

PolicyPennings by Dr. Daryll E. Ray

## Antibiotic use in livestock production

A recent news article paraphrased a comment made by a producer of meat animals as, "The effort to ban antibiotic use in animals is led by activists who want to shut down all animal agriculture."

The assertion was made in response to House and Senate bills, (HR 1549 and S 619, respectively) introduced as the "Preservation of Antibiotics for Medical Treatment Act of 2009." The proposed legislation seeks to limit the nontherapeutic use of 7 classes of antibiotics in animals raised for food. It does not restrict the use of these antibiotics for the treatment of disease in these animals. Note the phrase "nontherapeutic use of."

For the last 20 years, every time we have gone to the doctor with a sore throat and asked for an antibiotic, the doctor has done an ear, nose, and throat examination. More often than not we have been told we have the flu-a virus that does not respond to antibiotic treatment-and sent home with the advice to bundle up, use a saline nose spray, and wait for the flu to run its course.

When we have protested, we have been on the receiving end of a lecture about the development of antibiotic resistant germs. When we have been fortunate enough to have a disease that responds to antibiotic treatment we have been on the receiving end of another lecture, this one telling us to take the medicine as prescribed and don't stop taking the pills early just because we feel better.

It is like every doctor is reading from the same book. Well maybe they are because here is what we found on the Mayo Clinic website (<http://www.mayoclinic.com/health/antibiotics/FL00075>), "Take antibiotics exactly as prescribed. Follow your doctor's instructions when taking prescribed medication, including how many times a day and for how long. Never stop treatment a few days early if you start feeling better-a complete course of antibiotics is needed to kill all of the harmful bacteria. A shortened course of antibiotics, on the other hand, often wipes out only the most vulnerable bacteria, while allowing relatively resistant bacteria to survive."

The Mayo Clinic article ends with a paragraph on responsibility titled: "The scope of your responsibility." It reads: "Antibiotic resistance is a pressing, global health problem. Nearly all significant bacterial infections in the world are becoming resistant to commonly used antibiotics. When you abuse antibiotics, the resistant microorganisms that you help create can become widely established, causing new and hard-to-treat infections. That's why the decisions you make about antibiotic use-unlike almost any other medicine

you take-extend far beyond your reach. Responsible antibiotic use protects the health of your family, neighbors and ultimately the global community."

We may be dense, but if the misuse, as defined by prescribing doctors, of antibiotics in the treatment of human disease contributes to the development of "resistant microorganisms, why would that not also be true of the nontherapeutic (variously referred to as sub-therapeutic or prophylactic) use of antibiotics in the raising of animals raised for food?"

And how does that lead to the accusation that those wanting to ban the nontherapeutic use of antibiotics in the raising of animals are "seeking to shut down all animal agriculture?" We are not saying that that might be the goal of some critics. We are fairly certain that it is. But, many-and we would suggest it is the vast majority-of those who question the present practices of antibiotic use in animal agriculture eat meat on a regular basis.

Rather than malign the critics, a better course of action for meat animal producers might be to take the issue seriously.

As suggested, to categorically claim that it is a reasonable practice to routinely administer antibiotics to animals that are not diseased will strike many as being outside what they have come to believe to be an appropriate use of antibiotics.

That conflict with belief, regardless of facts, may convince additional people to become part of the very groups that the livestock industry fear most-those that indeed do want to shut-down animal agriculture.

Also, it is important to consider the possibility that indisputable evidence will emerge that the continued and persistent "overuse" of antibiotics in livestock production causes or accelerates the development of super-germs for which there are virtually no effective medications.

That would be a public relations and economic nightmare for production agriculture. Thought of in that light, taking the issue seriously and making meaningful adjustments in antibiotic use may have the most appeal of all.

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