

GUIDELINES

Responsible use of vaccines and vaccination in dairy and beef cattle 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**

A farm health planning initiative in partnership with Defra

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RUMA guidelines for the responsible use of vaccines and vaccination by dairy and beef producers have been designed to give easy-to-read guiding principles that can be used by all producers in the management of their herds.

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 herd 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 dairy and beef cattle industry.

From the 1930s, vaccines have made a major contribution to improving cattle 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 cattle and other livestock species. 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.

When animals are exposed to infections and survive, then they will develop an immunity and so they are completely, or partially, immune or resistant 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 animal succumbing to the disease. Thus it becomes resistant to the disease before it becomes infected and so, 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 fewer 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 dairy and beef farmers have as they use vaccines to safeguard the health, welfare and productivity of their herd.

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 is 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 cattle farmers must be totally committed to producing safe food.
- Cattle farmers have a duty and responsibility to safeguard the health and welfare of animals on their farm.
- An appropriate herd health plan should be drawn up, observed and regularly reviewed with the attending veterinary surgeon or other appropriate advisers. This plan should outline routine preventative treatments and management practices to cover issues such as vaccination programmes along with mastitis, lameness, infertility, internal and external parasite control strategies. Herd health planning is a bespoke process designed to positively foster the maintenance of good health in individual herds. Herd performance should be monitored for signs of disease and the herd health plan updated and implemented to take account of such signs.
- Vaccines help to reduce the incidence of disease in animals by stimulating the immune system to provide protection.
- Vaccine usage should be based on a risk assessment. Vaccination programmes should be tailored to the needs of the farm and should also emphasise those areas of management that are likely to ensure that an implemented vaccination programme is successful at reducing the incidence of disease. 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.

Cattle diseases for which vaccines are available:

1. Cattle viruses such as Bovine Viral Diarrhoea (BVD) and Infectious Bovine Rhinotracheitis (IBR)
2. Cattle bacteria such as Salmonella spp
3. Cattle parasites, lungworm (husk) (*Dictyocaulus viviparus*)
4. Cattle fungi such as ringworm (*Trichophyton verrucosum*)
5. Clostridial diseases such as blackleg (*Clostridium chauvoei*)
6. Cattle pneumonia such as Mannheimia spp
7. Calf enteritis such as rotavirus and E.coli
8. Leptospirosis (*Leptospira hardjo*)

- 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 herd health plan is updated.
- 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 into the nose (intranasal) or by mouth (oral).
- Vaccines are most effective when used on healthy animals. Stock to be vaccinated should not be suffering from any disease or nutritional or other type of stress. Authorised vaccines are usually contra-indicated in unhealthy animals.
- In general, avoid vaccinating cows or heifers in the 14 days prior to calving when their ability to respond to vaccination may be compromised. Only vaccines authorised for pregnant animals should be used.
- Clear instructions must be available on the farm and accessible for all staff responsible on the appropriate use and administration of vaccines.
- The prescribing veterinary surgeon or adviser must be made aware of all other vaccination programmes and medications used in the herd so that adverse reactions can be avoided.
- Always follow the manufacturer's recommended instructions on the Summary of Product Characteristics (SPC) or product data sheet, and product literature, including the routes and method of administration, the schedule for primary and booster vaccination, the category of animals and all safety precautions for the user, target species and environment.
- An animal medicines record book together with copies of relevant regulations and Codes of Practice must be kept on the farm.
- Accurately record date of administration, the identity of treated animals, the batch number, amount and expiry date of the vaccine used. Appropriate information should be kept on file of vaccines used (e.g. SPC, package inserts or safety data sheets). Records must be kept for a period of five years after the treatment has ended even if the animal has been slaughtered.
- Medicines must be stored according to the manufacturers' instructions. Many vaccines require refrigeration. Ideally a 'fridge not used for food should be used. Alternatively they may be stored in an airtight box in a 'fridge used for other purposes. Once a vaccine bottle is opened, follow the instructions for how long it can be used before discarding.
- Unused or unwanted medicines, as well as needles and syringes, must be disposed of according to manufacturer's instructions or returned to the veterinary surgeon or supplier for safe disposal.

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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)

- Any suspected adverse reaction in either the animals vaccinated or the staff treating them, should be reported to the Veterinary Medicines Directorate (VMD). Suspected adverse reaction forms can be found on the VMD's website at www.vmd.gov.uk. A report can be submitted by the farmer or by the attending veterinary surgeon. Keep a note in the medicine book or a copy of the VMD's adverse reaction report if available.
- Disposable syringes are to be preferred. If needles are used, ensure they are clean, sharp, regularly changed and appropriate to the size of the animal being vaccinated.
- Ensure all vaccines remain sterile and that during vaccination the vaccine does not come into contact with anything that might inactivate it.
- 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.
- Veterinary vaccines can cause serious injection site reactions if accidentally administered to humans. Always refer to the SPC (or product literature/data sheet) if accidental administration occurs. If in any doubt, medical advice should be sought and the SPC (or product literature/data sheet) should accompany the person to the doctor or hospital.
- Cooperate with and observe the rules of farm assurance schemes that monitor medication and withdrawal compliance. However all livestock keepers should never feel constrained from safeguarding the health and welfare of their animals.
- Adequate training and good recording systems are essential to provide a framework for identifying disease problems and making the necessary changes to management practices. This can lead to the implementation of suitable vaccination regime. 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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