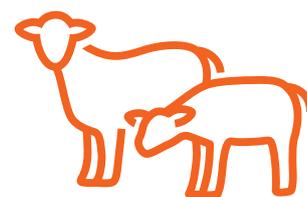


# New study into best practice vaccination technique in lambs and sheep



## Key messages

- Administering vaccines to lambs using only quarter inch needles at a 45 degree angle to the skin is a key finding from a recent study investigating the impact of different vaccination techniques in sheep.
- By vaccinating at the correct site, using the right equipment and approach, sheep producers can maximise vaccine efficacy and minimise the risk of adverse reactions.
- For lambs and ewes in short wool, use ¼ inch needles at a 45° angle to the skin
- For ewes with significant wool growth, use ¼ inch needles at a 90° angle to the skin.

Most vaccines for sheep in Australia are designed to be injected subcutaneously (under the skin). However a recent study, conducted by Dr Tristan Jubb of Bendigo Sheep Vets and supported by Zoetis Australia, has found that even experienced sheep producers and contractors may unintentionally be administering vaccines incorrectly, into muscle tissue. This increases the risk of costly carcass trimming and other side effects such as painful abscesses, loss of condition and even neurological damage or “staggers” in certain cases.

In the study, humanely euthanised lambs and sheep with various body condition scores and wool cover were vaccinated on the side of the neck with dyed Gudair® - the vaccine used to control Ovine Johne's disease. The impact of quarter and half inch needles, at 45 or 90 degrees to the skin, was investigated.

The results clearly demonstrated that even in the hands of an experienced vaccinator, a half inch needle – used at 45 or 90 degrees to the skin – was likely to deliver the vaccine into the muscles of the neck, rather than under the skin.

In contrast, a quarter inch needle at 45 degrees to the skin was most likely to successfully deliver the vaccine under the skin in lambs and adult sheep in low body condition and/or with short wool cover, thereby minimising the risk of any adverse reactions.

Even in adult sheep with more significant wool cover, a quarter inch needle, used at 90 degrees to the skin was shown to successfully penetrate through the wool to deliver the vaccine under the skin.

The study also highlighted the importance of correct vaccination site. Vaccinating on the **side** of the neck, approximately 5cm from the base of the ear, helps to avoid hitting structures including bone, ear cartilage and glands in the head/neck region, whilst also minimising the risk of injecting into relatively valuable meat cuts.

By vaccinating at the correct site, using the right equipment and approach, sheep producers can maximise vaccine efficacy and minimise the risk of adverse reactions.

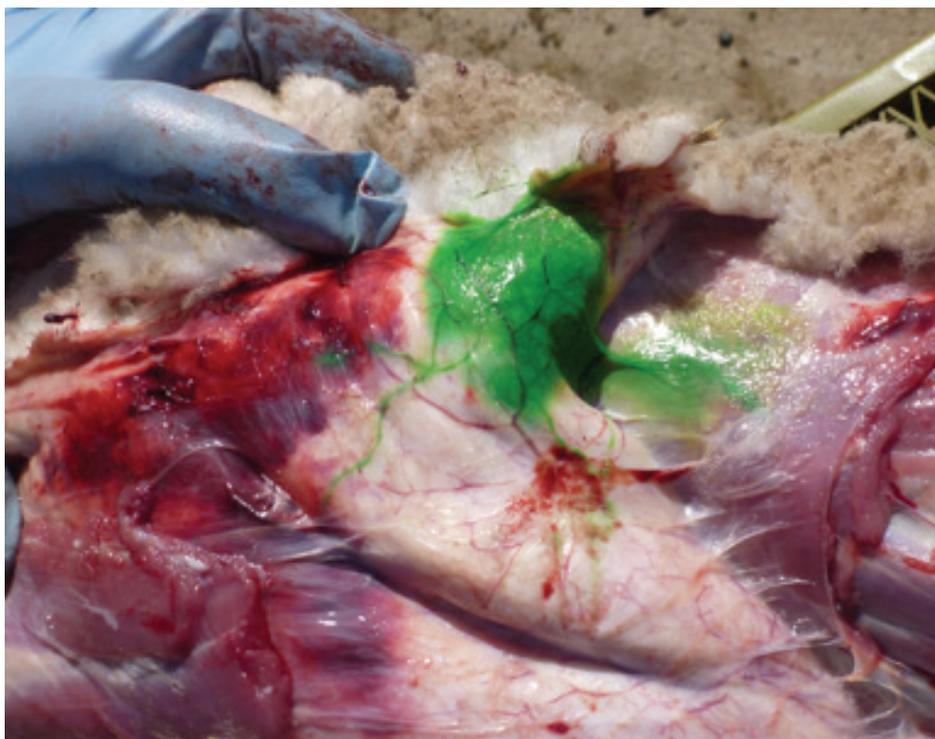


Correct site of vaccination – on the side of the neck, approximately 5cm from the base of the ear.

*Note: This photo was not taken during the most recent study. In the current study animals were humanely euthanised before being used in the study.*



A half inch needle is likely to deliver the vaccine (dyed blue) into the muscles of the neck, increasing the risk of adverse reactions.



Success. A quarter inch needle, at a 45 degree angle to the skin, has correctly delivered the vaccine (dyed green) under the skin.

*Note: The skin has been reflected from the front of the shoulder towards the head.*

## About Zoetis

Zoetis is the leading animal health company, dedicated to supporting its customers and their businesses. Building on more than 75 years of experience in animal health, Zoetis discovers, develops, manufactures and markets veterinary vaccines and medicines, complemented by diagnostic products and genetic tests and supported by a range of services. Zoetis serves veterinarians, livestock producers and people who raise and care for farm and companion animals with sales of its products in 120 countries.

**For more information call Zoetis Veterinary Operations on 1800 814 883 or contact your local Zoetis Professional Sales Representative.**

Photos courtesy of Tristan Jubb.