

Introduction

Today, both government food safety agencies and private markets have roles to play in ensuring a safe supply of meat and poultry. The Federal Government, through the U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS), inspects all animals for human consumption for animal diseases and monitors processing and slaughtering plants to ensure that they process meat in a sanitary fashion. Private markets provide added incentives to produce safe meat and poultry products.

The purpose of this report is to examine the economic forces affecting food safety expenditures, equipment use, and practices in the meat and poultry slaughter and processing industries. More specifically, we consider the costs of the 1996 Pathogen Reduction/Hazard Analysis and Critical Control Point (PR/HACCP) rule and how this regulation and private markets encourage the use of food safety technologies and practices to control pathogens.

This report uses the first national survey of meat and poultry plants on the costs of the PR/HACCP rule and the use of food safety technologies. USDA's Economic Research Service (ERS) initiated this project in order to obtain data that is important to achieving a better understanding of how the complex mix of technology, private markets, and government regulation interact to provide safe and wholesome meat and poultry products. The survey was implemented by Washington State University (WSU) and completed in May 2002. Altogether, nearly 1,000 plants responded to a survey that was sent to all meat and poultry slaughter and processing plants deemed to be mainly manufacturers and inspected by FSIS. The survey included about 15 questions on the costs and benefits of the PR/HACCP rule and about 35 questions on food safety technologies and practices in the meat and poultry industries. The remaining questions dealt with plant characteristics. The complete survey and the summary data are found on the ERS website at www.ers.usda.gov/data/haccpsurvey.

We first develop a model of how the incentives provided by private market mechanisms, such as product branding, interact with government regulation to encourage food safety. We then discuss the survey methodology, describe the data, and present results of food safety expenditures and technological choices in the context of our model.