

## Teagasc Notes for the week ending Friday 25<sup>th</sup> August 2017

### AMR: The need to act NOW

Antimicrobial resistance is becoming an ever increasing problem and we as food producers have a major role to play in the solution. The issues involved were explained very well in a recent Cellcheck newsletter.

#### What is AMR?

Antimicrobial resistance, or AMR, is a term used to describe a situation where a medicine that used to work, no longer works. The most common form of AMR is resistance by bacteria to antibiotics. However, there are other forms e.g. resistance of viruses to antiviral medicines. Bacteria have been on this planet a lot longer than we have. They have not been able to do this without developing effective methods of survival. One of the methods they have developed is the ability, when exposed to antibiotics, to become resistant to their effects. Not only can they do this for themselves, they can pass on this ability to other bacteria that were never exposed to the antibiotic.

AMR is a natural phenomenon. It cannot be prevented. However, the pace at which it is developing has increased rapidly in recent years because too many antibiotics are being used in both the human health and animal sectors, not just here in Ireland, but at the global level.

#### Why does AMR matter?

Since their discovery in 1928, antibiotics have very much improved the quality of all our lives. We take this benefit for granted, and like our health, we will not know its true value until it is gone, and then it will be too late. Treatments such as surgeries, cancer treatments, care of premature babies etc. would not be possible if we could not control the growth of bacteria using antibiotics. Antibiotics also mean that our older family members and friends are not left suffering from chronic conditions that would severely affect their quality of life, and it means that we too, when we have a bacterial infection, have access to pills that in 24 hours can have us feeling an awful lot better. Just think back to the last time you or a family member used an antibiotic. How did you/they feel before the antibiotic was used? How did you/they feel after? Imagine if we no longer had access to these medicines?

#### How can I play my part?

Medical practitioners alone cannot fix this problem; farmers alone cannot fix this problem; the public alone cannot fix this problem. We all need to work together if we are to avert this crisis. For those involved with animals, this means doing everything we can to prevent outbreaks of bacterial infections in our animals. It means using vaccination to prevent outbreaks of viral infections, as viral infections suppress human and animal immunity and make us all much more susceptible to bacterial infections. It means washing our hands. It means regularly cleaning and disinfecting any equipment that comes in contact with animals. It means isolating sick animals, and when we or our animals are sick, sticking to the 5 R's:

1. Get the right advice.
2. Treat the right animal or person. Never take an antibiotic that has not been prescribed for you, or give an antibiotic to an animal for which it has not been prescribed.
3. Understand that the right antibiotic to use is the simplest, most narrow spectrum antibiotic that will work for the particular infection.
4. Adhere to the right dose and the right duration of treatment i.e. that which is recorded on the prescription or medicine label.

If we do not act now, the choice may very well be taken out of our hands, whether that is by Nature herself, or by those who will be forced to act to protect all our futures

### Dairying

#### Don't ignore a summer SCC rise

Is your bulk tank somatic cell count (SCC) starting to creep up slightly? If so, don't ignore it. It is likely to be because the number of infected quarters in your herd is starting to increase a little, which in turn can lead to more infected quarters, and so on. High herd SCC in late lactation is generally because of spread of infection during the summer, not 'just late lactation'. Don't assume that small bulk tank SCC

increases during the summer will 'settle down'- act now, and set your herd up for late lactation, with minimal mastitis infections and maximum milk production.

Despite an annual improvement in the average SCC of herds over the last few years, we still consistently see herd SCCs starting to rise from early summer. It then usually continues to creep up for the rest of the year. The financial impact of a 'creeping' SCC should not be underestimated. For example, at a milk price of 30c/L, if the average bulk tank SCC of a 100-cow herd increases from 150,000 cells/ml to 250,000 cells/ml, it reduces the overall farm profit by approx. €8,200. An additional €4,000 of extra profit is lost if the bulk tank SCC increases from 250,000 cells/ml to 350,000 cells/ml. Milk record the whole herd now, and identify any high SCC cows i.e.

SCC>200,000cells/ml

1. These high SCC cows should be marked and milked last to minimise disease spread.
2. Discuss a treatment plan with your vet - while treatment may appear to be the most logical option, remember that cure rates can range from 20-80% depending on various factors, such as the bacteria involved, the duration of infection and the cow's lactation number.
3. Remove the source of infection by drying off individual quarters i.e. simply stop milking it, do NOT use a dry cow tube. Consider culling if the cow is a repeat offender i.e. high SCC in two consecutive lactations.

### **Important Event**

#### **Grow more – Graze more – Earn more**

A Teagasc Glanbia Dairy Farm Walk will take place on the farm of Denis Lahart, Goodwingsgarden, Kells, Co. Kilkenny on Friday September 1<sup>st</sup> at 11.00am. Teagasc advisers and specialists will discuss building up grass this autumn, improving soil fertility and improving grazing infrastructure. All are welcome.

