

How to help your clients avoid unacceptable residues

Public confidence in the quality of domestically produced foods is a key factor in ensuring the commercial success of the UK farming industry. A thriving farming industry is inextricably linked to the success of many veterinary practices. Veterinary surgeons can help maintain consumer confidence in UK produced food if they:

- maintain close communication with their clients about the safe and appropriate way to use veterinary medicines, including giving timely updates of significant SPC changes
- note that horses are food producing animals and check the passports of all horses that they treat. If the passport of a horse is not available veterinary surgeons should only administer drugs authorised for food-producing animals
- only use veterinary medicines that are authorised in the UK for the purpose, or that are correctly prescribed under the 'Cascade'
- apply the authorised withdrawal periods as specified in the product's instructions unless the product has been prescribed under the 'Cascade'
- are aware that the withdrawal periods set out in the 'Cascade' are the **minimum** required under law. To avoid unacceptable residues, a longer period may be needed – especially if a higher dose than normal is being used. These can be different for milk, meat and eggs.

Additional information on what withdrawal period to advise for products used under the 'Cascade' may be found as follows:

1. The SPC of the product will indicate withdrawal periods in the target species in section 4.11. A long withdrawal period for an authorised species / indication should give a note of caution to the veterinarian.
2. Section 5.2 of the SPC may contain additional information about the pharmacokinetics of the product.
3. The manufacturer may have unpublished data which may be helpful.
4. A significant additional safety factor should always be built in to the withdrawal period advised.

- remember that it is the veterinary surgeon's responsibility to advise the farmer to observe the authorised withdrawal period, or the withdrawal period specified when prescribing under the 'Cascade'
- consider if there is a risk of cross-contamination between treated and untreated animals and also their feed or water
- stress to clients the importance of any farmed animals sold being accompanied by their medicines treatment history and that clients have a legal responsibility to maintain appropriate and up-to-date farm medicines records. A full list of the record keeping requirements can be found in the Veterinary Medicines Regulations and its accompanying guidance note VMGN 16.

Where can I get more information?

The websites of the VMD and the independent Veterinary Residues Committee have information on residues and the surveillance programmes that check our food is safe:

www.vmd.defra.gov.uk

www.vmd.defra.gov.uk/vrc

Other links to organisations closely involved in veterinary aspects of food safety include:

www.food.gov.uk

www.ruma.org.uk

www.bva.co.uk

www.defra.gov.uk

www.hpa.org.uk

www.bcva.org.uk

www.britishtpigs.org.uk

www.bvpa.org.uk

On equine identification and use of medicines in horses you may also wish to refer to: <http://www.defra.gov.uk>

For any additional enquiries about veterinary medicines you can also phone the VMD on 01932 336911 or email: postmaster@vmd.defra.gsi.gov.uk



ASSURING THE SAFETY, QUALITY & EFFICACY OF VETERINARY MEDICINES



Veterinary Medicines Residues in Food – Issues for Veterinarians



The Veterinary Medicines Directorate is an Executive Agency of the Department for Environment, Food & Rural Affairs

Responsibilities in relation to avoiding residues in food

The UK has an excellent record of producing food uncontaminated by residues from veterinary medicines. Farmers have the primary role in ensuring that food derived from their animals does not contain residues of veterinary medicines above statutory limits. However, veterinary surgeons have both professional and legal responsibilities to advise farmers on the correct use of veterinary medicines. This advice includes:

- ensuring that animals receive the appropriate dose, based on actual bodyweights where possible
- ensuring that animal keepers understand the legal requirements to keep records of veterinary medicines used
- stressing that the authorised withdrawal period should be applied; or
- stressing that an adequate withdrawal period should be applied when prescribing under the 'Cascade'.
- giving timely and targeted advice on significant changes to the Summary of Product Characteristics (SPC) of the products
- ensuring that horse keepers understand that phenylbutazone cannot be legally prescribed in the absence of a horse passport declaring that the horse is not destined for human consumption. See the Veterinary Medicines Directorate (VMD's) leaflet 'Prescribing Veterinary Medicines for Horses' for further information.

By advising farmers about residues issues, veterinary surgeons can help avoid consumers being exposed to medicinal residues at concentrations above statutory limits that scientific studies have shown might pose a concern for consumer health. Good veterinary advice can also help your clients avoid the possible financial penalties that could follow if illegal residues were detected in food derived from their animals.

How does the VMD enforce Withdrawal Periods?

The UK has an extensive analytical surveillance programme to look for residues of veterinary medicines in foods of animal origin. This is a legal requirement placed on all EU Member States.

The VMD organises the collection of over 35,000 samples of UK produce (e.g. meat, milk, eggs) each year from farms and abattoirs. These samples are analysed for residues of authorised veterinary medicines, as well as for illegal or unauthorised medicines. This post-authorisation surveillance checks that the authorisation process has worked and any residues detected are, as expected, below the relevant Maximum Residue Limit (MRL). If any residues above the MRL are detected a follow-up investigation on the farm of origin is carried out to identify the cause. Veterinary surgeons may be called upon to provide input into these investigations.

