STRATEGIC PERFORMANCE WORKING GROUP SALMONELLA ACTION PLAN

The Food Safety and Inspection Service (FSIS) has an increasing amount of performance information and data available. Recurring critical reviews of the information and data will allow the agency to identify deficiencies and successes that warrant particular attention. The FSIS Administrator established the Strategic Performance Working Group (SPWG) to perform such critical performance reviews and to solicit and coordinate ideas within the Agency on how to improve agency performance.

The SPWG focused its first series of activities on identifying potential interventions or actions to decrease FSIS-attributable Salmonellosis. It decided on that focus because: 1) *Salmonella* is the pathogen that contributes the most to the FSIS's 'All-Illness' performance measure; and 2) since the All Illness Measure was created, *Salmonella* illness estimates have continued at a steady high or slightly increased rate despite FSIS interventions.

To gather ideas about actions FSIS could take to decrease Salmonellosis, the SPWG hosted a series of agency teleconferences and an interactive blog with participation by FSIS personnel throughout the agency. On the basis of the ideas and input received via those teleconferences and the blog, the SPWG developed this priority list of actions the agency plans to undertake.¹

1. Proposed Poultry Slaughter Rule

Although not a part of the work of the SPWG, FSIS has proposed a modernization of poultry slaughter inspection. This proposal is very important with respect to the Agency's efforts on *Salmonella* because FSIS estimates that the modernization in inspection activities is likely to result in a reduction of at least 4,286 *Salmonella* illnesses per year in the United States (Q3 FY2014).

2. Sampling Related Activities

To ensure that FSIS' sampling is in line with current and emerging trends in foodborne illness, FSIS will undertake the following actions, which are consistent with the agency's data-driven approach to preventing illnesses outlined in *Food Safety and Inspection Service's Annual Sampling Program Plan Microbiological and Residue Sampling Programs Fiscal Year 2014*:

- test comminuted poultry in order to generate data for a new performance standard (ongoing);
- continue to investigate whether there are products currently not subject to sampling that should be and that, therefore, are not being evaluated according to the performance standards (> 1 year); and
- explore developing a Salmonella sampling program for pork products (e.g., ground pork and other comminuted pork), including generating a performance standard (begin Q2 FY2014).²

3. Develop New In Plant Strategies

Providing inspection program personnel (IPP) with information about an establishment's performance could help the IPP assess the establishment's overall performance, point toward areas of concern and provide the basis for enforcement action if necessary. Therefore, FSIS will:

develop a directive and training for inspection staff on how to assess developing in-plant conditions
that may indicate a problem in adequately addressing Salmonella (> 1 year);

¹ In addition to the ideas gathered, to provide the overall breadth of the agency's actions of decrease Salmonellosis, this *Salmonella* Action Plan includes items that FSIS had already committed to doing. The timeframe (short, medium or long term) for each action is included in parentheses.

² Outbreak data indicate that pork products contribute to *Salmonella* illnesses. FSIS stopped sampling pork carcasses because the percent of pork carcass samples positive for *Salmonella* was consistently very low. Pork products are not currently sampled for *Salmonella* testing.

- consider adding an establishment's Salmonella category to the establishment profile in the Public
 Health Information System (PHIS) so IPP will have information about the overall performance of the
 facility and how to focus their actions (> 1 year);
- consider whether to include a summary of an establishment's performance on public health noncompliance records (NRs) in the establishment PHIS profile, and whether additional aspects of PHIS' functionality (e.g., alerts) could help focus IPP activities (> 1 year);
- initiate food safety assessments (FSAs) in comminuted poultry operations (Q4 FY2014);
- complete the analysis of the 30 establishments where Hazard Analysis Verifications (HAVs) are currently implemented and, depending on the findings from those analyses, expand the implementation of HAVs in poultry operations (Q2 FY2014).

4. Develop a Directive for Sanitary Dressing in Hogs

There is evidence from outbreak data that pork products contribute to *Salmonella* illnesses. Decreasing sanitary dressing problems in hog slaughter establishments, particularly related to removing the skin, could decrease a source of *Salmonella* on carcasses. FSIS does not currently have a directive for verification activities related to sanitary dressing in hog slaughter establishments. Therefore, FSIS will

 publish a directive that provides instructions to FSIS inspection personnel on the verification activities related to sanitary dressing procedures in hog slaughter operations (Q4 FY2014).

5. Consider Modifying How we Post Salmonella Categories

Data indicate that posting the names of broiler and turkey establishments that are in Category 3 for *Salmonella* set results led to improved control of *Salmonella* in those establishments. FSIS ceased webposting of Category 2 establishments as of June 2011. Data collected by the Agency since then, however, do not show continuous improvement in industry performance, and FSIS believes that making more information about the process control performance of these establishments available will provide a valuable incentive for industry to improve process control. Therefore, FSIS will:

- continue to collect data on the performance of establishments under the *Salmonella* performance standards for young chicken and turkey carcasses implemented in 2011 (ongoing);
- continue to collect data on whether the current performance will produce the reduction in illnesses that the Agency predicted when it adopted the standards (ongoing); and
- depending on what it finds from the above two bullets, consider posting Category 2, and perhaps Category 1, establishments in addition to Category 3 establishments on its website; changes to posting would be announced in the Federal Register (Q4 FY2014).

