

Responsible use of vaccines and vaccination in sheep production

In order for medicines to be used responsibly they must be lawfully obtained and used in accordance with the label directions or veterinary advice.

Produced for the **RUMA Alliance**

RUMA guidelines for the responsible use of vaccines by sheep farmers have been designed to give easy-to-read guiding principles that can be used by sheep producers in the management of their flocks.

The responsible use of medicines has always been a fundamental principle of good livestock keeping and is given further impetus by the encouragement of farm health planning under the Great Britain Animal Health and Welfare Strategy (AHWS). Farm health planning represents one of the direct ways in which the livestock sector, specifically individual producers, can be persuaded of the cost benefits of adopting on-farm health strategies. Best practice in the use of veterinary medicines must be an integral part of effective health planning, and these RUMA guidelines aim to define that best practice.

The Responsible Use of Medicines in Agriculture Alliance (RUMA) is a growing coalition of organisations representing every stage of the “farm to fork” process. It has been set up to review and provide guidance on the use of medicines in all livestock. As part of this work RUMA has established practical strategies to promote the correct use of vaccines in the sheep industry.

Vaccines have, from the 1930s, made a major contribution to improving sheep health, welfare and productivity. They are vital components in preventing a wide variety of diseases.

To communicate these strategies effectively to the industry RUMA has produced a comprehensive set of guidelines for the responsible use of vaccines in sheep and other livestock production. These give advice on all aspects from the initial risk assessment to best practice for their use. It also provides clear strategies for the implementation of effective vaccination programmes for farmers and veterinary surgeons to make best use of these valuable relatively inexpensive products.

A farm health planning initiative in partnership with Defra

Supported by the National Office of Animal Health (NOAH)

When animals are exposed to infections and survive then they will develop an immunity and so they are usually completely, or partially, immune or resistance to other attacks by the same infection. The

animal when first infected may become ill and need treatment. Vaccination mimics infection and so it provides immunity without the animals succumbing to the disease. Thus it becomes resistant to the disease before it becomes infected and so, if later on the animal is exposed to disease, it will usually not show any signs, or only minor signs, of illness. This will result in animals being healthier and also requiring less treatments. This is beneficial to the animal, the farmer and the consumer. All animals will be immune to some diseases and so there is no risk from consuming food from healthy animals which have previously been vaccinated.

This booklet summarises the responsibilities that sheep farmers have as they use vaccines to safeguard the health, welfare and productivity of their flock.

For Farmers

The use of animal medicines carries with it responsibilities. Under UK legislation, all vaccines are licensed for specific species and uses.

A product will not be authorised unless very stringent requirements are met. The use of some vaccines are under the direct responsibility of veterinary surgeons.

Farmers, however, have a very considerable role to play in ensuring that the directions of the veterinary surgeon and manufacturer are properly carried out and also in developing and applying disease control measures which utilise vaccines to best practice.

THE GUIDELINES

All farmers have a responsibility to safeguard the health and welfare of the animals under their control. There are occasions where this is a joint responsibility with their veterinary surgeon, such as in the discharge of correct and appropriate vaccination programmes. Farmers and stock-keepers can play a major role in ensuring that these responsibilities are properly discharged and that medicines are responsibly used by observing the guidelines published here. Similar guidelines form part of all farm assurance schemes.

- All sheep farmers must be totally committed to producing safe food.
- Sheep keepers have a duty and responsibility to safeguard the health and welfare of animals on their farm.
- An appropriate farm health plan should be drawn up, observed and regularly reviewed in association with the attending veterinary surgeon. This plan should outline routine preventive treatments and management practices to cover issues such as foot care and vaccination programmes along with worming, lice and mite control strategies. Flock performance should be monitored for signs of disease and the farm health plan updated and implemented to take account of such signs.
- Vaccine usage should be based on a risk assessment but some should be used as a routine. Vaccines are complimentary to good hygiene and nutrition.
- Vaccination programmes which require vaccines needing a veterinary prescription should only be initiated with formal veterinary approval.
- It is essential that any vaccine programme is based on a correct diagnosis. In addition a full risk assessment of potential diseases should be made as and when the flock health plan is updated.
- The prescribing veterinary surgeon or adviser must be made aware of all other vaccine programmes and medications used in the flock so that adverse reactions can be avoided.

Sheep diseases for which vaccines are available:

1. Clostridial diseases including *Clostridium perfringens* types A, B, C and D, *C. septicum*, *C. sordellii*, *C. haemolyticum*, *C. tetani*, *C. chauvoei* and *C. novyi* B.
2. Diseases caused by *Mannheimia haemolytica* and *Pasteurella trehalosi* (pneumonias and septicaemias)
3. Abortions both Enzootic (EAE) and Toxoplasma (note the difference between the two types of EAE vaccines) (note as well that the live attenuated vaccines both have meat withdrawal restrictions)
4. Footrot
5. Orf (Contagious Pustular Dermatitis)
6. Louping-ill
7. Erysipelas
8. Ovine Johnes Disease (OJD)*
9. Caseous Lymphadenitis*

* Only available under licence so consult your veterinary surgeon.

