

Time is winding down on solutions for antimicrobials

“We are in a situation where the world is changing - we are entering a post-antibiotic era.”

BY LOIS HARRIS

Ontario Farmer

Guelph - ‘Reduce the use’ of antimicrobials was the main message at the fifth Animal Health Forum. About 170 veterinarians, producers and representatives of the livestock industry, feed and pharmaceutical suppliers, academia and the federal and provincial governments attended the conference held in Guelph on November 12th.

The entire agricultural value chain is responsible for fighting AMR and has to work together to do it, according to Dr. Greg Douglas, the Chief Veterinarian of Ontario, who co-hosted the forum, along with Jennifer McTavish of the Ontario Sheep Marketing Agency. There’s a renewed urgency to the job because of Health Canada’s deadline of January 1, 2017 for phasing out claims on antimicrobial drugs for growth, nutrition and health maintenance and shifting toward making veterinary oversight mandatory for dispensing them.

“We’re all being held to account – all the leaders in this room will need to make things happen in their own circles,” he

says.

Antimicrobials, of which antibiotics are one kind, kill or inhibit micro-organisms that cause infections, illness and disease. Besides being a treatment, they are also used to prevent disease and, in some cases, to promote growth. Resistance occurs when the organism being targeted evolves so the medicine is no longer effective.

The more antimicrobials are used, the more they kill off vulnerable bacteria, leaving only the resistant bacteria behind, which results in fewer options for treatment. The threat is heightened by the fact that resistant bacteria can move between and among human and animal populations.

It’s a serious problem that is recognized and being tackled by governments and organizations around the globe, including the World Organization for Animal Health (O.I.E.), the U.S. Food and Drug Administration, and the Canadian government.

“We are in a situation where the world is changing - we are entering a post-antibiotic era,” said keynote speaker Jason Tetro, a microbiologist and published author known as the

‘Germ Guy’. “(Human) medicine is ahead of the curve – they really are looking at antibiotics as a last resort,” he added.

Tetro also wrote a column in the November 11th Globe and Mail in which he encouraged the agriculture industry to kick the antibiotic habit by following the human health lead. He also petitioned consumers to vote with their wallets to reduce or eliminate the use of antibiotics in food animals.

While many acknowledge there is an AMR threat in agriculture, and there are many ongoing efforts by the livestock industry to try to control it, significantly reducing antibiotic use is not going to be easy.

Currently, antimicrobial drug use in Canadian agriculture – in feed and water as well as in treatments - is widespread, is not tightly regulated (for example, producers can import drugs for use on-farm without a prescription), and has become a staple in some areas of production.

Forum participants agreed there is no ‘silver bullet’ and that the issue has to be taken on from several fronts at the same time – including research, education and ensuring there are effective alternatives and substitutes available.

“It’s a problem that will be

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From left to right are Dr. Mike DeGroot from Ontario Pork, Paul Brown from Beef Farmers of Ontario, Jennifer Van Gerwen, who was MCing the event from OMAFRA, and Steve Leech from the Chicken Farmers of Canada.

here for the foreseeable future,” says Dr. Douglas. “The worst thing we could do is focus on one area at the expense of others.”

During the forum proceedings, a producer panel, made up of representatives of the beef, chicken and pork industries, was asked by Dr. Douglas what they considered to be their main barriers to reducing antimicrobial use.

Paul Brown, a sixth generation beef farmer from eastern Ontario, said that lower herd densities to reduce stress and disease are possible, but the economics don't work for most

feedlot operators, and profitability would take a hit.

Steve Leech of the Chicken Farmers of Canada said producers are willing to make changes, but they need to have proven alternative products to antibiotics.

Dr. Mike DeGroot of Ontario Pork said that pork producers don't reach for antibiotics just because they are there – that there is a need to focus on animal husbandry, genetics and genomics research to produce hardier animals and proven replacement strategies in order to make the changes.

Most industry associations

have on-farm food safety systems and some have mandatory training. Chicken producers in Ontario, for example, will have to have completed AMR training by April, 2015.

The government has already weighed in on AMR. Besides imposing the three-year deadline on antimicrobial labeling and veterinary oversight, the federal government also intro-

duced a framework for action that ‘serves as a starting point for a collaborative response.’ Its goal is to protect Canadians from the health risks related to antimicrobial resistance, and it focuses on surveillance, stewardship and innovation. The framework includes:

- Establishing and strengthening surveillance systems to identify and track new threats

in human in animal settings.

- Better promoting the appropriate use of antimicrobials in human and veterinary medicine.

- Working with animal agriculture to strengthen regulations on veterinary medicines and medicated feeds, including increasing access to alternatives and practices that reduce the need for antimicrobials.

- Funding collaborative research and development on AMR domestically and internationally.

The province is helping the industry and federal government with surveillance, working with producer groups and veterinarians on outreach and researching alternatives through the University of Guelph agreement and Growing Forward 2.

During the wrap-up to the proceedings, Tetro reinforced the idea that what is needed is for all the stakeholders to find a way to make it all work - to reduce the use of antimicrobials in a way that doesn't harm the industry.