

GUIDELINES

Responsible use of vaccines and vaccination in fish 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 fish farmers have been designed to give easy-to-read guiding principles that can be used by fish farmers in the management of their fish stocks.

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 aquaculture industry.

From the 1990s vaccines have made a major contribution to improving fish health, welfare and productivity. They are vital component 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 fish and other livestock production. These give advice on all aspects from the initial risk assessment to best practice for their use. They also provide clear strategies for the implementation of effective vaccination programmes for farmers and veterinary surgeons to make best use of these valuable products.

When fish are exposed to infections and survive then they will develop immunity and so they are usually completely, or partially, immune or resistant to other attacks by the same organism. The fish when first infected may become ill and need treatment. Vaccination mimics infection and so it provides immunity without the fish succumbing to the disease. Thus the fish becomes resistant to the disease before it becomes infected and so, if later on the fish is exposed to the infection, it will usually not show any signs, or only minor signs, of illness. This will result in fish being healthier and also requiring less treatments. This is beneficial to the fish, the farmer and the consumer. All fish will be immune naturally from exposure to some diseases and there is no risk from consuming food from healthy fish which have been previously vaccinated to produce similar immunity.

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

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 utilize vaccines to best practice.

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All farmers have a responsibility to safeguard the health and welfare of the animals under their control. There are occasions where this 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 fish farmers must be totally committed to producing safe food.
- Fish farmers have a duty and responsibility to safeguard the health and welfare of fish on their farm.
- An appropriate veterinary 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 vaccination programmes along with lice and fungal control strategies. Fish performance should be monitored for signs of disease and the veterinary 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 complementary to good hygiene and nutrition.

Fish diseases for which vaccines are available:

1. Furunculosis
caused by *Aeromonas salmonicida*
2. Vibriosis
caused by *Vibrio anguillarum*
serotype O1
3. Vibriosis
caused by *Vibrio anguillarum*
serotype O2
4. Enteric redmouth
caused by *Yersinia ruckeri*
5. Infectious pancreatic necrosis
caused by infectious pancreatic
necrosis virus (IPNV)
6. Pancreas disease
caused by pancreas disease virus

- Vaccination programmes which require vaccines requiring a veterinary prescription should only be initiated with formal veterinary approval.
- It is essential that any vaccination programme is based on a full risk assessment of potential diseases which should be made as and when the veterinary health plan is updated.
- Vaccination must always be administered at the recommended dosages. Booster programmes may be required to maintain protection and must be given at the correct intervals.
- The recommended route of administration must be followed. Ensure during intra-peritoneal injection that the full dose is going into the appropriate area of the peritoneal cavity by sacrificing some fish at the start of vaccination.
- 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 vaccination procedure. Records should also include the vaccination date, batch number, amount and expiry date information for vaccination session. Medicine records required by legislation should be maintained for at least five years (even if the fish 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. This is of particular importance in the case of oil-based injection vaccines in the event of accidental self-injection.
- 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.

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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 fish 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 fish keeper direct to the VMD. Adverse reaction forms can be found on its 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 may also constitute an adverse reaction.
- Cooperate with and observe the rules of farm assurance schemes that monitor medication and withdrawal compliance. However any fish keeper should never feel constrained from safeguarding the health and welfare of the fish.
- 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 fish 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 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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