Salmonella Initiatives: SIP, Poultry Slaughter Rule, NRTE Comminuted Poultry

William K. Shaw, Jr., PhD
Director, RIMD
Office of Policy and Program Development
Reciprocal Meat Conference, Auburn, AL
June 2013
July 13, 2011 FRN
“SIP FRN”

- Salmonella Verification Sampling Program: Response to Comments on New Agency Policies and Clarification of the Timeline for the Salmonella Initiative Program (SIP)
Waiver of Regulations Review

- FSIS authority to waive regulations 9 CFR 381.3(b) and 9 CFR 303.1(h)
- Sets aside provisions of regulations to permit experimentation
- New procedures, equipment, and processing techniques can be tested to facilitate definite improvements
Waiver of Regulations

- FSIS grants waivers of regulations and
- Has no objection to allowing alternative procedures in place of the waived portion of regulation
- Inspection would verify alternative provisions as described in waiver letter
- FSIS defines control programs for waivers that ensure enhancing public health--SIP
Waivers of Regulations

• Under SIP the waiver is granted based on providing microbial data results to FSIS
• Includes documenting and responding to microbial test results
July 13, 2011 FRN

• Line speed waiver: Up to 5 establishments to participate in study that impacts inspection with NIOSH (CDC)
• April 2012-FSIS identified an establishment that agreed to allow NIOSH to evaluate worker safety before and after evisceration line speed increases granted by FSIS under the SIP program requirements.
Status

• **Visit 1** May 2012- NIOSH visited the plant to observe work practices, interview and gain preliminary information to further develop its evaluation plan and protocol. NIOSH set the focus of its study.

• **Visit 2** August 2012- NIOSH collected the before line speed increase data including nerve conduction assessments. Some of the data collection included: 67 job tasks for ergonomic risk factors, medical and personal records, questionnaires. NIOSH also and administered nerve conduction testing for 283 production line employees.
Status

- October 2012 - FSIS granted the plant a SIP waiver to increase their line speed by adding an additional inspector.

- April 2013 - NIOSH completed and sent the interim report of the data collected before line speed increase to the company and employee representatives. The report is currently on the NIOSH web site.

- **Visit 3** June 2013 - NIOSH returns to the establishment to collect the after line speed data. After this data collection, NIOSH intends to analyze the data and write an interim report.
Future Status

• **Visit 4** Approximately 1 year after the line speed increase, NIOSH will collect additional data (tentatively November 2013 or later) and write a final report to include all analyses. The report will be peer reviewed and reviewed as well by OSHA, USDA and a national union representative before being finalized.
Current Status

• Approximately 174 establishments participating and submitting data
  – 151 Young Chicken
  – 13 Turkey
  – 6 Swine
  – 3 Fowl
  – 1 Duck
Common Waivers

• 102 Time/temperature
• 136 OLR/OFLR
• 29 HIMP
• 43 other included finished product standards, line configurations not impacting inspection, fowl Salmonella baselines
SIP Data Analysis

• Establishments submit their daily post-chill *Salmonella* and other microbial test results to FSIS

• Data is blinded and aggregated so that the establishment’s identity is not known

• Also report the parameters under which the daily Salmonella samples are collected—e.g. type of intervention, antimicrobial agent, sampling time, line speed and others
SIP Data Analysis

• Currently analyses in two broad areas is in progress
  – 1. Overall success of a specific waiver
  – 2. Impact of various parameters, e.g. physical and antimicrobial interventions on *Salmonella* rates
Overall Success Determination

– Compare FSIS *Salmonella* data
  • before and after waiver obtained
  • of establishments with waiver to all other establishments without a waiver
  • to establishment SIP *Salmonella* data

– Preliminary analysis is indicating either no difference or better performance as measured by *Salmonella* of establishments with the waiver
Impact of parameters, e.g. interventions on *Salmonella* rates

- Goal is to determine which parameters can be used to help improve public health as measured by *Salmonella*
- Initial analysis will be descriptive report of establishment characteristics and types of interventions – antimicrobial, physical
- Then a statistical comparison of *Salmonella* and interventions and thirdly a multifactorial analysis to take into account other parameters
SIP Request for Waivers

• Send e-mail requests for all waivers to Isabel Arrington (Isabel.arrington@FSIS.USDA.gov)

• Include protocol detailing plant’s proposal to meet criteria
Poultry Slaughter Rule

• “Modernization of Poultry Slaughter Inspection” proposed rule published January 27, 2012
• Purpose of the proposed rule is to:
  – Improve food safety and the effectiveness of poultry slaughter inspection systems
  – Remove unnecessary regulatory obstacles to innovation
  – Make better use of Agency’s resources
Proposed Rule Overview

• Proposed new inspection system for young chickens and turkeys that would replace all existing inspection systems except Traditional

• Proposed changes that would apply to all establishments that slaughter poultry other than ratites
Key Elements of Proposed Rule-Plant Responsible for Sorting

- Reduce number of FSIS on-line carcass inspectors to one to allow additional off line inspection activities

- Establishment personnel responsible for sorting carcasses, disposing of carcasses that must be condemned, and conducting any trimming or reprocessing before they are presented to FSIS carcass inspector