6. Other Performance Standard Related Activities

Healthy People 2020 Goals and FSIS' strategic goals include a reduction in the illnesses attributable to FSIS-regulated products. Linking *Salmonella* performance standards to those goals and focusing activities on improving the performance of establishments relative to those standards could move the agency closer to those goals. To that end, FSIS will:

- complete a risk assessment and develop standards for comminuted poultry products (Q4 FY2014);
- complete a risk assessment and develop standards for poultry parts (Q4 FY2014);
- develop standards and, if needed, sampling programs for hog carcasses and pork products (> 1 year);
- develop performance standards that are linked to Healthy People 2020 Goals, that could incorporate
 the concept of the moving window³ depending on public comments, and announce them in the
 Federal Register (begin Q4 FY2014); and

³ A "moving window" sampling plan is one in which FSIS would evaluate a set number of sequential results from a single establishment to assess process control. For example, if FSIS chose to evaluate 20 results under the moving window

• consider implementing new performance standards that could target FSIS testing in establishments with poor performance for sanitary dressing until two mini-sets show a level of control equal to a Category 1 establishment (> 1 year).

7. Develop New Enforcement Strategies

FSIS needs new enforcement strategies that take a systems or overall process control approach and link NR histories, *Salmonella* categories under the performance standards, and sanitary dressing findings. Therefore, FSIS is:

 looking at enforcement and NR history, including looking at what establishments have been in Category 3 for many years without any enforcement actions, to determine if there is a way to link to sanitary dressing problems and Salmonella issues (> 1 year).

8. Explore the Contribution of Lymph Nodes to Salmonella Contamination

Some data, including research results from the Agricultural Research Service (ARS), indicate that lymph nodes could be a source of *Salmonella* contamination. In addition, data from the Agricultural Marketing Service (AMS) might help determine the effects of lymph nodes on contamination. Therefore, FSIS will:

- identify, in coordination with ARS, the available research on lymph nodes (Q4 FY2014);
- explore whether AMS data, combined with FSIS data, could provide information about the effects of lymph nodes on *Salmonella* contamination (Q4 FY2014); and
- reach out to work with industry to determine the extent of the problem of *Salmonella* from lymph nodes and to identify possible solutions (Q4 FY2014);
- depending on the findings in the previous three bullets and announcing the sampling change in the Federal Register, begin collecting samples of beef and pork tissue containing specific lymph nodes from establishments where warranted (> 1 year).

9. Pre-harvest Related Activities

Pre-harvest contamination can affect the level of *Salmonella* on FSIS-regulated products. Synthesizing information on pre-harvest interventions from previous and on-going FSIS activities, and other information available from industry, could help decrease the prevalence or levels of *Salmonella* on FSIS-regulated products. Therefore, FSIS will:

- develop a document summarizing the lessons learned from previous poultry and beef pre-harvest
 meetings⁴, and how those lessons were incorporated into or informed FSIS policies. The document
 should include a discussion of how FSIS has worked with the Food and Drug Administration (FDA) and
 the Animal and Plant Health Inspection Service (APHIS) to overcome regulatory barriers (Q3 FY2014);
- continue to work with industry members on specific outbreaks to identify best practices they have developed for pre-harvest (ongoing); and
- after the above two bullets have been completed, organize and host a pre-harvest poultry meeting to focus on those issues. FSIS will then use the information gathered at that meeting to inform future policies or best-practice guidelines (> 1 year).

10. Focus the Agency's Education and Outreach Tools and Resources on Salmonella

New approaches or routes for providing *Salmonella*-related food safety messages to the public could help decrease *Salmonella* illnesses. Therefore, FSIS will:

approach, FSIS would assess the most recent 20 FSIS results for a particular establishment. The "moving window" approach would provide FSIS with more flexibility for scheduling sample collection at different establishments.

⁴ Previous meetings include the August, 2005 meeting on the pre-harvest reduction of *Salmonella* in poultry in Athens, GA, and the November, 2011 meeting on pre-harvest food safety for cattle in Riverdale, MD.

- provide more detailed messages related to Salmonella, such as explaining why we recommend or require certain practices, and will clearly communicate why Salmonella is more challenging than some other pathogens (Q4 FY2014);
- provide easy to find information about Salmonella trends in easy to read formats (Q4 FY2014); and
- work with the Food and Nutrition Service (FNS) to provide audience-appropriate, multilingual, Salmonella-specific food safety information to consumers through FNS nutrition programs (Q4 FY2014).