Fexofenadine	Allegra	60 mg	1/2 - 1 tab	1 - 1.5 tab	1.5 - 2 tab	2 - 3 tab	1x or split dose
Hydroxyzine	Atarax (Rx only)	10 mg	1/2 - 1 tab	1 - 2 tab			4x
		25mg			1 - 2 tab	2 tab	4x
Loratadine	Claritin	1 mg/mL 10 mg tab	1/2 tab	1 tab	1.5 tab	2 tab	1x



Questions?

