

Could you, and should you, cut down on antibiotic use in dry cows?

# To treat, or not to treat?

The blanket treatment of cows with antibiotic at drying off is firmly under the spotlight. NMR vet Eamon Watson reassures producers that there's no need to panic – particularly if they have access to herd level data and accurate individual cow records so that, with their vets, they can make well-judged decisions. He answers some key questions.

text **Karen Wright**

**T**he rise of antimicrobial resistance (AMR) in public health is a major concern. Although AMR is not new, the concern is that resistance is now occurring in some antibiotics that need to be preserved as the last line of therapy for treating human patients, according to NMR vet Eamon Watson. “We all have a part to play in the responsible use of antibiotics to help reduce the threat posed by AMR. This includes the use of antibiotics in livestock, pet animals and farmed fish, as well as antibiotics prescribed to people.”

*Why are many producers now making the move to reduce antibiotic use?*

“Selective dry cow therapy (SDCT) is now at the forefront for a number of herds due to the positive step to reduce antibiotic use being taken by Arla in its pan-European Arlagården standards.

“Arla suppliers now have to work with their vet to put in place a plan for SDCT and demonstrate responsible antibiotic use. Medicine use in general is high on the agenda for many milk buyers and retailers, and it can be expected that the practice of SDCT will become increasingly important during the next 12 months.

“The Responsible Use of Medicines in Agriculture Alliance (RUMA) is continually active in promoting best practice for medicines use and it has recently updated guidelines on the use of antibiotics in dairy cattle.”

*So all producers are likely to have to move towards a more measured approach to antibiotic use, particularly at drying off?*

“Yes, but it's not just about cutting the usage of antibiotics – it's about the wider picture of responsible use and being selective in treatment. For SDCT this

means no antibiotic is the norm and only treating those cows that have evidence of infection. Antibiotics have their place. We need them to treat sick animals, but we must use them responsibly and correctly.

“The use of antibiotic dry-cow therapy was an important part of the five-point plan in the 1970s when contagious mastitis pathogens (those that pass from cow to cow) were dominant. Antibiotic dry-cow therapy has helped to reduce average bulk tank cell counts from more than 500,000cells/ml in the early 1970s down to around 180,000cells/ml now. But the situation has changed, hence the new approach to DCT.”

*Is the way relatively straight-forward with good records and meaningful data?*

“Yes, definitely. SDCT is evidence-based decision making and the better the

*All producers will move to a more measured approach to antibiotic use, particularly at drying off*



evidence you have, the more confident you can be in having a successful outcome. Gathering data at both herd and cow level is important. Regular and repeated individual cow SCCs and accurate mastitis records are essential. Don't forget that it is still necessary to pay attention to the environment, the milking routine and general herd health to stay on top of mastitis and milk quality management."

*How easy will it be for producers to reduce antibiotic use and, particularly, DCT?*

"Some producers have been doing it successfully for years and they'd tell you that it's easy! Others will be taking cautious first steps. The key is going to be working with your vet. Look at your mastitis management and milk quality data, and assess the risk factors for your farm. Every unit and herd will be different – it's not a case of 'one size fits all'. There's plenty of information out there, but work with your vet to produce a plan that's tailored to your herd."

*Are there other on-farm benefits?*

"Aside from the economic saving of not using unnecessary antibiotics, there is good evidence that using DCT in healthy cows actually increases the risk of mastitis in the next lactation."

*So what should producers do now to decide if they could opt for more selective antibiotic use on dry cows?*

"Firstly, make sure they have good milk records and also work with their vet. I've said 'no rule fits all' but in general, those with a herd average SCC of 200,000 cells/ml or less should be well placed for selective antibiotic use at drying off. That doesn't exclude herds with a herd average SCC above 200,000 cells/ml, but these herds need to be looking at mastitis control and milk quality improvements in the first instance."

*NML has developed a Selective Dry Cow tool that pulls all the herd level information and analyses together. What can this be used for?*

"The tool has been developed to support vets and producers in mastitis management and to help with their decision making on SDCT. It brings together herd level information on bulk milk somatic cell count (BMSCC), individual cow somatic cell count (ICSCC) for those recording with NMR and clinical mastitis records.

"The tool is designed to present the key information for discussion between the vet and producer. This is important because it is a starting point for active mastitis management and for continuous monitoring of the herd for SDCT."



Eamon Watson: "Selective dry cow therapy must be based on good evidence"

"The tool is available to all producers through Herd Companion and it is constantly updated with the latest results."

*And on a typical farm, that takes advantage of the data and is suited to SDCT, how much would you expect them to reduce the use of DCT?*

"I'd advise against setting a target. The important thing is to tread carefully at first and, as your experience grows, you can review your thresholds. But with experience, many herds can reduce DCT to less than 50% of the herd, and frequently less than 25%. Those producers that are well down the path of SDCT see it as a positive step. For them it is 'business as usual'."

*NML's Selective Dry Cow tool analyses the data and provides a good starting point for monitoring the herd for SDCT*

