

# Veterinary medicines

Safe use by farmers and other animal handlers



## Introduction

This leaflet is for farmers and other people who use veterinary medicines (including medicated feeds) as part of their work. It sets out the practical steps you should take to protect the health and safety of anyone who works with veterinary medicines, and to comply with the Control of Substances Hazardous to Health Regulations 2002 (as amended) (COSHH).

## What are veterinary medicines?

This guidance applies to veterinary medicines as defined in the current Veterinary Medicines Regulations, which set out the controls and procedures concerning their authorisation, manufacture, supply and use.

Veterinary medicines include, for example, antibiotics, vaccines, wormers (anthelmintics), and ectoparasiticides such as sheep dips. For information on the safe use of sheep dips, see HSE leaflet AS29.

The Veterinary Medicines Directorate (VMD) is the regulatory authority for veterinary medicines in the UK. The VMD and other bodies enforce the Regulations. For more information on these requirements see the 'Find out more' section at the end of this leaflet.

## What about medicated feeding stuffs?

Anyone wishing to buy medicated pre-mixtures (eg vitamin/mineral feed supplements containing medicines) to mix on their own premises must be registered with the VMD or the Department of Agriculture and Rural Development for Northern Ireland. Only veterinary medicines that are specifically authorised for incorporation in animal feeds may be used.

## What do I need to do to comply with COSHH?

Some veterinary medicines contain hazardous substances that may be harmful to human health. If you intend to use such products you will need to prevent or adequately control risks to health arising from the use of veterinary medicines in your work. You must:

- carry out an assessment of the risks (a 'COSHH assessment') by finding out what harmful effects the medicine might have, if any, and estimate the exposure of people who might come into contact with it;

- use control measures to reduce exposure if your assessment shows this is necessary. Check regularly that they are working and being used by staff;
- keep everyone informed of the risks and precautions needed, consulting employees and safety representatives if your business has them;
- review all the above regularly or if the nature of the work changes.

## COSHH assessment

The purpose of the assessment is to enable you to make valid decisions about the measures necessary to prevent or adequately control exposure to substances hazardous to health arising from work with veterinary medicines. Follow this five-step process:

### *Step 1: Gather information about the substances, the work and the working practices*

#### *Do I need to treat at all?*

Consider whether it is necessary to administer veterinary medicines. If in doubt, talk to your veterinary surgeon or animal health adviser. If you must use a veterinary medicine then:

- **Identify available authorised products.** Some products contain hazardous substances that may be harmful to human health or pollute the environment if misused. The product label, package leaflet or safety data sheet (available from your supplier or the manufacturer) should provide you with this information.
- **Decide which of the range of authorised treatments is most effective** in preventing or controlling the condition in animals but poses the least risk to people and the environment. Use less hazardous products if possible.

It is a criminal offence to administer a veterinary medicine to an animal unless:

- the product has a marketing authorisation (MA) authorising its administration in the UK; and
- the product is used in accordance with that MA and its Summary of Product Characteristics (SPC); or
- it is used under the directions of a veterinary surgeon.

### **Products such as agricultural pesticides must never be used as veterinary medicines.**

For more guidance on the best form of treatment, consult the VMD *Code of Practice on the responsible use of animal medicines on the farm* (<http://www.vmd.defra.gov.uk/pdf/RUCOP.pdf>) and speak to your veterinary surgeon.

### *Step 2: Evaluating the risks to health*

#### *Consider who might be harmed and how*

Veterinary medicines can get into the body in a number of ways. They can be:

- absorbed through the skin (eg by using bare hands to apply products, by spillage or by splashing);
- accidentally injected (either self-injected or by injecting bystanders);
- swallowed (eg by contamination of human food or drink); or
- breathed in as a vapour or aerosol.

Exposure to veterinary medicines can cause a range of ill-health effects. These include:

- puncture wounds from needles;
- reactions to injected, swallowed or inhaled substances;
- infection through bacterial contamination from needles or directly from live vaccines;
- the loss of a finger or impaired mobility in the fingers or hands following self-injection of mineral-oil-based vaccines.

Remember that there may be a risk of catching a disease from the animal being treated. These zoonotic diseases, eg ringworm and leptospirosis, may require extra precautions (see Agriculture Information Sheet AIS2).

