**Beef Quality Assurance -- Vaccination & Handling Assessment**

Length of activity: 1 – 90 minute class (2 depending on class size)

Teacher: Sarah Schypers, Holston High School

**Lesson Objectives**

Students will be able to:

 Demonstrate two proper vaccination techniques (sub-Q and IM)

 Demonstrate proper handling technique to minimize stress to livestock

 Determine accurate drug dosage

 Justify selection of administration equipment

Chapter 2 of the Beef Quality Assurance program is an in-depth and important portion of the BQA certification program. With access to small animals, in our case, lambs and bottle calves, and an appropriate handling system students demonstrate skill in proper handling and vaccination techniques. This assessment is a great culmination to the vaccination and handling techniques in the BQA training portion. This hands-on assessment also prepares students for actually working with animals in the future and for the demonstration requirement to receive BQA certification.

I use an adapted version of the judges’ score card for the 4-H cattle working contest as a rubric for grading the assessment activity. Students work in small teams to demonstrate handling techniques but each student will be required to administer a vaccination. If the assessment can fall during a time when vaccinations need to be given that is wonderful. If not, a water placebo may be administered or students can demonstrate their vaccination techniques on fruit models.

Students will be divided into teams. They will prepare for the vaccinations and choose the equipment they would like to use if any. In the teams, the animal will be loaded into the system and vaccinations (or placebo) administered as appropriate for your situation. Other students can provide feedback from an abbreviated rubric with a section for narrative comments as well.

**Materials**

Vaccinate vials or water vials with drug labels

Syringes (variety)

Needles (variety)

General livestock supplies (variety – cattle prod, sticks, paddles, etc.)

Lambs and/or bottle calves

Working system

**Resources**

 Grading rubric

 Peer evaluation rubric

# Vaccination & Handling Assessment Rubric

**Cattle Handling (10 points)**

**2 point deductions:**

* Rough handling
* Excessive roughness in moving animal
* Failure to use crowd gate
* Excessive use of cattle stick

**1 point deductions:**

* Team had to have more one attempt to properly load animal into alley chute
* Noisy handling
* Missed head
* Failure to use squeeze before starting processing
* Failure to release squeeze before releasing animal
* Failure to latch crowd gate
* Failure to use bar behind animal
* Failure to remove bar in chute after releasing animal when gate is open for next animal

**Other deductions:**

**Comments:**

**Safety (10 points)**

**2 point deductions:**

* Any action that puts handlers/team at risk
* Handler’s head too close to animal’s head during tagging/implanting
* Attempting to inject in the neck in front of the head catch

**1 point deductions:**

* Dropping the tail gate

**Other deductions:**

**Comments:**

**Vaccination Injection (10 points)**

**2 point deductions:**

* Failure to re-administer product if not given correctly on first attempt
* Shot was given IM instead of SQ
* Injection given behind the neck, too high, too low, or too far forward
* Needle used to give vaccine is same needle used to draw vaccine out of bottle
* Vaccine was not properly hydrated

**1 point deductions:**

* Took more than 1 attempt to administer properly
* Injection not given where indicated on cattle processing plan
* IM injection was given too shallow in the muscle
* Wrong dose given (too much or too little)
* Needle was dropped or bent

**Other deductions:**

**Comments:**

**Cattle Processing Plan**

**Product Name** (1 point)

**Route of Administration** (1 point)

**Location of Administration**

* Two different vaccinations are given in different locations (1 point)
* Deworming application is accurately depicted (1/2 point)

**Dose**

* Correct dosing (1 point)
* Weight estimated accurately (1 point)
* Correct implant dosage (1/2 point)
* Proper tag placement (1/2 point)

**Preslaughter Withdrawal**

* Form filled and correct (1 point)
* Ear tag removal information indicated (1/2 point)

**Comments:**

# Peer Evaluation of Vaccination & Handling

Mark possible deductions for each category for each working team. Provide comments on improvements and successes you observe (provide examples.)

**Cattle Handling**

* Rough handling
* Excessive roughness in moving animal
* Failure to use crowd gate
* Excessive use of cattle stick
* Team had to have more one attempt to properly load animal into alley chute
* Noisy handling
* Missed head
* Failure to use squeeze before starting processing
* Failure to release squeeze before releasing animal
* Failure to latch crowd gate
* Failure to use bar behind animal
* Failure to remove bar in chute after releasing animal when gate is open for next animal

**Safety**

* Any action that puts handlers/team at risk
* Handler’s head too close to animal’s head during tagging/implanting
* Attempting to inject in the neck in front of the head catch
* Dropping the tail gate

**Vaccination Injection**

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**Comments (Successes & Improvements):**

