PORK PRODUCERS' VIEWS ON THE SULFAMETHAZINE ISSUE¹

David L. Meeker
National Pork Producers Council, Des Moines, IA 50306

ABSTRACT

Currently less than .4% of the slaughtered pigs contain sulfamethazine at levels above those allowed by the Food and Drug Administration. These violations are due partly to failure to properly withdraw sulfamethazine after treatment to reduce loss or combat or prevent diseases, whereas others are due to inadvertent contamination of feed or the environment. Cull animals particularly are suspect. The National Pork Producers Council (NPPC), representing more than 100,000 producers, is supporting attempts to reduce violations and maintain the safe image of pork. The Food and Drug Administration is continuing to evaluate the safety of sulfamethazine, and the NPPC has encouraged producers to suspend use of the drug. The NPPC is encouraging development of faster, more reliable testing methods and of a traceback system to permit the farm of origin to be identified. But the NPPC is opposed to the “bill back” proposal developed by the Packers and Stockyard Administration that would allow packers to charge the seller for costs of carcasses condemned for containing illegal residues. Reasons for opposition include imprecision of current testing procedures, inaccuracy of present identification and traceback methods and disruption of the free market relationship between buyers and sellers.

(Key Words: Pork, Sulfamethazine, Feed Additives, Regulation.)


Introduction

The National Pork Producers Council (NPPC) represents more than 100,000 pork producers and their families in 45 member states that are affiliated with the national organization.

When the pork industry is faced with a major problem, NPPC establishes a task force or committee to investigate all aspects of that problem and to implement programs for solutions. The Quality Assurance Committee has been active for several years. This committee operates with two major considerations in mind.

The first is to provide consumers with high-quality, safe meat products. Without consumer confidence in pork, the outlook for producers would not be optimistic. The second is to maintain the availability of safe, effective health and production tools for efficient production. It is our hope that science will prevail with this issue.

Current Status

Our committee has treated the sulfamethazine problem as two separate problems: 1) safety and 2) residues. We look to the FDA to answer the safety question, and until we have that answer, we have asked producers to suspend the use of the drug. Our delegates have asked us to develop a sulfa certification program to deal with the residue problem in the future. We now are developing that program.

Only a few years ago, before the era of antibiotics in swine feed, we had sizeable death losses and illnesses in the swine population. Antibiotics and vaccines have allowed producers to raise healthier swine in greater numbers. Today, the pain and suffering that hogs endure as a result of disease has been

¹Presented at a symposium titled "Sulfa Residues in Pork" at the ASAS 80th Annu. Mtg., New Brunswick, NJ. The symposium was sponsored by the Regulatory Agencies Committee of ASAS.

Received October 3, 1988.
Accepted February 4, 1989.
reduced dramatically. Even with the use of antibiotics, animal losses due to disease cost American farmers, and therefore consumers, considerable amounts of money annually.

Animal health products improve swine production and efficiency, thereby lowering the cost to consumers. U.S. consumers pay much less for pork in the supermarket because most of the nations' producers are efficient.

In the marketplace, where competition is keen, price always is a key factor. Price, in turn, is a function of production efficiency. If we do not allow our producers the opportunity to continue to improve their production efficiency, consumers can expect to pay higher prices and producers can expect financial stress.

As in humans, disease regulation and diagnostic theory must come together rapidly if animals are to be spared. Thus, the producer must have a high level of stockmanship and a broad range of tools to properly care for his animals. Preventing pain and suffering in animals is important, not only for an efficiency point of view, but from a humane care standpoint. The NPPC supports the careful, prudent use of animal drugs, both subtherapeutic and therapeutic, with proper precautions and safeguards surrounding their use.

The NPPC recognizes that we are entering a new era of marketing our swine that definitely will change our methods of delivering our product to the markets or directly to the packers. Swine identification is coming and, even though we may have some rough roads to travel, eventually it will become routine. Likewise, it is important that the FSIS and FDA operate effectively and that their image is strong in the eyes of the consumer.

