Food Safety and Inspection Service (FSIS) Use and Application of Harmonized IFSAC Attribution Approach and Estimates

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Importance of Attribution to FSIS

• Performance Measurement
  – FSIS Strategic Plan
    • Goals 1 and 4
  – Agency Priority Goal
  – *Salmonella* Action Plan
  – FSIS Annual Performance Plan

• Policy Development
  – Risk Assessments and Economic Analyses
  – Performance Standards
  – New Initiatives

• IFSAC
  – Joint participation on projects, technical workgroup, steering committee and communications
FSIS Performance Measurement

All Illness Measure

- The All Illness Measure is included in the FSIS Strategic Plan for 2011-2016 (Goal 1) and the USDA Strategic Plan.

USDA Agency Priority Goal

- USDA also specifically tracks the Salmonella portion of the All Illness Measure to focus Agency attention on reducing Salmonella illnesses associated with FSIS-regulated products.

FSIS Strategic Plan for 2011-2016; Goal 4

- FSIS seeks to maximize its relationships with public health and food safety partners to enhance the food safety system.
  - **Goal 4:** % of results from interagency collaboration on analytics used in FSIS policy; IFSAC
FSIS All Illness Measure

• FSIS developed the All Illness Measure in 2009 to allow the Agency to track foodborne illnesses due to *Salmonella*, *E. coli* O157:H7 and *Listeria monocytogenes* (*Lm*) that are associated with FSIS-regulated products.

• A summary measure (estimate) of all *Salmonella*, *E. coli* O157:H7, and *Lm* foodborne illnesses attributed to FSIS-regulated products (meat, poultry, processed egg products)
  – Incorporates CDC case rate data and attribution estimates

• Utilizes a 3 year window FDOSS ‘simple food’ data to estimate attribution

• Reduction goals are linked to Healthy People 2020 Objectives
FSIS Salmonella Action Plan

• FSIS convened personnel from across the Agency to gather ideas about actions FSIS could take to decrease salmonellosis
• Led to the development of a priority list of actions
• Sets priorities for FSIS to address Salmonella, examples include:
  – Develop performance standards
    • Comminuted poultry, Poultry parts, Pork products
  – Improve Sampling approaches
    • Better designs, coverage
  – Modernization of poultry inspection
• Foodborne illness attribution informs these priorities
FSIS Policy Development and New Initiatives

- Earlier performance standards were linked to prevalence estimates and establishment performance relative to that estimate
- New approach is to set performance standards linked to HP2020
  - Potential Public Health Impact of *Salmonella* and *Campylobacter*
    Performance Guidance for Young Chickens and Turkeys
  - Docket No. FSIS-2014-0023 “Changes to the *Salmonella* and *Campylobacter*
    Verification Testing Program: Proposed Performance Standards for
    *Salmonella* and *Campylobacter* in Not-Ready-to-Eat Comminuted Chicken and
    Turkey Products and Raw Chicken Parts and Related Agency Verification”

- New Initiative: Pork products sampling
  - FSIS sampled pork carcasses for *Salmonella*, but found very low rates of
    contamination and stopped the program in 2011
  - Illness attribution data indicates that pork is a source of foodborne illness
    from *Salmonella*
  - In 2014, FSIS began exploratory sampling in pork products
FSIS Use of IFSAC Estimates

• Conducted internal FSIS analyses to determine:
  – Impact of new commoditization scheme and FSIS attribution fractions
  – Relationship between harmonized attribution fractions and FSIS attribution fractions

• Plan to assess impact on All Illness Measure moving forward, as compared with current FSIS approach to estimation attribution

• Anticipate incorporating harmonized estimates into the FSIS All Illness Measure in future, likely in coordination with the next 5 year FSIS Strategic Plan

• Plan to assess impact/investigate use of harmonized estimates in other FSIS performance measurement and policy development activities
Summary

• FSIS uses foodborne illness attribution data in a variety of ways; performance measurement and policy development, and accurate data is key to understanding what food products contribute most to foodborne illness.

• A harmonized approach to attribution, like that undertaken through IFSAC, is essential for consistent analysis and reporting across the government.

• FSIS is committed to its collaboration with IFSAC and pursuing new collaborative projects moving forward.
Summary

• Foodborne Disease Illness Source Attribution is important to FSIS
  – Current decision-making
  – Long-term planning and goal setting
  – Helps FSIS measure contributions to improving public health

• Collaboration is critical
  – Support improved data collection
  – Consensus on methodology
  – Transparency