

## Procedures for Equine First Aid Wet lab

### 1. Vital Signs

- **Pulse and Heart rate:**
  - Using a stethoscope
  - How many sounds make up one beat = 2; can hear more than 2.
  - Facial artery
  - Digital artery
    - more for diagnostics of a foot problem
    - a “pounding” pulse would indicate inflammation in the foot
  - Normal = 28-44 beats per minute
- **Respiratory rate:**
  - Watch for nostril flaring
  - Watch how many times the chest moves in and out
  - Watch how hard the horse is breathing
  - Making noises, if so where (throat vs. lungs)
  - If unable to see any of the above, don't worry it means it is normal.
- **Temperature:**
  - Rectal thermometer – digital better than traditional mercury
  - Normal = 99.5 – 100.5;
    - if less don't worry
    - if on a hot day or just after exercise, the temperature may be elevated, if so, then recheck later to see if comes down.
    - higher in the afternoon vs. the morning
- **Gums:**
  - What color are they?
    - Normal is pink
    - Check your horse's gum color, when he/she has no problems.
    - Gum color will vary with the type of lighting – sunlight vs. artificial light. Check under both conditions.
  - What is the capillary refill time (CRT)? This is the time it takes the capillaries in the gums to refill after you press down on the gum with your finger to blanch them out.
    - normal is less than 2 seconds
    - over 2 seconds, could indicate shock and/or dehydration
  - How moist are they?
    - Wet and glistening is normal
    - Dry could indicate dehydration
- **Skin pinch:**
  - Lower neck in front of shoulder
  - Should go flat quickly – need to practice to see normal. Older horses may normally be slower than younger horses.

## Procedures for Equine First Aid Wet lab

### Vital Signs (continued)

#### ➤ **Gut sounds:**

- With and without a stethoscope
- Keep one hand on back and one on upper rear leg when listening with your ear for safety reasons.
- Listen to both sides of the horse in two places
  1. Upper flank – between hip bone (tuber coxae) and last rib.
  2. Lower flank - where the belly starts curving underneath.
- Time
- Sounds
  1. None
  2. Pinging
  3. Gurgling
  4. Ocean sounds
  5. Sudden flutter

### 2. Bandaging

#### ➤ **Foot:**

- Clean entire bottom of foot to avoid cross contamination
- Using a diaper and a duct tape bootie
- Apply medication to diaper before putting on foot vs. putting on foot then wrapping.

#### ➤ **Cannon:**

- Using quilt and standing bandage
- Never put an elastic bandage on the leg without thick padding underneath! You can cause severe tendon damage! Examples of this are ACE, VETRAP, and ELASTIKON.
- Wrap everything in the same direction.
- Technique for unrolling both the padding and wrap.
- Never go above or below your padding with a pressure wrap.
- Overlap the standing bandage by 50% as you go around the leg.
- Consistent tension with padding and wrap.
- \*Note: Old Track Myth – *wrap the tendons in.*
- Bandaging material management.

### 3. Injections (I.M.)

#### ➤ **Areas of injection:** (will be shown)

- Neck
  - Pinch and Pull: “distracts and protects”
  - Needle with syringe attached. Aspirate before injecting.
  - Be sure you and the holder are on the same side, and if horse “explodes” then you two and the horse’s head come together and let the horse’s rear end move away from you.

## Procedures for First Aid Wet lab

- **Areas of injection:** (continued)
  - Breast
    - Stand to side of horse facing the same direction
    - Be sure holder and you are on same side (see above)
    - If you are on the left side, hold the unattached syringe in your left hand and insert the needle with your right hand.
    - Insert needle 1st with quick thrust to the hub, then attach syringe.
    - A distraction method to use could be to either “bump” a few times or “pinch”, insert needle, aspirate and inject.
  - Lateral gluteal
    - Stand close to the side of the horse, in front of the hind leg, and facing towards the rear.
    - If on left side of the horse, put the unattached syringe in your left hand and rest your forearm on the lumbar area and insert needle with right hand.
    - Insert needle first with a quick thrust to the hub, then attach syringe, aspirate and inject.
    - You and holder on same side (see above)
  - Caudal thigh
    - Until you are well schooled in giving injections, this should be a 3 person procedure. One holds the head; one holds the unattached syringe, while you inject the needle.
    - Stand close to the side of the horse, beside the hind leg, and facing towards the rear.
    - If on the left side of the horse, while resting your left forearm against the lateral thigh, reach around to “pinch” the caudal thigh with your left hand. This method is used to “distract and protect”. If no big reaction, then insert the needle with a quick thrust to the hub, using your right hand. Do the distraction and needle insertion within a few seconds of each other.
    - Attach syringe handed to you by the 3<sup>rd</sup> person, aspirate and inject.
- **Show how to connect needle to syringe**
- **Show how to draw sterile water into syringe**
- **Inject the orange = BE SURE TO ASPIRATE!**
- **Quick thrust vs. slow drag style of injection = POP IT IN!**