

DEVELOPMENT OF RESIDUE SURVEILLANCE IN THE UNITED STATES

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The Food Safety and Inspection Service (FSIS) of the USDA conducts the National Residue Program (NRP) to identify and control residue problems in the meat and poultry supply. In 1990, the existing NRP was evaluated by the Residue Evaluation and Planning Division and a substantially modified program was developed. An epidemiologic analysis of residue monitoring and slaughter data identified several slaughter classes as having detectable residues. A new surveillance program was designed and one combination of species slaughter class and residue compound group was selected as the model for the epidemiologic approach. The pair selected for the initial surveillance study was antibiotic and sulfonamide residues in cows. A study was designed to determine the occurrence of antibiotic and sulfonamide residues in both dairy and beef cows for each of the five PSIS slaughter regions. It will also provide information on the sensitivity, specificity, and positive and negative predictive values of the current in-plant rapid screening test (STOP) for antibiotic residues. Implementation of the stratified sampling plan in 1991 will result in the testing of specimens from 2,625 dairy and 1,125 beef cows.

The project presented an implementation challenge. Initial resistance to the alteration of terminology and the introduction of a new epidemiologic basis for the NRP had to be surmounted. Concerns about the new surveillance program which were addressed included resource costs for personnel and materials, feasibility within current staffing levels, and data continuity for the existing monitoring plan. Several methods were employed to obtain Agency approval. These included the epidemiological analysis and presentation of previously unused data to demonstrate the need for program updating, the initial limitations of the new surveillance program to one model slaughter class, the incorporation of study features which would be valued by personnel in all of the operational levels involved in the project, and multiple meetings with upper and middle management in different PSIS Programs to explain and promote the project. Project acceptance and implementation required commitment and co-operation throughout the Agency.