Carefully check:

- the dose and quantities you plan to use (contractors and their employees are likely to be at greater risk because greater quantities are used and exposure is more frequent);
- the application method;
- the number of people and animals involved. If treating a large number of animals, make sure you have enough staff to reduce the risk of fatigue;
- the other people who might be affected, eg those handling the animals later;
- the risk of harm or pollution from use or disposal of medicines or used application equipment, especially sharps;
- that the product will not affect the health of employees who may be particularly at risk (eg pregnant women or those with an existing health condition that might be worsened);
- that children are excluded from the working area and are not involved in administering the products or contacting the animals.

Talking with employees or workers' safety representatives, if your business has them, will help you identify the risks from particular practices.

### **Step 3: Select measures to prevent or control exposure**

#### **What controls are needed?**

- Read the label, package leaflet and, if available, safety data sheets.
- Follow the product instructions or the veterinary advice.
- Put engineering controls in place.
- Use personal protective equipment (PPE) where necessary.
- Ensure those who work with these products are competent and properly trained.
- Observe high standards of hygiene.



**Figure 1** A cattle crush suitable for veterinary tasks

### **Engineering controls**

- Choose the best site and the right facilities for the treatment. Consider how risks to the environment can be controlled.
- Check that you have the right equipment to handle and restrain the animals. If handling cattle your facilities should meet the standards described in Agriculture Information Sheet AIS35. Adequate animal restraint is important to help reduce the risk of accidental injury from injection (see Figure 1).
- For administering injections, is there suitable application equipment available that gives a better standard of protection than using an unprotected needle? For example, applicators with shrouded needles, automatic needle guards or other protective devices can significantly reduce the risk of accidental injections or other needlestick injuries (see Figure 2).
- The risk of infection from injuries involving 'dirty' needles can be reduced by



**Figure 2** Applicator with needle guard



**Figure 3** Disinfectant reservoir kit with vial adapter

using devices containing a reservoir of disinfectant through which the needle is drawn before each injection. They are particularly useful for mass vaccinations (see Figure 3).

- Poultry tables/frames used by poultry vaccinators restrain birds and reduce the need to lift and handle heavy birds.
- Finger guards and automated fish injector machines may help prevent injuries when injecting fish.
- Is ventilation adequate? Can the work be done in a well-ventilated area or is extraction equipment necessary?

If in any doubt about administering a veterinary medicine, consult your veterinary surgeon or animal health adviser.

## Personal protective equipment (PPE)

Your first priority should be to use the least hazardous product appropriate for the treatment or to use a high standard of engineering controls. But even after taking these precautions there may still be risks that require PPE, eg gloves, aprons, protective suits, face shields or respiratory protective equipment (RPE).

When selecting and using PPE, consider:

- Is it suitable for the job?
- Does it conform with any recommendations made on the label/leaflet of the veterinary medicine?
- Does it fit properly?
- Is it compatible with other PPE worn? eg wearing safety glasses may disturb the seal of a respirator, causing air leaks.
- Do employees know how to use it and is it maintained in good condition and cleaned or replaced as necessary?
- Are employees provided with training on using, maintaining and cleaning it?
- Are suitable storage facilities provided?
- Consult workers or their safety representatives about choosing PPE.
- Any PPE must be CE marked to show that it satisfies certain basic safety requirements, and in most cases has been tested and certified by an independent body.
- PPE may not necessarily be marketed specifically for use with the veterinary medicine you are using, so check if necessary with the manufacturer of the PPE or veterinary medicine that it is suitable.

## Competence and training

Work with veterinary medicines should only be undertaken by competent persons who have received adequate instruction, information, and training.

If you are an employer:

- you are required to provide this for your employees;
- you will also need to assess employees' competence to do the work safely;
- you should take into account their capabilities, knowledge and training when assessing their competence.

Agricultural colleges and local training providers offer suitable training courses. City & Guilds Land Based Services (formerly NPTC) and the Scottish Skills Testing Service offer accredited Certificates of Competence in the safe use of veterinary medicines. Information can be obtained from:

- City & Guilds Land Based Services, Building 500, Abbey Park, Stareton, Warwickshire CV8 2LY Tel: 024 7685 7300 [www.nptc.org.uk](http://www.nptc.org.uk); and
- Scottish Skills Testing Service, Skills Training Centre, Ingliston, Edinburgh EH28 8NE Tel: 0131 333 2040.

Note that special requirements for Certificates of Competence apply for users and purchasers of sheep dips – see HSE’s leaflet AS29 for more details.