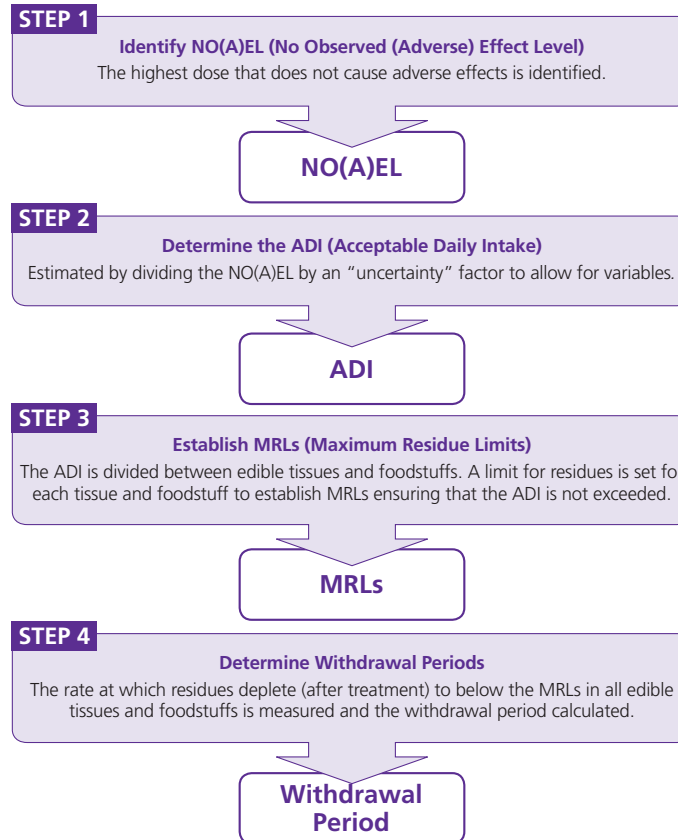
What has the VMD found?

Overall, the VMD's surveillance shows that the UK has an excellent record of using veterinary medicines responsibly. While a number of residues above the MRL or other limits are detected, very few are of potential concern for consumer health.

During 2011 there were a number of cases where residues of nitroxylin were found in milk from dairy cattle following use of an authorised product. This was due to the wording of the Summary of Product Characteristics (SPC) prohibiting its use in dry (dairy) cows being misinterpreted by the farmer. The SPC was changed to provide clearer instructions for the administration of the product and the issue was resolved.

How does the VMD set withdrawal periods?

Setting a withdrawal period is a scientific process:



For details of the scientific process on "How to Determine Withdrawal Periods" please see www.vmd.defra.gov.uk

What causes have there been for other unacceptable residues?

When residues of veterinary medicines at concentrations above the MRL are detected, a follow-up investigation on the relevant farm is carried out. These investigations have found:

- **the withdrawal period had not been observed** – this can be the result of not knowing the withdrawal period, poor record keeping of medicines use, a failure to correctly identify treated animals, overdosing, or the use of unauthorised products which are not declared in the records
- **incorrect withdrawal applied under the 'Cascade'** – the 'Cascade' allows a veterinary surgeon to prescribe medicines outside their normal authorised uses, but only where there is no authorised medicine available for a particular use. The EU legislation specifies minimum withdrawal periods for medicines used under the 'Cascade'. For more persistent medicines these minimum periods may be insufficient
- **medicines bought from unauthorised sources** – the VMD is aware of unauthorised sources for medicines that could pose a risk of unacceptable residues. These include car boot sales, online auction sites and overseas internet sites. The VMD welcomes the help it receives from vets and the public enabling appropriate action to be taken against such illegal activity (see the VMD leaflet "How to Identify Veterinary Medicinal Products: Legal or Illegal?"). In May 2012 the VMD launched its Accredited Internet Retailer Scheme (see the VMD's leaflet: "Helping you to buy safe and effective veterinary medicines on the internet.")
- **residues can occur if expected calving dates are inaccurately recorded and dry cow intramammary tubes are administered too close to the onset of the next lactation.** Residues may be found in milk. They can also occur if a sustained release worming bolus is administered but the date of administration is not recorded and the animal is slaughtered too early in the year
- **animals were sent to slaughter where their medicines history was not known** – high residues have been found in animals that had been sent to market for sale and further fattening, but were then sent directly to slaughter, or where the purchaser has not been advised that animals had been recently treated
- **phenylbutazone was administered to animals that subsequently entered the food chain** – residues have occurred because horses have received phenylbutazone, but their passports had not been amended to show that they were not intended for human consumption
- **out-of-date medicines used** – medicines have a shelf-life which is given on the label. If kept for longer than this, degradation of ingredients may occur and affect the quality and efficacy of the product. This would vary dependent on the toxicological profile and substance included in the product. The stability and rate of absorption of the product cannot be guaranteed when used beyond the recommended shelf life; this may in turn affect the required withdrawal period
- **medicated feed inadvertently available to animals that subsequently entered the food chain** – residues have occurred by housing treated and untreated animals in the same place, allowing them access to medicated food or contaminated bedding.