policy pennings

Δ **Contact Dr. Daryll E. Ray or Dr. Harwood D. Schaffer** at the UT's Agricultural Policy Analysis Center by calling (865) 974-7407,faxing (865) 974-7298, or emailing dray@utk.edu or hdschaffer@utk.edu For more info, visit: www.agpolicy.org

Rational And Wording Of Government Regs Always Available In The Published Rule

DR. DARYLL E. RAY
Agricultural Economist
University of Tennessee

DR. HARWOOD D. SCHAFFER
Research Assistant Professor at APAC, University of Tennessee

In writing the final rule banning most extralabel use of cephalosporin in food-producing animals, the Food and Drug administration had to follow a prescribed pattern. In this and recent columns, we are working through that pattern of presentation, partly to demystify the government regulation process. Additionally, we believe that it is to your advantage to be able to read and understand both the rationale for the regulations and the actual wording of the rules that affect various aspects of your farming operation.

Specifically, the FDA rule prohibiting/limiting the extralabel use of cephalosporin in food-producing animals includes: I) providing background on the history and rationale for issuing the rule; II) explaining the scientific reasoning they used as a "basis for prohibiting the extralabel use of cephalosporin with certain exceptions; III) responding to the comments made to the July 3, 2008 order of prohibition which was withdrawn before it went into effect; IV) explaining the FDA's conclusions; V) establishing a comment period and describing the ways in which interested parties can make comments; VI) providing the "Order of Prohibition" – which runs a short two paragraphs out of 10 pages of explanatory material. The final section (VII) lists the scientific references the FDA used in backing up its findings and establishing a rationale for its issuance of the order of prohibition.

The last two columns examined sections I, II, and V. We will cover sections III, IV, and VI in this column. The full order may be found at http://www.gpo.gov/ fdsys/pkg/FR-2012-01-06/pdf/2012-35.pdf. All quoted material in this column comes from that order.

Many of the comments that the FDA received as a result of their July 3, 2008 order "said the scope of the original order was too broad in that it unnecessarily prohibited certain extralabel uses that do not significantly contribute to the development of antimicrobial resistance." After reasserting its concern for the development of antibiotic-resistant, disease-causing bacteria, the FDA agreed that "the scope of the original order was too broad in that it unnecessarily prohibited certain extralabel uses that are not likely to cause an adverse event and present a risk to the public health."

As a result the FDA provides exceptions that allow for the extralabel use of cephapirin (an early version of cephalosporin) in part because 1) there is no current cephapirin drug approved use in humans; 2) it is less likely to produce resistance; and 3) its "use is currently only approved for use in food-producing animals as intramammary infusion drug products for dairy cattle.... Therefore, because the impact of cephapirin on antimicrobial resistance among bacteria of public health concern is substantially less than other, newer cephalosporins, and its unique dosage form restricts the extent of its extralabel use significantly, the [FDA] believes that it is appropriate to exclude cephapirin drug products from the prohibition order."

The FDA summarizes another concern writing, "many commenters were concerned that a blanket prohibition of all extralabel use of cephalosporins would have a negative impact on animal health and welfare because, by prohibiting all extralabel use, therapeutic use for unapproved indications would also be prohibited, thereby eliminating effective treatment options for many life-threatening diseases for which there are limited or no approved therapies (emphasis added). As a result the FDA narrowed "the scope of the prohibition order somewhat by only allowing extralabel use in food-producing major species for treatment or control of unapproved disease indications, but continuing to prohibit most other extralabel use in these species including unapproved dosage regimens and use to prevent extralabel disease indications."

In a similar vein "many comments requested that food-producing minor species [animals other than cattle, swine, chickens, turkeys, horses, dogs, cats, and humans], particularly small ruminants, be excluded from the order of prohibition. Most of these comments cited the limited availability of approved animal drug products for these species and several comments also noted that small ruminants represent only very limited uses of cephalosporin drug products compared to cattle, swine, and poultry." The FDA allowed this exception to its prohibition of the extralabel use of cephalosporin.

Some commenters to the 2008 rule accused the FDA of using the looser "precautionary principle" in issuing the order. The FDA rejected that interpretation of its analysis and provided an extensive analysis of relevant regulations to show that the extralabel use in this order "support[s] its conclusion that the extralabel use that is being prohibited by this revised order does in fact present a risk to the public health, including a likelihood that the use would, if not prohibited, ultimately lead to adverse events in humans resulting from the development of resistance to antibiotic drugs needed to treat human infections."

In its conclusion the FDA writes in part, "based on information regarding cephalosporin resistance as discussed previously, FDA continues to believe, as it did in July of 2008, that it is likely that the extralabel use of cephalosporins in certain food-producing animal species is contributing to the emergence of cephalosporin-resistant zoonotic foodborne bacteria. Therefore, FDA has determined...that, with some exceptions, such extralabel use likely will cause an adverse event and, as such, presents a risk to the public health." It also summarized its conclusions allowing for three exceptions to the rule.

The final rule reads: "Therefore, I [Bernadette Dunham, Director, Center for Veterinary Medicine] hereby issue the following order under 21 CFR 530.21 and 530.25. FDA finds that certain extralabel use of the cephalosporin class of antimicrobial drugs in food-producing animals likely will cause an adverse event, which constitutes a finding that extralabel use of these drugs presents a risk to the public health. Therefore, the Agency [FDA] is prohibiting the extralabel use of the cephalosporin class of antimicrobial drugs as follows: Cephalosporins (not including cephapirin) are prohibited from extralabel use in cattle, swine, chickens, or turkeys [note: minor species are not included in this list] as follows: (1) For disease prevention purposes; (2) at unapproved doses, frequencies, durations, or routes of administration; and (3) if the drug is not approved for that species and production class.

The comment period ends March 6, 2012. Persons with concerns about this rule should submit their comments by that date. The full order – link provided above – describes various means people can use to submit their comments. Δ

DR. DARYLL E. RAY: Blasingame Chair of Excellence in Agricultural Policy, Institute of Agriculture, University of Tennessee

DR. HARWOOD D. SCHAFFER: Research Assistant Professor at APAC, University of Tennessee