Vaccination Lesions

Vaccination lesions are reactions, such as an abscess or scar tissue, at vaccination sites. Sheep vaccinated with the Gudair® OJD vaccine often develop a large vaccination reaction at the injection site. This is “normal” for Gudair® but not for the other vaccines commonly administered to sheep. If a severe reaction occurs, the injection site can burst and discharge pus.

**Economic Consequences**

**At the Abattoir**

- **Trimming** – vaccine lesions are trimmed from the carcass. This has the least impact if vaccination is high up on the neck, behind the ear. Reactions associated with the spine or leg muscle results in more significant trimming and loss of carcass/dressed weight.

**What Causes Vaccination Lesions?**

- Incorrect vaccination technique. Vaccines are designed to be given into the space under the skin – not into the skin*, muscle or spine;
- Vaccinating wet sheep; and
- Unhygienic vaccination equipment/processes (i.e. using dirty needles).

**Prevention**

1. **Vaccination technique**
   - Ensure correct vaccination technique is demonstrated to new workers, assuming they know could be very costly.
   - Use the correct length needle for the job; ¼” or 0.6 mm for lambs and ½” or 12mm for adult sheep. Inject under the skin (subcutaneous), not into the skin* or into the muscle – injection should be easy, if there is resistance this may indicate the needle tip is not in the space beneath the skin but in the muscle or in the skin.
   - Guarded, “safe” vaccinating ‘guns’ are available, to reduce the chance of self-injection.

2. **Vaccination sites**
   - Ideally, vaccinations should be given high up on the neck, behind the ear*. If a reaction was to occur it would be trimmed from a low value cut.

3. **Vaccination hygiene**
   - Avoid vaccinating wet animals. Inject into dry clean skin.
   - Use clean, sharp needles. Replace frequently.
   - Don’t let the needle come in contact with dirt. A vaccinator holster can be used to avoid this. Replace any needles that become contaminated or are dropped.
   - When finished vaccinating ensure equipment is cleaned and sterilized.
General Vaccination Guidelines

In order to avoid wasting time and money and to prevent costly disease it is essential that the following be considered when vaccinating your flock:

1. **Type of vaccine** – ensure the correct vaccination is being used for your enterprise.
   - What diseases/deficiencies are more prevalent in your area?
   - Do you need a 2/3-in 1 or a 5/6-in 1?
   - Do you need to vaccinate for erysipelas (arthritis), scabby mouth or OJD?
   - Do you need to vaccinate for specific markets (e.g. scabby mouth, OJD)?

2. **Number of vaccines** – ensure product instructions are followed closely, including the number of vaccinations required for the initial vaccination course and for yearly boosters.
   - Does the vaccination course require 2 initial doses 4-6 weeks apart followed by a yearly booster?
   - Is the vaccine required once only?

3. **Timing of vaccinations** – adhere to the appropriate timing of vaccinations.
   - If the second vaccination of a primary course is to be given 4-6 weeks after the first, ensure this occurs. Giving a second vaccination and at the correct time is essential.
   - Timing of annual boosters is also important for some diseases, for example ewes previously vaccinated against arthritis need their annual Eryvac® booster, 4 weeks before lambing.

4. **Be aware of what else has been included in the vaccination**
   - Some vaccines contain selenium. You may inadvertently cause selenium toxicity if you are not in a selenium deficient area and a sheep dose is used in lambs and you have also used a drench containing selenium.

5. **Ensure appropriate vaccination and equipment is obtained (before yarding)**
   - Check vaccine to be used is in date and has been stored correctly.
   - Check the condition of the vaccine gun.
   - Ensure the vaccine has not become contaminated. Check to see how long the vaccine can be used after opening.
   - Keep a record of batch numbers and expiry dates.

For Further Information

Contact either Livestock Biosecurity Network’s Dr Patrick Kluver 0499 077 213 or VFF Livestock Biosecurity Project Officers 1300 882 833.