We do not like to lose an effective drug like sulfamethazine, especially when the vast majority of our producers can use the drug without violative residues. Some producers have difficulty understanding why test doses of this drug fed to mice and rats in research are massive relative to its level in swine feed. However, when drugs are approved for use, users must follow directions. These directions are based on research so that residues will not be present when a drug is withdrawn for a certain number of days. When illegal levels are found in the meat, something has gone wrong.

The challenge we face as an industry is how to deal with the residues in such a way that violative levels are not present in the final product. The FSIS monitoring program should not be expected to make pork residue-free, but simply to check the system to make sure it's working properly. Sulfa is very easy to remove from a live animal by proper withdrawal, but it cannot be removed from a carcass.

Even though the majority of our producers do not have violative levels of sulfamethazine in their market swine, actions to correct the situation must be initiated in all states. Analysis of the problem indicates that even though some misuse of the drug is intentional, there is an insidious problem of contaminated feed and contaminated facilities in which hogs are raised that must be resolved. The industry now is much more aware of this problem.

The current problem with sulfa residues eventually will provide us with a working model to be used when marketing swine so that we can assure consumers that they are free of violative levels of any drugs. Newer techniques provide a means to test for a number of drugs using one sample and also provide more rapid results and testing at much lower levels or tolerances. All the segments in the industry must work together to accomplish same goals. Pharmaceutical companies, the feed industry, government agencies, packers, veterinarians, extension personnel and producers must develop this model for the pork industry. Information and education will be the cornerstone of this model for all in the pork business.

We should not look at current developments solely as a response to the sulfa situation, but as the beginning of a certification or testing procedure that will apply to any drug used by the producers to assure consumers that pork products do have violative levels of residues. That is our goal.

Consequently, it is time to bite the bullet and find a workable solution. The FSIS is accelerating this change because they announced they are testing swine for sulfamethazine at 100 slaughtering establishments. This monitoring and enforcement, coupled with massive educational efforts by the Federal and State Extension Service, the feed industry, drug sponsors and the NPPC, has dramatically lowered the violation rate. It is our goal to attain a violation rate of zero.

The recent testing, coupled with traceback of the violations, may have uncovered an overlooked problem in our industry. The handling of cull animals is an important aspect
in reducing the residue problem. We suggest continued surveillance of these animals along with identification of the cull animals marketed. The U.S. industry should gather more information on the marketing of cull animals.

Evaluation of the individual swine operations must be conducted to find sources of sulfamethazine residues on specific premises. In some cases producers may be using the drug intentionally to reduce loss or combat or prevent diseases, and in other cases drug presence probably is due to inadvertent contamination.

The NPPC has coordinated successfully the "sulfa-safe" educational program for nearly 2 yr. This has brought about widespread producer attention to that problem along with a significant drop in sulfa violations. However, we need strong regulatory activity to sustain interest in education.

We now are embarking on a much broader program to educate producers on the safe use of drugs in pork production. The main points of this effort include the following.

First, the NPPC supports mandatory identification of market hogs back to the farm where the hogs were produced. We must know where residue problems are originating in order to correct them and to prevent the actions of a few people from cutting profits for the entire industry. Good producers take pride in their product and are proud to be identified with it. Identification of carcasses back to the producers also can enhance production efficiency by making it possible to address health and quality questions and concerns.

Second, we encourage closer producer-veterinarian relationships. This will put drug use much more under professional guidance and lead to more efficient, specific use of drugs. Accurate diagnoses and proper applications of drugs can save producers money and spare animals. The NPPC is working with representatives from the American Association of Swine Practitioners to accomplish these changes. We announced a joint program last winter. This will lead to more preventive medicine rather than just responding to emergencies.

Third, the NPPC is developing a quality assurance program that will include guidelines for good production practices and record keeping.