- The full course of vaccination at the recommended dosages must always be administered. Booster programmes are essential to maintain protection and must be given at the correct intervals.
- The recommended route of administration must be followed. Always check when using a new vaccine whether it should be administered under the skin (subcutaneous [sc]) or into the muscle (intra muscular [im]) or in the case of the orf vaccine intra-dermally [id].
- All involved with vaccination programmes should make themselves aware of the medicine information relating to withdrawal periods both for sheep destined for slaughter and for those producing milk for human consumption. This can usually be found on medicine labels but may be set by the veterinary surgeon.
- To obtain the best results from a vaccine it is important that it is stored correctly, usually in a refrigerator set between +2°C to +8°C. They must not be frozen, since this destroys the suspension and they become floccular in appearance. Some oil-based vaccines may be gently warmed to reduce their viscosity before use. Once opened follow the instructions for how long they may be used before discarding. In addition part finished bottles (vials) should be correctly discarded at the end of the day's operation.
- An animal medicine record book, copies of relevant regulations and codes of good practice must be kept safely on farm (e.g. the Veterinary Medicines Directorate (VMD) Code of Practice on the Responsible Use of Animal Medicines on the Farm).
- Accurate information must be kept on the identity of the sheep being vaccinated. Records should also include the date of administration, batch number, amount and expiry date information for each animal vaccinated and the withdrawal period that must be observed. Medicine records required by legislation should be maintained for at least five years (even if the sheep in question have been slaughtered).
- Information on all vaccines in use should be readily available to stock-keepers and kept on file, e.g. Summary of Product Characteristics (SPCs) or product data sheets, package inserts and safety data sheets.
- Follow the advice of manufacturers and regulatory bodies on the storage of medicines and the disposal of unused medicines (check the label or package insert). Safely dispose of unused or out-of-date medicines and containers and application equipment (including needles to a sharps container) when you finish the treatment for which they were intended. If in any doubt seek advice from your veterinary surgeon or whoever supplied the product.
- Any suspected adverse reaction in a sheep to any medicine should be reported immediately to the Veterinary Medicines Directorate (VMD) and the supplier. The report to the VMD can be done through the prescribing veterinary surgeon or the supplier. The adverse reaction can also be reported by the livestock keeper direct to the VMD. Suspected adverse reaction forms can be found on its

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RUMA is made up of the following organisations:

Agricultural Industries Confederation (AIC)
Animal Health Distributors Association (AHDA)
Animal Medicines Training Regulatory Authority (AMTRA)
Assured Food Standards (AFS)
British Poultry Council (BPC)
British Retail Consortium (BRC)
British Veterinary Association (BVA)
Linking Environment And Farming (LEAF)
Meat & Livestock Commission (MLC)
National Beef Association (NBA)
National Consumer Council (NCC)
National Farmers' Union (NFU)
National Office of Animal Health (NOAH)
National Pig Association (NPA)
NPTC
National Sheep Association (NSA)
Royal Association of British Dairy Farmers (RABDF)
Royal Pharmaceutical Society of Great Britain (RPSGB)
Royal Society for the Prevention of Cruelty to Animals (RSPCA)

website <http://www.vmd.gov.uk/>. All such suspected adverse reactions should also be accurately recorded in the on-farm medicine records. In the case of vaccines a suspected failure to prevent disease should also be reported although it does not constitute an adverse reaction as such.

- Cooperate with and observe the rules of farm assurance schemes that monitor medication and withdrawal compliance. However any sheep keeper should never feel constrained from safeguarding the health and welfare of the sheep.
- When contemplating vaccinating a flock it is essential that the sheep are dry, unstressed and not suffering sub clinical disease. Heavily pregnant ewes require special care. Sheep in good nutritional condition generally respond better to vaccines, but there is always, to a degree, some individual variation. No vaccine confers 100% protection and overwhelming infection can induce mild disease in correctly vaccinated sheep. It is as well to remember that the orf vaccine only claims to be an aid in the control of the disease.
- Adequate training in the correct administration of vaccines and good recording systems is essential. A protocol, with the attending veterinary surgeon, to provide a framework for identifying disease problems and making the necessary changes to management practices should be agreed. This can lead to the implementation of suitable vaccination regimes. Staff working directly with animals should be trained to identify health problems early and in the use of veterinary medicines.

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The Responsible Use of Medicines in Agriculture Alliance (RUMA) was established in November 1997 to promote the highest standards of food safety, animal health and animal welfare in British livestock farming.

A unique initiative involving organisations representing every stage of the food chain RUMA aims to promote a co-ordinated and integrated approach to best practice in the use of animal medicines.

RUMA membership spans the food chain and includes organisations representing interests in agriculture, veterinary practice, the pharmaceutical industry, farm assurance, training, retailers, consumers and animal welfare interests.

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