

## Review Material:

- What is vomiting?
  - Evacuation of food from the stomach via stomach, abdominal muscle, and diaphragm contraction. Dogs do so readily and may be related to disease or a single occurrence in a healthy dog.
  - Different than regurgitation which is composed of undigested food that never reached the stomach
- What causes vomiting in dogs?
  - Vomiting (acute or chronic) can occur for a wide list of reasons. It can be due to the gastrointestinal tract not working properly or because of a secondary issue like toxins or abdominal pain.
    - Minor upset
    - Parasites
    - Allergies
    - bacterial/viral infections
    - Inflammatory conditions
    - Obstructions from foreign bodies
    - Organ dysfunction
    - Cancer
  - Is vomiting a bad thing?
    - Vomiting is not a disease in and of itself. It is a common symptom that doesn't necessarily point to any sort of larger problem.
    - Sometimes we actually want to induce vomiting in dogs. For example, when a dog eats something they're not supposed to.
      - Inducing vomiting is something you should only attempt to do under the guidance of a veterinarian.
      - If your dog ate something more than two to six hours ago, it may be too late to get them to vomit it up
      - Veterinarians can use special drugs to safely induce vomiting in your dog
        - We can also use drugs to prevent vomiting from occurring in dogs
  - Why do dogs eat their vomit?
    - Because dogs can still smell the food from their stomach and think, "Yum!".
    - It's a normal behavior in the wild and stems from their ancestors (wolves)
- What do the contents mean?
  - The contents of dog vomit are variable. Looking at color and consistency alone are not great indicators of cause. For example, red vomit could indicate blood, but it could also be red because the dogs eat red food. The contents of vomit can also tell you if the animal is vomiting or regurgitating. If the vomit has whole food that looks completely undigested, then the dog has actually regurgitated which is a sign of an esophageal problem not a GI problem. Besides telling between vomiting and regurgitation, looking at your dog's vomit can confidently tell you if

your dog's stomach is empty or not. If the vomit is all liquid then the dog likely has vomited on an empty stomach. As mentioned before, color cannot confidently tell you whether a dog needs medical service immediately, but if the color is very dark, red, or black you should contact your veterinarian as soon as possible.

- Yellow = bile
- White = foam and saliva
- Red = blood (undigested)
- Green = bile or plant material
- Brown = food, feces, or intestinal blockage
- Black = dirt/soil/stone, intestinal bleeding (digested blood)
- What is vomit made of?
  - Vomit is partially digested food and stomach acid– can contain other foreign materials
- How to resolve vomiting?
  - Find the cause–TAKE YOUR DOG TO THE VET!!
    - Blood tests
      - Look for changes levels of red blood cells and white blood cells
      - Electrolyte and kidney function
    - Urine tests
      - Presence of WBC, high levels of glucose and ketones, bilirubin
    - Radiography w/ or w/o barium
      - Find obstructions, gas, or inflammation in GI system
    - Biopsies
      - Used primarily in chronic conditions (allergies, infections, autoimmune skin disease, tumors)
    - Exploratory surgery
      - Evaluating the organs involved in GI tract and identify/remove foreign materials
      - Can take biopsies during surgery
  - Medications
    - Cerenia (control nausea)
    - Reglan (promote movement of intestinal tract)
    - Metronidazole (relieve inflammation of intestinal tract)
    - Sucralfate (soothing medication for stomach and intestines)
    - Antibiotics
  - Other treatments
    - Change the diet
    - Fluid therapy for treating dehydration
    - Withhold food for 24 hrs and then slowly reincorporate
  - Bland diet (chicken, rice etc.)