Veterinary Science
Preparatory Training for the Veterinary Assistant

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First Aid

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Objectives

- Discuss topical medications used in the treatment of cuts and abrasions on the skin
- Describe techniques for cleaning cuts and abrasions on the skin
- Describe procedures to provide comfort to an injured animal
- Describe techniques to control external bleeding
- Describe techniques to support a broken leg
- Describe artificial respiration procedures
Introduction

First aid

- The initial care or treatment of
  - a sick or injured animal before
  - complete medical evaluation and treatment

Purpose of first aid

- Reduce effects of injury
- Reduce or stop severe bleeding
- Prevent death of an animal
Handling and Restraint

- Should be applied appropriately
  - State of shock
  - Unconscious
  - Hemorrhaging
  - Bone fractures

- Animals should be moved and restrained carefully
Animals in Shock

- Capillary refill (mucous membrane)
  - Pale, gray or blue in color
  - Should be healthy pink!

A Healthy Pink

Pale Colored
Shock and Internal Hemorrhage

- **Pulse rate**
  - 1 ½ to 2 times above normal
    - State of shock
    - Internal hemorrhage
    - Pain
    - Respiratory disease

- **Patient handling**
  - Kept still
  - Reduce distraction
Body heat

- Body temperature may drop
  - Cover animal with blanket to maintain body temp
  - Overheating should be avoided
Wounds and External Hemorrhage

- Control bleeding
  - Artery
    - Bright red and spurts as heart beats
  - Vein
    - Darker red, steadier flow
- Severity of bleeding
  - Is it clotting?

- Non-bleeding wounds
  - Cleaned with warm water
  - Cleaned with antiseptic or antibiotic
  - Supportive-protective bandage applied
Severe bleeding

Apply pressure

- With hand
- Pressure bandage
- Tourniquet
- Artery: Apply pressure above
- Vein: Apply pressure below the wound
- Pressure directly on the wound doesn’t stop bleeding.
Tourniquet
- Tightened to stop bleeding
- Loosened every 10 to 15 minutes

Keep applying bandages until bleeding stops.
Pain and Fractures

- Signs of pain and/or fractures
  - Labored breathing
  - Depression
  - Reluctance to move
  - Non-weight bearing
    - Pain
    - Open joint
    - Fracture
- **Patient handling**
  - Kept still
    - Reduce pain
    - Reduce possibility of bone damaging important vessels
  - Apply temporary splint, if needed
    - Two stiff pieces of material
    - Lots of padding!!!
    - Splint wrapped around leg
Respiratory Distress

- Causes of distress
  - Drowning
  - Trauma
  - Circulatory shock
  - Anaphylactic shock
  - Electrical shock
Artificial respiration

- Lay animal on side
- Press straight down on thorax with palm of hand
- Release quickly
- Repeat cycle every 4 to 5 seconds

Do not apply if animal has thorax or rib injuries!
Colic

- Colic is abdominal pain

Gastrointestinal colic

- Stomach, small intestine, or large intestine
  - Gas
  - Impaction
  - Twist
  - Hypermotility
Clinical signs in horse
- Not eating
- Pawing
- Rolling
- Sweating
- Increase body temp
- Slightly to high pulse rate
- Pale, dark red or blue mucous membranes
- Capillary refill greater than 3 seconds
Colic first-aid in horse

- Walk horse
- Jog if horse wants to lay down and roll
  - If horse is laying quietly, leave alone

Diagnosis of colic type is based on physical examination.