



## **Clemson Sheep Unit**

### **STANDARD OPERATING PROCEDURE**

#### **Injections**

How and where a sheep receives an injection affects the quality of meat and pelt they produce. It is not unusual for meat processors to find abscesses and scar tissue from injections in expensive cuts of meat. The location where a vaccine is to be injected is a critical part of a successful vaccine program. The vaccine must be placed in a site compatible for its action as well as one that reduces the chance of contamination and potential trim loss or pelt damage if a reaction occurs.

1. In sheep, the best "route" that is recommend is giving all injections under the skin (subcutaneously) unless directed by a veterinarian. Subcutaneous injections cause much less damage to the meat tissue. This is even more important in baby lambs because of the small amount of muscle tissue, and the damage that can be caused by the intramuscular injections can cause lameness and stiffness which often leads to unthrifty lambs.
2. There are two preferable "locations" to use in sheep. Never give an injection into the rear leg or loin area. The best locations are the sides of the neck, or the low area on the rib cage just behind the bare spot behind the front leg. The meat in this area is less valuable and if pelt damage occurs it can easily be trimmed to help reduce losses.



Proper site for Sub Q injection. Image from:  
<http://www.infovets.com/healthysmrm/C275.htm>

3. Use the correct needle size. Use the smallest gauge of needle that can properly handle the job. Most injections done to any size of sheep can be accomplished with an 18 gauge needle that is  $\frac{3}{4}$  - 1 inches in length. Longer needles tend to bend or break. The same is true of using smaller gauge needles. Needles larger than 18 gauge tend to cause more local tissue damage and drag more skin contamination into the injection site.
4. Never vaccinate wet or muddy sheep. The location of the injection needs to be clean and dry. Do not vaccinate in manure stained areas. The location of the injection must be clean and dry to prevent bacteria from entering the injection

- site. Fresh shorn sheep are good to vaccinate, as well as dry newborn lambs. Long wool makes it very difficult to see if the vaccine and needle are properly placed or if any vaccine leaks back from the injection site.
5. Improper syringe and needle handling can alter the effect of a vaccine or induce a local reaction at the injection site. Disposable syringes are just that - disposable. Normal cleaning, disinfecting or even boiling will affect the integrity of any syringe. Small microscopic cracks in the rubber plungers can contain bacteria. All rubber will crack with age and needs to be maintained and replaced as needed. The use of alcohol or disinfectants will often alter and greatly reduce the effectiveness of vaccines. Needles need to be replaced for each animal.
  6. Always use a clean needle when drawing vaccine or medicine from a bottle. A needle that has been used to give injections should not re-enter the bottle as it will carry bacteria from the skin into the bottle. Never store a bottle with a needle in the stopper. Always make sure to keep the vaccine or medicine at the correct temperature and replace into the refrigerator as soon as you finish the injections.