

Emerging Issues for the Next

Antibiotics, beta-agonists and research funding take center stage.

by **Troy Smith**, field editor

“It just goes to show you, it’s always something. If it ain’t one thing, it’s another.”

Television viewers of a certain age may remember that line, often repeated by comic Gilda Radner’s *Saturday Night Live* character, Roseanne Roseannadanna. The statement applies to the cattle business. There are plenty of challenges and more to come.



PHOTOS BY KASEY BROWN

► K-State veterinarian Mike Apley said there are multiple uses of antimicrobials in food animals whose benefits far outweigh any potential risks.

Emerging issues facing the beef industry were discussed during the 2014 International Livestock Congress (ILC–USA 2014) hosted Jan. 14 in Denver, Colo. Experts representing three different disciplines shared their views regarding issues the industry cannot ignore and must address.

Kansas State University (K-State) veterinarian Mike Apley spoke about consumer concern that use of antimicrobials in food animals is creating resistant pathogens and reducing the efficacy of antimicrobials used against human disease. He alluded to the fear-mongers who want restrictions broadly applied to antimicrobials.

Apley said he accepts that changes in microbe susceptibility may lead to resistant

pathogens that can be transferred to humans — through the food chain or directly. However, he also believes there are multiple uses of antimicrobials in food animals whose benefits far outweigh any potential risks.

“I don’t want to see policy enacted in the name of human health that results in harm to animal health with no benefit or, possibly, detrimental result to human health,” stated Apley.

According to Apley, the use of antimicrobials administered through feed for growth promotion will be phased out by 2017. He warned that microbial administration through drinking water may be next to go, and the day is probably coming when veterinarians will be the only sources for injectable products currently found in farm-supply stores.

Apley said animal agriculture must address this issue through judicious use of products. He said veterinarians should have control of all uses of antimicrobials in animals. Apley said improved education of veterinarians regarding optimal use of antimicrobials is sorely needed, along with research aimed at appropriate duration of treatment with antimicrobial products.

Beta-agonists

One of the issues foremost on Daryl Tatum’s mind is the use of technologies to enhance growth and weight gain among feedlot cattle. The Colorado State University (CSU) meat scientist talked about the controversy surrounding use of beta-agonist feed additives in finishing rations and possible effects on animal well-being.

Tatum recounted the decisions by some beef packers to end purchases of cattle fed the beta-agonist marketed under the name Zilmax®, and the subsequent decision by the manufacturer to remove that product from the market.

Tatum said speculation regarding a possible connection between use of the product and a specific event involving multiple lame animals is what “tripped the trigger.”

According to Mike Apley, the day is probably coming when veterinarians will be the only sources for injectable products currently found in farm-supply stores.

INDUSTRY AT A CROSSROADS



It was not the first time concerns were raised about whether beta-agonists could be contributors to mobility problems among cattle following transport from feedlots to packing plants. Tatum said symptoms appeared unevenly. Some cattle exhibited stiffness, lameness and lethargy, but many did not. It was more often observed in cattle fed Zilmax, but it was also observed in others.



► Until more definitive data are available regarding beta-agonists and cattle mobility issues, “this remains an important issue for the beef industry that requires additional attention in the decade ahead,” said CSU’s Daryl Tatum.

Tatum said scientific evidence has not established a cause-and-effect relationship between beta-agonists and cattle mobility issues. Most scientists believe the problem results from multiple factors, such as animal handling and transport, recent feed intake, heat stress and others. Beta-agonist supplementation may be a contributor.

“It’s pretty tough to make a direct link, but beta-agonists may be involved in setting animals up for trouble,” said Tatum. “Until more definitive data are available, this remains an important issue for the beef industry that requires additional attention in the decade ahead.”

More research

According to Kevin Pond, CSU animal

Decade



► Declining investment in research and development is an issue that demands attention, said Kevin Pond, CSU animal science department head.

science department head, declining investment in research and development is another issue that demands attention. Pond said livestock production is a “cash cow” for many states and enrollment in animal science is steady, but universities are starving for investment in research from state, federal and industry levels.

According to Pond, in the 1960s 3% of USDA research and development expenditures went to agriculture. Fifty years later, agriculture’s share is less than 1%. Of that, 71% goes to plant science and 29% to animal research.

Pond said the National Association of Animal Science was formed to work with Congress and the presidential administration to promote animal science. A good sign of success is the \$50 million in increased funding that is promised in the proposed farm bill. Saying that isn’t enough, Pond urged all with interest in animal science to seek help.

“We need to work together, know our national leaders and partner with other states, countries and universities. And we need to look to foundations and philanthropists for funding,” said Pond. “We’ve got to get engaged. Unless we unite, there is no way we can feed the growing population of the world.”

AJ

Editor’s Note: Troy Smith is a freelancer and cattleman from Sargent, Neb. ILC–USA 2014, themed “The Cattle Industry at a Crossroads: How Do We Adapt to Change?” was hosted at the Renaissance Denver Hotel Jan. 14 in conjunction with the National Western Stock Show in Denver, Colo.