First Aid in the Field, CPR, and Common Toxins

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First Aid Kit

- Staple gun
- Gauze squares (3 x 3 inch or larger)
- Cotton balls
- Elasticon (adhesive tape)
- Vet wrap (non-adhesive tape)
- Honey (or sugar) packets
- Sterile non-adhesive pads
- Syringes, 2-3 (6mL or larger)
- Eye wash
- Dog friendly anti-inflammatory pain med
- Clippers

- Antiseptic (betadine or chlorohexidine)
- Bitter apple spray
- Scissors
- Triple antibiotic and hydrocortisone
- Thermometer
- Ear cleaner solution
- Nail clippers
- Quickstop

https://www.gundogsupply.com/ready-dog-professional-first-aid-kit.html?utm_source=google&utm_medium=cpc&utm_term=READY-DOG-PROFESSIONAL-FIRST-AID-KIT&gclid=EAIaIQobChMIhueDvcHl4wIVeh-tBh2T8g-_EAQYASABEgJQ9PD_BwE
First Aid in the Field

- Allergic reactions
- Minor lacerations/wounds
- Major lacerations
- Punctures
- Eye exposure
- Heat stroke
- Rattlesnake encounter
- Other wild animal encounters
- CPR
Allergic reactions

- Can happen with insect bites or exposure to a variety of things
- Benadryl – 1mg/pound = 25mg orally every 8-12 hours for a few days; can cause sedation
- Signs: hives, facial swelling, if severe: vomiting, diarrhea, weakness
- Anaphylaxis is rare
- If itchiness persists despite Benadryl or if signs are severe, seek veterinary care
Minor lacerations

- Most minor wounds can be tended to at home (some judgement needed)
- My rule of thumb: < 1 inch (quarter sized) and not deep can potentially be clipped and cleaned with warm water
- Hydrogen peroxide or isopropyl alcohol (OUCH) – can damage the tissue…rinse with tap water (ideal is 3-5 minutes) removing any debris
- Check the wound 2-3 times a day; clean twice a day
- If not improving within 2-3 days or if pet is declining, see vet

Photo courtesy of L. McCracken
Major lacerations

- Hunting vests – help prevent
- Larger wounds or those that are deep will require prompt veterinary care
- Trauma to the tissues beneath the wound
- Rinse with warm water to remove debris
- Seek veterinary care right away
Punctures

- The skin site can be deceiving – small
- Potential to leave bacteria and foreign material behind
- Rinse the area with warm water for several minutes and monitor the site 2-3 times a day

When to seek veterinary care:
- Small puncture wounds that are not healing
- Pet has signs that do not fit for a simple skin wound
  (vomiting, inappetance, diarrhea, others)
- If you are concerned... want piece of mind
Eye exposure

- Running through brush
- Common to get material in eyes (eye wash, can be used many times a day)

- If squinting or ocular discharge present beyond a few hours, seek veterinary care
Heat Stroke

- Hot, humid days
- Dogs do not have the same cooling mechanisms that we have
- Brachycephalic breeds (Pugs, Bulldogs, Boxers, and Frenchies) – even more limited cooling than other dog breeds

- Signs can include
  - rapid forceful panting, bright red tongue, red or pale gums, thick and sticky saliva, depression/lethargy, weakness, dizziness, vomiting, diarrhea, shock, coma and death
  - Prolonged high temperature can lead to organ damage and death
- Normal temp: 99-102.5F; when very active the temperature could be a bit higher...if >104F with signs, consider heat stroke
Heat Stroke

- Seek shaded area
- Offer small amount of water frequently (do not force to drink)
- Spray water to the trunk of the body

- When to seek veterinary care immediately:
  - having diarrhea, or is noticeably bleeding or bruised
  - pet is collapsed, unresponsive, or having seizures

- Do NOT pour water into the mouth if collapsed or unconscious.
- Do NOT use ice water or an ice bath.
- Do NOT cool your pet too fast or too far – gradual is best.
- Monitor rectal temperature every 1-2 minutes.
- Stop cooling once rectal temperature reaches 103.5°F.
Low blood sugar (hypoglycemia)

- Uncommon in adult dogs, but with heavy exercise...
- Prevent: small snacks/meals throughout the day
- Signs: lethargy/weakness and ultimately seizures

Treatment in the field:
  - If able to eat, feed
  - if not honey/sugar water/syrup – absorbed through the gums/mucosa (no need to swallow) – don't get bit; amount 1-2 teaspoons; feed once recovered...call it a day
  - Improvement should be seen relatively quickly
Rattlesnake bite

- Venom – best used to obtain food; dogs are protective and curious

- Small dog = more venom relative to size (more likely to die)

- Vaccine – only W. Diamondback rattlesnake; data is uncertain – may decrease severity of reaction to venom

- Signs: pain and swelling at the site followed by weakness/shock

- Treatment: anti-venin (within 4 hours, $$), hospitalization (fluids, pain meds, antihistamines, and antibiotics).
Other wild animals

- Bites
- Quills
- Trauma
- Infectious diseases (rabies, other)
CPR

- Check for responsiveness
- Check for breathing and for a heart beat (just behind front leg)

If CPR needed:
- Compress the chest ½ of the width – “Staying Alive”
- Stop to give two breaths every 30-40 compressions
- Check for breathing every 2 min
- Get to vet

VIDEO: https://www.youtube.com/watch?v=ibd4edu1Zhs&feature=youtu.be
Toxins

- Xylitol
- Grapes, Raisins, and Currants
- Chocolate
- Avocado pit
- Human Anti-inflammatory Meds – ibuprofen (Advil) & acetaminophen (Tylenol)
- Onions and Garlic
- Blue-green Algae
- Mouse/Rat Poison

