

Steps towards better awareness

EUROPEAN Antibiotic Awareness Day was an ideal opportunity for everyone using antibiotics in agriculture to ensure they are doing so responsibly, which means "as little as possible and as much as necessary".

Antibiotics are key medicines in both human and animal health. Responsible use in livestock helps to maintain animal health and welfare and provide safe food for the consumer. However, they should not be a substitute for good farm management. The Federation of Veterinarians in Europe (FVE) has clear guidelines on responsible use and it's worth reviewing these.

PETER EDMONDSON

is one of seven dairy vets in the Shepton Veterinary Group in Somerset, which looks after more than 24,000 cows on 150 dairy herds. His main interests are mastitis, milk quality and the interaction of the milking machine and cow. He provides consultancy services and tailored training for vets, farmers and the pharmaceutical and agri industry.



PETER EDMONDSON

MVB, CertCHP, DipECBHM, FRCVS

reminds practitioners to encourage farmer clients to follow guidelines on responsible use of antibiotics

Work with clients to avoid need for antibiotics

A typical example is one of our herds, which had an infectious bovine rhinotracheitis (IBR) problem. Replacement heifers were only vaccinated against IBR each year. This meant the older cows did not have adequate cover and we were seeing clinical IBR cases in these older cows.

We advised whole herd vaccination in the summer of 2012. Farm medicine records show a significant reduction in antibiotic use with the number of cows treated dropping by 60 per cent.

The farmer is delighted because his treatments are reduced, which means more milk being sold plus healthier cows that are more productive. We are delighted because we have a happy client and less antibiotic

ics being used on farm.

More farmers are now buying into the whole herd health concept to prevent disease and this has to be the way forward for all species and conditions where there are vaccines and effective control measures available. Always promote good husbandry and biosecurity.

Choose the right drug for the right bug

Use as narrow a spectrum antibiotic as possible as a first-line treatment. Many farmers will want to use broad-spectrum antibiotics if they are unsure what the problem is. This should be discouraged. Training farmers in medicine use will help with this. We should ensure they use the most suitable antibiotic for the appropriate condition using the correct dose rate, frequency and



The author talking with clients about how preventing disease is essential in reducing antibiotic use.

duration of treatment, and that the medicine is administered by the correct route.

In Japan, there is the NOSAI system of veterinary insurance where the farmers' veterinary costs are covered. Vets who deliver this system have to follow specific treatments for different conditions. For example, the first-line treatment for calves might be oxytetracycline and, if the animal does not respond, it then moves on to the second-line choice. Vets cannot jump in with the most potent antibiotic each time. Vets drew up these guidelines and have to follow them otherwise they do not get paid for their work. Practices could draw up similar treatment guidelines for some of the common conditions.

Farmer education

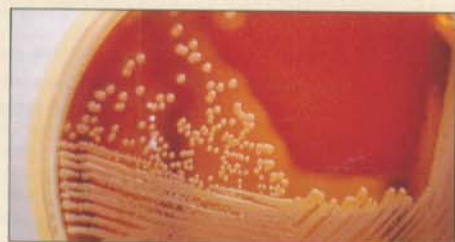
We have been running medicine courses in our practice for several years and farmers have responded really well. These have resulted in a reduction in the number of treatments. The use of thermometers is now common. Farmers often telephone if they are unsure about what is wrong with an animal rather than just treat hoping to resolve the problem. If there is any doubt we will visit the animal.

Use diagnostic tests as much as possible

Diagnostic testing is important to help ensure we are using the most appropriate treatments, as well as helping to fine-tune control measures. Use of regular diagnostic tests should be encouraged.

Pay attention to critically important medicines

Third and fourth generation cephalosporins and fluoroquinolones are classified as "critically important" antibiotics and their use should be discouraged as much as possible. Data sheets of third and fourth generation cephalosporins state these should not be used as first-line treatments. Many farmers put pressure on vets to use



Use of diagnostic tests to identify the cause, control and select the most suitable treatments is essential.

the most potent antibiotics as a first-line treatment. This should be discouraged.

Minimise prophylactic use of antibiotics

Previously, prophylactic use of antibiotics was used, for example, chlortetracycline added to calf milk replacer to try to avoid or reduce the severity of pneumonia. This might be to overcome management and husbandry problems, such as poor ventilation, wet and draughty beds, overstocked sheds, mixing of age groups or calves did not receive adequate colostrum. You can manage your way out of all of the above factors.

Report any adverse reactions to the VMD

An adverse reaction is not just when an animal has an allergic reaction to a medicine. It can also be a treatment failure when treating a condition for which the medicine is licensed. Pharmaceutical companies and the VMD should be notified in the event of treatment failure.

So what are the opportunities with medicine use for vets in the UK? We are the prescribers and most frequently the dispensers, so it makes sense for us to train those who administer the products. Farmer training will pay dividends and makes them realise that making a diagnosis is not

as simple as it seems – otherwise why did we spend five years at veterinary school?

Larger practices might also consider reviewing their common treatments, drawing up protocols and ensuring the whole team has a consistent approach to treatments. A farmer asked me a few years ago why I used a different dose of a particular antibiotic for treating cows to one of my colleagues. It was a good question – and one of us was right.

In the future there will be more restrictions on antibiotics and their use. The Dutch government has requested a cut in antibiotic use by 2015 to 70 per cent of the levels used in 2009. In the Netherlands, third and fourth generation cephalosporins and fluoroquinolones are not used at all in food-producing animals. The Dutch authorities can see the dispensing habits of individual vets and the medicine use of individual farms, and there are actions that will be taken if these do not follow the government guidelines.

It should be the veterinary profession that leads and promotes responsible use, rather than vets being forced to make changes by supermarkets or regulatory agencies.

Further reading
www.fve.org/uploads/publications/docs/fve_antimicrobials_a4_hr02.pdf

WALKIE

YUMOVE ADVANCE
Advanced joint care for advanced joint conditions.

- ✓ Higher levels of proven EFAs*
- ✓ Fast moving synovial support
- ✓ Greater structural support

Lintbells VETERINARY

Find out how YUMOVE ADVANCE could help your clients.
Call 01462 790886 or email vet@lintbells.com

* Based on B.V. J. Nutr. 2002 June 13;13(14):5-16:65.

SPOTLIGHT

This article is part of our regular Spotlight series of clinical and topical features aimed specifically at the large animal veterinary practitioner