## Hygiene

Everyone who works with veterinary medicines should make sure that high standards of personal hygiene are observed. For example:

- Ready access to suitable washing facilities is essential. Washing facilities will be needed for emergencies (eg for washing off any contamination), for breaks in the work and at the end of the treatment.
- If users are contaminated during the work, they should stop until the affected skin has been washed and contaminated PPE has been cleaned or replaced.
- Users should not eat, drink or smoke while working or until they have removed any PPE and washed their hands and exposed skin thoroughly.
- Cuts and abrasions should be covered with suitable dressings to protect against infections, medicines or zoonoses.

## Health surveillance

This is a requirement of COSHH in certain circumstances. It can help spot at an early stage whether exposure to hazards at work is causing ill health and help you check whether your control measures are working.

For most veterinary medicines, as long as the label instructions and controls identified in the COSHH assessment are followed, health surveillance will not normally be required. However, it is important that users are trained to recognise any symptoms of illness that might be caused by:

- exposure to the medicine;
- zoonotic disease;
- self-injection or other needlestick injury.

## Arrangements for accidents, incidents and emergencies

Make a list of who to report incidents to and how to get help – keep emergency contact numbers to hand.

Anyone who feels unwell following the use of a veterinary medicine should seek medical advice as soon as possible. Remember:

- The product data sheets for mineral-oil-based vaccines all contain warnings recommending urgent attendance at the nearest hospital accident and emergency department if anyone is accidentally injected.
- Operators are advised to take the product/information leaflet with them so that medical staff know what further symptoms can be expected and what treatment may be necessary.
- Even though operators may not have an initial reaction, they should still act promptly. Delay in seeking medical advice may lead to complications.

- Where possible, the injured person should be driven to hospital or a medical centre and be accompanied by others in case of any adverse reaction during the journey.

### **After treating animals with veterinary medicines**

- Check there is no continuing risk after treatment, eg veterinary medicines present on livestock skin or wool. Treated animals can also pollute watercourses. Follow the product guidance on handling animals post-treatment.
- Clean, replace and/or sterilise equipment following the supplier's/manufacturer's guidance.
- You must observe the withdrawal periods specified for food-producing animals.

### **Disposal**

- Before disposal, store all waste safely and securely.
- Dispose of all out-of-date or unwanted veterinary medicines, containers and equipment properly, eg through the supplier, waste disposal contractor or local authority, referring to the product literature for further guidance.
- After use, sharps such as needles and syringes should be stored in purpose-made containers such as sharps bins. Do not put them in domestic refuse.

### **Storage**

- Don't buy more veterinary medicines than needed. Storage creates a risk.
- Store medicines in accordance with the label instructions. Separate them from application equipment in a secure, lockable store that is safe from children, vermin and birds. The store can be a container, cupboard, room or separate building, but it should be safe from accidental damage, where possible fireproof for at least 30 minutes, and able to contain any spillage.
- Keep veterinary medicines away from domestic, office or public access areas as well as food, drink and animal feed, to reduce the risk of mix-ups, contamination or medicines being taken by mistake.
- Keep store records for stock-control purposes. Consider any special requirements for controlled drugs. A separate duplicate list may help the fire services in an emergency.
- If vaccines or other veterinary medicines need to be stored in a refrigerator, do not keep them in fridges containing food or other containers used for food.

### **Transport**

When transporting veterinary medicines in vehicles, you should make sure they are:

- stored properly to prevent damage or spillage during transport;
- transported in a secure container or section of the vehicle separate from the driver, other passengers, animals or food;
- transported in accordance with any product literature guidance;
- secured against theft and unauthorised access;
- accompanied by relevant information about the products.

Never carry a loaded syringe in a pocket or within clothing.

#### **Step 4: Record the assessment**

If you have fewer than five employees, you don't have to write anything down but it is good practice to keep a record. An easy way to record your findings is to use the risk assessment template which can be found on the HSE website ([www.hse.gov.uk/simple-health-safety/manage.htm](http://www.hse.gov.uk/simple-health-safety/manage.htm)). It also includes a section for your health and safety policy so you can record everything in one place.

#### **Step 5: Review the assessment**

You should review the assessment if significant changes occur, such as using different medicines, application methods, or treating other types of livestock.

- Consider any lower-risk medicines or application equipment that become available and use them instead if they will do the job and reduce the risk of injury or ill health.
- Consult worker safety representatives and employees, if you have them, if there is a change to the work practice that has implications for health and safety.