Fourth, we encourage residue testing before animals are presented for slaughter to prevent costly condemnations and the bad public image these incidents cause. Residue testing can be revolutionized and become more effective by new products from biotechnology. Eventually, this type of premarket testing, if economical, could complement the more indirect method of withdrawal times to assure absence of residues.

Many current trends in pork production point toward a much higher level of sophistication for the average production unit in the future. This trend will help accomplish the goals that the NPPC has for top-quality, safe products.

**Proposed Legislation**

A "bill back" proposal has been discussed at various meetings. NPPC opposes the proposed regulation and will vigorously fight its implementation. It was proposed May 24, 1988 in the Federal Register by the USDA Packers and Stockyards Administration that packers be allowed to "bill back," or charge the seller for, the costs of animal carcasses condemned for containing illegal residues. Though no further action on this proposal has been taken, it continues to be discussed as a solution to the residue problem. If this proposal should become law, each seller in the marketing chain would be held responsible for the cost of any condemned animals and the cost of disposal.

The NPPC places a high priority on food safety and has strong record of accomplishment in this area. Enhanced business relationships between producers and packers can further the cause of food safety and quality enhancement without being encumbered by government intervention. Incentives for pre-slaughter tested hogs and verified production control programs are workable examples of these relationships.

The NPPC supports a simple and accurate swine identification system and believes that economic responsibility for residue condemnations should be assigned to those who cause the problem. The "bill back" proposal does not accomplish this goal fairly.

The NPPC has pointed out a number of reasons why this proposal will not work. The underlying assumptions for the "bill back" proposal are faulty and oversimplify the sulfa residue problem. Producers who medicate animals and sell them for slaughter without proper withdrawal are not the predominant
source of the residue problems. Instead, inadvertent exposure due to contaminated feed, mixing equipment, trucks, holding pens and facilities is the predominant cause of sulfa residue contamination. In many cases, the source of the sulfa residue is not traceable to anyone with certainty.

This regulation would automatically assign guilt to the producer. Inaccuracies in the present identification and traceback system and the present system of handling and regrouping market hogs and breeding stock could lead to a producers' wrongly bearing the cost.

The false positive problems with the sulfa-on-site (SOS) test and potential inaccuracy of other future tests also could lead to unfair financial loss. The proposed rule would bypass the producer’s right to the due process of law before retribution. By this proposal, the producer is presumed guilty until proven innocent.

Not only would this rule disrupt traditional free market relationships between buyer and seller, but it would also remove incentives for packers to cooperate with producers in residue prevention programs. Under this proposal, packers lose all liability and the full burden would be put on producers’ shoulders.

The increased sulfa testing since April 1988 has found less than .4% confirmed sulfa violations. It is not convincing that this low level of violation justifies the need for this major change of normal business practices.

The USDA's proposal to reduce residues by forcing the immediate past owner to be liable is too simplistic for such a complex problem. Producers would support a system that would accurately determine the violators responsible for drug residues. Packers could then recover costs of condemnation through the court system. Costs of condemnations are currently very low. However, if future regulations require incineration of carcasses with sulfamethazine residues, or if groups of carcasses can be condemned based on a single positive test, the costs will increase.

Conclusion

The pork industry is very important to the U.S. economy. Working together, we can keep agriculture strong and healthy while continuing to provide the highest-quality, lowest-cost food supply in the world. Pork will be a major source of meat protein in the future. Pork will be repositioned in the consumer's mind as a healthy, convenient, tasty food. The pork industry will continue to make improvements in efficiency.

The FDA has made responsible decisions on drug use and the NPPC is confident they will continue to do so. Naturally, if their decision is that sulfamethazine is unsafe from a public health standpoint, we do not want to use it. On the other hand, if its removal is purely a precautionary measure and its potential harm is very remote, then the livestock industry should be allowed to retain the use of this valuable and efficient drug.