- Establishments would be required to develop, implement, and maintain procedures to ensure that septicemic/toxemic carcasses do not enter chiller. Must incorporate procedures into HACCP system.
Key Elements of Proposed Rule-On-Line Carcass Inspection

- FSIS on-line carcass inspector (CI) will conduct a carcass-by-carcass inspection before carcasses enter chiller
- CI is authorized to stop the line to prevent contaminated carcasses from entering chiller
- The IIC is authorized to require establishments slow the line speed if CI observes excessive food safety related conditions or other defects, poor presentation, or other indications of poor process control
Key Elements of Proposed Rule-Offline Verification Inspection

• New—an offline verification inspector (VI) will be assigned for each evisceration line to enhance food safety verification

• The VI inspector will conduct inspection that are more important to food safety, such as:
  – Verifying compliance with HACCP and Sanitation SOP requirements including antimicrobial interventions
  – Performing verification checks for septicemia/toxemia and visible fecal contamination
  – Verifying sanitary dressing requirements throughout the line
  – Collecting Samples
Key Elements of Proposed Rule-Finished Product Standards

- Require establishments to maintain records to document products from slaughter meet definition of “ready to cook” poultry rather than finished product standards
  
  - All poultry slaughter establishments are required to prepare eviscerated carcasses as ready to cook poultry
  - Ready-to-cook poultry is any slaughtered poultry “…which is suitable for cooking without the need for further processing
  - Carcasses that contain large numbers of trim/dressing defects and removable animal diseases are not suitable without the need for further processing
Key Elements of Proposed Rule-Line Speeds

• Establishments permitted to operate at faster line speeds
  – Up to 175 bpm for young chickens (now 140 bpm with 4 online inspectors)
  – Up to 55 bpm for turkeys (now 51 bpm with 2 line inspectors)
• IIC authorized to slow or stop line if establishment does not maintain process control
Key Elements of Proposed Rule-Fecal Contamination

- FSIS has zero tolerance for visible fecal contamination
- Existing regulations require establishments prevent poultry carcasses contaminated with visible fecal material from entering chiller
- Proposed regulation will make clear establishments must develop, implement, and maintain written procedures to prevent poultry carcasses contaminated with visible fecal material from entering chiller
- Establishments must incorporate these procedures into their HACCP systems
Key Elements of Proposed Rule-Enteric Pathogens

- Establishments required to develop, implement, and maintain written procedures to prevent contamination of carcasses and parts by enteric pathogens and fecal contamination throughout the entire slaughter and dressing process.

- Establishments would be required to incorporate these procedures into HACCP systems.
Key Elements of Proposed Rule-Microbial Testing

- Procedures to prevent contamination must include, at minimum, sampling and analysis of carcasses for microbial organisms at pre- and post-chill to monitor process control for enteric pathogens
- Establishments responsible for determining which microbial organisms will best help the monitor effectiveness of their process control procedures
Key Elements of Proposed Rule-Microbial Testing

- Establishments could develop sampling plans for enteric pathogens, such as *Salmonella* and *Campylobacter*, at pre- and post chill, or they could test for an appropriate indicator organism.

- Establishments would need to provide scientific or technical documents to support the design of the sampling program.

- Proposed rule would rescind regulations that require post chill testing for generic *E. coli*.
Key Elements of Proposed Rule-Time and Temperature

- Remove prescriptive time and temperature requirements for scientific supported HACCP decisions

- Establishments would be required to develop, implement, and maintain procedures that control the levels and prevent the multiplication of spoilage and pathogenic bacteria in product after evisceration

- Establishments must incorporate procedures into their HACCP systems
Key Elements of Proposed Rule-On-Line Reprocessing

- Permit the use of on-line re-processing with use of anti-microbial agents in addition to chlorine for off-line reprocessing
- Establishments must incorporate re-processing procedures into HACCP systems
- Establishments would be permitted to use any approved safe and suitable antimicrobial agents under the specific conditions and parameters approved
Current Status

• Received over 150,000 comment letters, along with a petition with over 150,000 signatures and form letters
• Also received over 2000 individual comments from private citizens and FSIS inspectors
• Also received 120 separate comment letters from trade associations, representing the poultry industry, consumer advocates, labor unions, public health organization, animal welfare advocates…
Current Status

• …. Members of academia, a State Department of Agriculture and human /worker rights advocates.

• Currently refining responses to comments, Goal is to complete responses and send to the Office of Management and Budget (OMB) this summer for its clearance to publish the rule

• Also developing an implementation plan to use once the rule becomes final
NRTE Comminuted Poultry

- In response to outbreaks, FSIS issued FRN in 2012 for establishments to reassess
- FRN also said exploratory sampling to determine new standard
- Expansion of eligible products
NRTE Comminuted Poultry

- FRN also says after reassessment verification conduct survey of practices
- Update Guidance Materials
- Schedule FSAs based on survey results
Status

• Verifying Reassessment
• Issued instructions for exploratory sampling and beginning to collect samples for shakedown
Questions?

Dr. William (Bill) K. Shaw, Jr.
william.shaw@fsis.usda.gov
(301) 504-0852