### **Reporting**

All employers, the self-employed and people in control of work premises have duties under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR).

They must report certain work-related injuries, cases of ill health and dangerous occurrences. HSE will pass details to the relevant enforcing authority.

RIDDOR applies to all work activities but not all incidents are reportable.

Any ill health of animals or humans and any adverse effects on the environment resulting from exposure to veterinary medicines should be reported to the VMD who operate the UK Suspected Adverse Reaction Surveillance Scheme (SARSS). A human SAR is defined as a reaction which is noxious and unintended and which occurs in a human being following exposure to a veterinary medicine.

An interactive adverse event reporting form for completion and submission online is available on the VMD website at [www.vmd.defra.gov.uk](http://www.vmd.defra.gov.uk). Adverse event and environmental report forms can be downloaded from the same website.

The scheme enables the VMD to monitor any problems that may arise with these medicines and if necessary, review the licensing provisions.

### **Find out more**

Veterinary Medicines Directorate (VMD), Woodham Lane, New Haw, Addlestone, Surrey KT15 3LS [www.vmd.defra.gov.uk/fsf.aspx](http://www.vmd.defra.gov.uk/fsf.aspx) email: [inspections@vmd.defra.gsi.gov.uk](mailto:inspections@vmd.defra.gsi.gov.uk) tel: 01932 336911

*Compendium of data sheets for animal medicines* National Office of Animal Health (NOAH) (published annually by NOAH, 3 Crossfield Chambers, Gladbeck Way, Enfield, Middlesex EN2 7HF Tel: 020 8367 3131 [www.noah.co.uk](http://www.noah.co.uk) and [www.noahcompendium.co.uk](http://www.noahcompendium.co.uk))

Department of Agriculture and Rural Development for Northern Ireland  
Tel: 02890 524999

### **VMD publications**

Summaries of product characteristics for all UK authorised veterinary medicinal products can be accessed via the VMD's Product Information Database [www.vmd.defra.gov.uk/ProductInformationDatabase/](http://www.vmd.defra.gov.uk/ProductInformationDatabase/).

*Record keeping requirements for veterinary medicinal products* VMGN14 Veterinary Medicines Directorate 2011 [www.vmd.defra.gov.uk/pdf/vmgn/VMGNNote14.pdf](http://www.vmd.defra.gov.uk/pdf/vmgn/VMGNNote14.pdf)

*Medicated feeding stuffs and specified feed additives* VMGN17 Veterinary Medicines Directorate 2011 [www.vmd.defra.gov.uk/pdf/vmgn/VMGNNote17.pdf](http://www.vmd.defra.gov.uk/pdf/vmgn/VMGNNote17.pdf)

### **HSE publications**

*A step by step guide to COSHH assessment* HSG97 (Second edition) HSE Books 2004 ISBN 978 0 7176 2785 1 [www.hse.gov.uk/pubns/books/HSG97.htm](http://www.hse.gov.uk/pubns/books/HSG97.htm)

*Sheep dipping: Advice for farmers and others involved in dipping sheep* Leaflet AS29(rev3) HSE Books 2007 (Priced pack ISBN 978 0 7176 6247 0) [www.hse.gov.uk/pubns/AS29.htm](http://www.hse.gov.uk/pubns/AS29.htm)

*Common zoonoses in agriculture* Agriculture Information Sheet AIS2(rev2) HSE Books 2000 [www.hse.gov.uk/pubns/AIS2.htm](http://www.hse.gov.uk/pubns/AIS2.htm)

*Handling and housing cattle* Agriculture Information Sheet AIS35 HSE Books 1999 [www.hse.gov.uk/pubns/AIS35.htm](http://www.hse.gov.uk/pubns/AIS35.htm)

*Reporting accidents and incidents at work: A brief guide to the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)* Leaflet INDG453 HSE Books 2012 (Priced pack ISBN 978 0 7176 6460 3) [www.hse.gov.uk/pubns/indg453.htm](http://www.hse.gov.uk/pubns/indg453.htm)

### **Acknowledgments**

Some images supplied by Sterimatic Worldwide Ltd [www.sterimatic.com](http://www.sterimatic.com).

### **Further information**

For information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit [www.hse.gov.uk](http://www.hse.gov.uk). You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops.

**This document contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.**

This document is available at [www.hse.gov.uk/pubns/as31.htm](http://www.hse.gov.uk/pubns/as31.htm)

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