Changing use of Antibiotics in Veal Production

By Melissa Speirs, Project Coordinator

The careful use of antibiotics is gaining global attention. Each time antibiotics are used, the possibility of antibiotic resistance developing increases. As such, everyone involved in prescribing and using antibiotics must do so with care.

Antibiotic resistance

Antibiotics are a valuable tool in both veterinary and human medicine. Antibiotics kill or stop the growth of bacteria that cause infections.

Bacteria evolve and change due to environmental conditions. If bacteria changes too much, current antibiotics become unable to control it. To keep antibiotics effective, we must use them carefully and according to label and veterinarian instructions to prevent antibiotic resistant bacteria (AKA "Super Bugs"). Antibiotics should always be used as directed, even if the animal begins to look better before the course of antibiotics is complete. Only sick or at risk animals should be treated with antibiotics.

Antibiotics are an essential component of modern human and animal medicine. If they become ineffective, simple infections from an injury such as a scraped knee can become deadly, and routine surgeries would present a great risk of infection and death to patients. In order to prevent major changes in human and veterinary medicine, we must use antibiotics responsibly and implement management practices that reduce the need for antibiotics.

Health Canada and antibiotic resistance

Many of the drugs used in livestock production are also used in human medicine. To ensure that we do not reduce the effectiveness of antibiotics for use in humans, Health Canada categorizes antibiotics into four categories (I to IV). Category I drugs are extremely important to human health and few alternatives exist. Even in humans, these drugs are considered a "last resort" – only used in patients with very specific and severe, life-threatening bacterial infections.

Health Canada is demanding closer oversight of the use of antibiotics in food production animals by:

- Removing growth promotion and/or production claims of medically-important antimicrobial drugs
- Developing options to strengthen the veterinary oversight of antimicrobial use in food animals

This means that antibiotics in categories I-III will no longer be available over-the-counter for production claims and there will be a large shift from over-the-counter to prescription drugs, especially for drugs in the categories most important to human health (category I).

Careful use of antibiotics

Antibiotics should be used carefully to prevent antibiotic resistance from developing and prevent residues in food products. However, animals that are suffering from infection should be promptly diagnosed and treated. If they are suffering from an unknown infection, antibiotics should not be used if other treatment options such as fluids and non-steroidal anti-inflammatories have not been explored. Work with your herd veterinarian to create a protocol that determines how to decide if an animal needs

antibiotics, how to administer antibiotics (such as dosage and frequency) and how to prevent infections in the future. Often, increased sanitation, biosecurity, and preventative herd health practices, such as vaccination, can eliminate or reduce the need for antibiotics. Antibiotics should not be used in place of good sanitation and biosecurity. Careless use of antibiotics is not a fix for poor management practices.

List of antibiotics commonly used in veal production and their importance to human health as idenfied by Health Canada

In order to use antibiotics in veal, you must have a valid veterinary-client-patient-relationship. Your herd veterinarian must prescribe any antibiotics used on your farm.

Active ingredient	Common name	Antimicrobial importance
Florfenicol	***Nuflor***	III
Enrofloxacin /danofloxacin	***Baytril / A180***	I
Ceftiofur	***Excenel, Excenel RTU, Excede***	I
Tylosine	***Tylan 200, Soluble Tylan***	II
Tilmicosin	***Micotil, Pulmotil***	II
Gentamycin	***Gentocin***	II
Spectinomycin	***Adspec***	III
Tildipirosin	***Zuprevo***	II
Tulathromycin	***Draxxin***	II
Amoxicillin	***Pacetam***	II
Lincomycin	***Lincomix***	II
Tiamuline	***Denagard***	II