

Proper Handling of Livestock Vaccines

By Melanie Barkley, PSU Extension Educator

Looking at a group of healthy sheep peacefully grazing while their lambs bounce around the pasture can be a very satisfying experience. However, healthy animals don't just happen, they take time and care. One step to keeping animals healthy involves vaccinating them to protect against disease. In order to accomplish good protection against disease, it is important to handle vaccines properly.

To protect your animals against infectious diseases, it is important to vaccinate not only at the right time, but with the right product. Properly handling the vaccine from the time it is purchased to the time it is given to the animals will ensure the best immunity.

When buying vaccines, purchase from a reputable source who will deliver a high quality vaccine. Most vaccines should be stored in a refrigerator. Heat can make the vaccines ineffective, so they should not be allowed to warm up to room temperature at any time. Also, be sure that the vaccines do not freeze. This could also make them ineffective.

If you buy vaccines that need mixed, use only the rehydrating solution packaged with the vaccine. Determine how many animals you need to vaccinate and only mix enough to vaccinate that number. Any leftover vaccine should be thrown away as it loses its effectiveness during storage. For some vaccines, this could be as quickly as one to two hours after it has been rehydrated. So, only mix what you will use in a very short period of time.

Generally, there are two types of vaccines: modified live and killed. Modified live vaccines have been treated so that the disease viruses will not cause the disease, but will allow the animal to produce immunity to the disease. This occurs when the virus reproduces in the animal's body and the animal's immune system then develops antibodies. These vaccines are generally not safe to give to pregnant animals because the vaccine mimics an infection.

Killed vaccines are made from viruses or bacteria that are no longer active. This type of vaccine stimulates the animal's

body to produce antibodies which prevent the animal from getting the disease if the animal is exposed. These vaccines can be given to pregnant animals.

Follow label directions for how to give the injection. Some products call for subcutaneous (SQ) injections which are given under the skin. Other products should be given in the muscle (IM). If you have a choice, it is better to give the injection SQ as this will minimize any damage to muscle tissue. The best area to give the injection is in the neck, or in front of the shoulder.

In addition to the injection site, look for the timing of the vaccinations. Be sure to follow directions for age at administration and if another vaccination needs to be given at a later time period. Younger animals tend to need a second injection two to four weeks later. Then, annual boosters are recommended using a single dose. If the animals receiving the injection will be used for meat, make sure you check the withdrawal times. Most withdrawal times are 21 to 28 days after injection.

Handling vaccines properly will help to ensure that the product will produce immunity against specific diseases within your sheep. And, will help keep those lambs bouncing happily across your pastures.

PA LIVESTOCK EVALUATION CENTER HOLDS 33RD PERFORMANCE TESTED RAM

The exceptional quality of Pennsylvania's sheep and meat goat industries was on display Saturday, Aug. 6, at the Livestock Evaluation Center's 33rd Annual Performance Tested Ram lamb and Meat Goat Buck Sale.

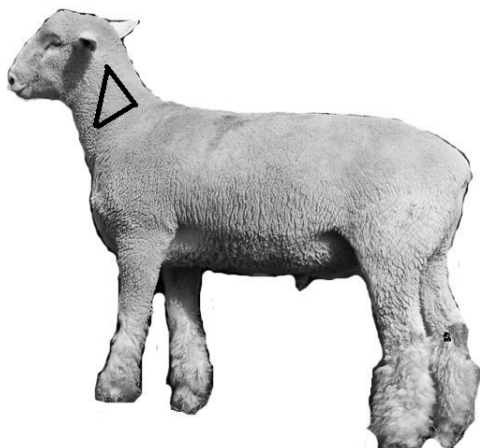
The sale featured 133 animals that included 55 rams and bucks that were selected after 77-day ram and 70-day buck performance tests, which evaluated growth, average daily gain, muscling and fat deposition.

Twenty-nine rams averaged \$631 in the sale, while 40 consignment ewes averaged \$421. The top-selling ram, a Dorset consignment from Campbell Dorsets of Blairsville, PA, was sold to John Waltz, Jr. of Smithburg, MD for \$1,100. Hollystone Farm, Paoli, PA sold a ram for \$1050 to the same buyer and Penn State sold a \$1000 ram to Kenneth Bell, Medina, OH. All three of these rams came out of the Senior Dorset Ram Lamb division. High indexing ram in the Junior Dorset division was from Sunny Valley Farm, Manheim, PA and sold for \$425 to Linda Hetrick of Palmyra, PA. The high selling junior Dorset ram lambs were consigned from John Stewart, Hookstown, PA and Melana Lovell, Linden, PA and sold for \$650 each.

The high selling ram from Campbells was the highest indexing ram in the sale over all breeds. He indexed at 118. His average daily gain on test was 1.10# and his actual loin eye measured 3.9". Congratulations to the Campbells on their high indexing and selling ram!

All rams were sold with growth data, feed efficiency, loin measurements and fat thicknesses, which can be used to help producers make important breeding and sales decisions. Included in the sale were invitational ewes from producers with animals on test. All animals sold in the sale were considered flock or herd improvers.

For more information on the ram and buck test, contact Livestock Evaluation Center staff at 814-238-2527 or ghubbard@pa.gov. For more info. on the center and other performance testing programs go to www.livestockevaluationcenter.com



Injections should always be given in the area inside the triangle on the neck of the sheep.