

PORK SAFETY

Title: Analysis of a More Restricted Antimicrobial Access Policy in Pork Production - **NPB# 02-104**

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Abstract: Denmark recently banned the use of feed-grade antibiotics in pork production. The ban was implemented first at the finishing stage and then at the weaning stage. The purpose of this research is to apply the lessons learned from the Danish ban to the U.S. pork system. Our conclusion is that a U.S. ban at the finishing stage would create very few animal health concerns, but it would lead to a slight reduction in feed efficiency and increase the weight spread of finished animals. A ban at the weaning stage would create some serious animal health concerns and lead to a significant increase in mortality. Faced with these problems U.S. veterinarians would likely resort to more powerful therapeutic antibiotics, and the total use of antibiotics could rise, much as has happened in Denmark in the period immediately after the ban at the weaning stage. The economic impact of a U.S. ban would depend to a large extent on the willingness of U.S. veterinarians to increase therapeutic use. Our best estimate is that costs would increase by approximately \$4.50 per animal in year one. The estimated cost increase includes an increase in costs at the finishing stage of \$1.05 per animal; an increase in costs at the weaning stage of \$1.25 per animal; an additional veterinary cost of \$0.25 per animal; a vaccine cost of \$0.75 per animal; an increase in sort loss of \$0.65 per animal; and a capital cost of about \$0.55 per animal. Industry profits would be lower than would otherwise have been the case as U.S. producers adjust to the ban. The total cost of a ban to the U.S. pork industry spread across a ten-year period is estimated to be in excess of \$700 million. The expected cost to consumers is an approximate 2 percent increase in retail prices.

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