

# Veterinary medicines

Safe use by farmers and other animal handlers



*This is a web-friendly version of leaflet AS31(rev1), revised 07/07*

## 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 Veterinary Medicines Regulations 2006, 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(rev3).

The Veterinary Medicines Directorate (VMD) is the regulatory authority for veterinary medicines in the UK. Inspectors from the Animal Medicines Inspectorate 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 premixtures (eg vitamin/mineral feed supplements containing medicines) to mix on their own premises must be registered with the VMD's Animal Medicines Inspectorate (Tel: 024 7684 9260) or the Department of Agriculture and Rural Development for Northern Ireland (Tel: 02890 524999). 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?

You have 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. 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 six-step process:

### **Step 1: Do I need to treat at all?**

Use veterinary medicines only when necessary for animal health reasons. If in doubt consult your veterinary surgeon. If you must use a veterinary medicine then:

### **Step 2: Look for the hazards**

Identify the range of authorised products available. 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.

### **Step 3: 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 HSE's 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 numbers of people and animals involved (the longer the job the more tired people get and the greater the chance of mistakes);
- 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;
- the risk to women of childbearing age who are, or think they might be, pregnant, or those with an existing health condition that might be worsened;
- 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 risks from particular practices.

#### Step 4: Choose the treatment

Decide which of the range of authorised treatments is best to prevent or control the condition in animals but poses the least risk to people and the environment. Use less hazardous products where possible. For example, choose a water-based vaccine instead of an oil-based one. If in doubt get advice from your veterinary surgeon.

It is an 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 administration of the product is in accordance with that MA; or
- it is administered in accordance with the directions of a veterinary surgeon under the 'cascade' system. This permits administration of a veterinary medicine outside the terms of an MA.

**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* and speak to your veterinary surgeon.

#### Step 5: 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



**Figure 2** Applicator with needle guard



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

#### 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 HSE's Agricultural 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 needle stick injuries (see Figure 2).
- The risk of infection from injuries involving 'dirty' needles can be reduced by 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.

## **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 medicine?
- Does it fit properly?
- Is it compatible with other PPE worn?
- 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 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. NPTC (part of the City & Guilds group) and the Scottish Skills Testing Service offer accredited Certificates of Competence in the safe use of veterinary medicines. Information can be obtained from:

- NPTC, Stoneleigh Park, Stoneleigh, Warwickshire CV8 2LG  
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 [www.sayfc.org](http://www.sayfc.org).

Note that special requirements for Certificates of Competence apply for users and purchasers of sheep dips – see HSE's leaflet AS29(rev3) 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.



**Figure 4** Review the assessment and consult with staff

### Step 6: Review your COSHH 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.

## 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 needle stick injury.



**Figure 5** Accidental injection with oil-based vaccines requires urgent medical attention

## 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 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/manufacture'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 medicines, containers and equipment properly, eg through the supplier, waste disposal contractor or local authority.
- 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 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.
- Protect any drains that might be polluted.
- Keep 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 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 ensure 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;
- secured against theft and unauthorised access;
- accompanied by relevant information about the products.

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



## Records

- COSHH assessments should be written down unless they can be easily repeated and explained. Employers with five or more employees must record the significant findings.
- It is a legal requirement to keep a record of all medicines administered to food-producing animals, including those administered by your veterinary surgeon or provided in feeds (see 'Find out more').

## Reporting

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR) require employers, the self-employed, or people in charge of premises to report to HSE any deaths, certain injuries or diseases and dangerous occurrences caused by work. These include:

- loss of consciousness caused by exposure to a harmful substance or absorption of any substance;
- acute illness requiring medical treatment resulting from absorbing any substance;
- cases of phosphorous (including organophosphorous) poisonings diagnosed by a doctor;
- cases where the affected person is admitted to hospital for more than 24 hours;
- cases where the injured person is unable to work at their normal job for more than three consecutive days.

Reports should be made to the Incident Contact Centre (ICC) by telephone (0845 300 9923), fax (0845 300 9924) or e-mail to [riddor@natbrit.com](mailto:riddor@natbrit.com). Other cases of ill health may also need to be reported. If in doubt, contact the ICC or HSE for advice.

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 an incident in which a person reports adverse health effects following exposure to a veterinary product.

Copies of the reporting form MLA 252A are available from VMD (Tel: 01932 338427 or download the form from their website at [www.vmd.gov.uk](http://www.vmd.gov.uk)). The scheme enables VMD to monitor any problems that may arise with these medicines and if necessary, review the licensing provisions.

## Find out more

*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))

### **VMD publications**

*Record-keeping requirements for veterinary medicinal products* Veterinary Medicines Guidance Note 16 VMD October 2006

*Medicated feedingstuffs prescriptions* Veterinary Medicines Guidance Note 21 VMD October 2006

*Code of Practice on the responsible use of animal medicines on the farm* VMD  
June 2006

VMD publications are available from VMD, Woodham Lane, New Haw, Addlestone,  
Surrey KT15 3LS Tel: 01932 336911 [www.vmd.gov.uk](http://www.vmd.gov.uk).

### **HSE publications**

*Control of substances hazardous to health (Fifth edition). The Control of Substances  
Hazardous to Health Regulations 2002 (as amended). Approved Code of Practice  
and guidance L5 (Fifth edition)* HSE Books 2005 ISBN 978 0 7176 2981 7

*Sheep dipping AS29(rev3)* HSE Books 2007 (single copy free or priced packs of 10  
ISBN 978 0 7176 6247 0)

*Common zoonoses in agriculture* Agriculture Information Sheet AIS2(rev2)  
HSE Books 2000

*Handling and housing cattle* Agriculture Information Sheet AIS35 HSE Books 1999

### **Acknowledgments**

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

### **Further information**

HSE priced and free publications are available by mail order from HSE Books, PO Box  
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[www.hsebooks.co.uk](http://www.hsebooks.co.uk) (HSE priced publications are also available from bookshops and  
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For information about health and safety ring HSE's Infoline Tel: 0845 345 0055  
Fax: 0845 408 9566 Textphone: 0845 408 9577 e-mail: [hse.infoline@natbrit.com](mailto:hse.infoline@natbrit.com) or  
write to HSE Information Services, Caerphilly Business Park, Caerphilly CF83 3GG.

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

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