- Easter lilies in cats
Over the Counter Anti-inflammatory Meds

...we love our dogs

a) Weekend warrior – there are veterinary NSAIDs that are effective and safer
b) Curious pups – getting into what they shouldn’t
OTC Anti-inflammatory Meds

dose needed is too close to the toxic dose...as a result, these should be avoided

veterinary alternatives are available (Rimadyl, Previcox, others)

Can lead to stomach/intestinal ulcers and kidney failure

Can lead to red blood cell damage and liver failure

Signs can be seen as quickly as a few hours to a couple of days after ingestion.
OTC Anti-inflammatory Meds

- If exposure occurs
  - Contact Pet Poison Control or a veterinarian right away

- If within 1-2 hours (<4 hours), vomiting should be induced

- If the dose of any of these meds is high enough, aggressive treatment is usually needed
Xylitol – sugar alcohol

- One of several sugar substitutes – sweeteners for humans
  - Sugar free candy and gum; some peanut butters, some flavored lip balms and face lotions

- Ingestion can lead to low blood sugar in dogs (within 1-12 hours) and liver failure (within 8-24 hours)

- Treatment: if asymptomatic and immediately after ingestion – induce vomiting; then head to a vet.
- Blood sugar should be monitored for 12 hours after ingestion.
- If larger amounts have been ingested, the risk for liver damage is high. Liver protectants may be helpful. Death rate with liver toxicity: up to 60%.

- Dogs are the only species reported to experience toxicity with xylitol.
Check any sugar free sweetened item

https://www.preventivevet.com/xylitol-products-toxic-for-dogs
Grapes, Raisins, & Currants

- Component - unknown
- Ingestion → severe kidney failure
- Amount to cause kidney failure is variable
- Some dogs seem to be more sensitive than others
- 4-5 grapes can be fatal for an 18 pound dog

- Signs: vomiting, diarrhea, restlessness, excessive thirst with 6-12 hours
- Renal failure develops within 24-72 hours of ingestion
- Treatment: induce vomiting if within an hour;
  - veterinary treatment: hospitalization with fluids for days
- Prognosis: guarded
Chocolate

- Toxic components: caffeine and theobromine

- Milk chocolate
- Dark Chocolate
- Semi-sweet chocolate
- Unsweetened baker’s chocolate
- Cocoa powder

- White chocolate…yuck! That doesn’t contain cocoa = not toxic
Chocolate

- Amount to be toxic depends on the amount of caffeine and theobromine
- SIGNS – within 6-12 hours
  - Lower amounts: restlessness, transient vomiting, diarrhea, excessive thirst
  - Modest amounts: signs above and cardiac rhythm changes (fast and/or irregular heartbeat.
  - Higher doses: Seizures and even death
  - Similar signs can be seen with other CNS stimulants
- Chocolate toxicity calculators are available online
- Treatment: if early (within an hour) – induce vomiting, veterinary treatment with muscle relaxants, antarrhythmic drugs, +/- antiseizure meds, and fluids
- Can take 72 hours to recover
Avocado pit

- Mild toxin for dogs and cats
- Blockage/obstruction in the esophagus or gastrointestinal tract
- Very toxic to birds and horses
- Avoid
Macadamia Nuts

- Toxin within the nut: uncertain
- Weakness, depression, vomiting, tremors, and high body temps
- Signs within 12 hours
- Treatment: induce vomiting if a large amount ingested; severely affected dogs may need hospitalization
- Signs usually resolve within 12-48 hours
- Only seen in dogs
Onions and Garlic

- Small amounts vs large amounts (many onions)
- Gastrointestinal upset
- Cause damage to red blood cells resulting in anemia
- If a large amount has been ingested – seek veterinary care

https://www.petpoisonhelpline.com/poison/garlic/
Mushroom Toxicity

- Wild mushrooms are common; identifying toxic mushrooms – challenge!
- Death cap mushroom, others. Consider any wild mushroom as potential toxin

- Signs: vomiting, diarrhea, abdominal pain, staggering/weakness, and seizure; can lead to liver and kidney damage.
- Seek veterinary care immediately

- Again, identifying the mushroom as poisonous can be very challenging; you can collect one or snap a photo

Blue Green Algae

- June, 2019: 2 dogs poisoned by blue green algae in Alexandria, MN
- Cause: a bacteria in the water that produces
- Requirement for the bacteria: well nourished (fertilizer), still/stagnant water and sunlight
- Which lakes contain blue green algae? Often “pea soup” or sludge.
Blue Green Algae

- Signs: lethargy/disorientation, vomiting, diarrhea, excessive drooling, seizures, jaundice/yellow pigment to tissues, and even death

- Prevention: avoid exposure; wash right away (be careful that you are not exposed)

- Very hard to confirm

- Treatment: supportive care (no specific treatment)
Mouse/Rat Poison

- Common!

- Several types of poisons and how they act to poison the rodent
  - Anti-coagulants (similar to warfarin): blocks normal blood clotting
  - Bromethalin (nerve damage) and cholecalciferol (excessively high blood calcium)

- Seek veterinary care right away!

https://www.petpoisonhelpline.com/poison/garlic/
Lead shot

- Chronic lead toxicity in any species
Easter Lillies – cats only

- Leaves and flowers are toxic to cats
- Severe renal failure
- Seek veterinary care immediately!
Phone Numbers

- Put these numbers in your cell phone NOW so you have if needed
- Your vet
- Local Emergency Vet
- **Pet Poison Helpline:** (855-764-7661)
- **Animal Poison Control Center:** 888-4ANI-HELP (888-426-4435)

Both charge about $60 (one time fee; offer recs to you and vet team treating the patient) – money well spent; they are the experts with a lot of info at their fingertips
Questions