

A CENTURY OF SERVICE, A FUTURE OF PROMISE, A LEGACY OF PUBLIC HEALTH

USDA-FSIS Agency Report 2012 Biennial Conference for Food Protection

Dr. Daniel Engeljohn Assistant Administrator Office of Policy and Program Development Food Safety and Inspection Service U.S. Department of Agriculture



FSIS Mission*

As the public health regulatory agency in USDA, FSIS is responsible for ensuring that the nation's commercial supply of <u>meat</u>, <u>poultry</u>, and <u>processed egg products</u> is:

- Safe
- Wholesome
- Correctly labeled and packaged

*Jurisdiction – slaughter through consumer sale for livestock and poultry products; egg handling through pasteurization for processed egg products. Primary statutes --EPIA, FMIA, PPIA



FSIS Strategic Plan FY2011–FY2016



Goals

- 1. Align food safety inspections with risks
- 2. Maximize compliance with food safety practices
- 3. Enhance public education and outreach
- 4. Strengthen collaboration among stakeholders
- 5. Effectively use science
- 6. Implement effective policies
- 7. Empower employees
- 8. Use innovative methodologies (e.g., PHIS)

Corporate Performance Measures

- 1. Total # illnesses from FSIS regulated products
- 2. % of broiler plants passing the new *Salmonella* standard
- 3. % of all establishments with a functional food defense plan
- 4. % of slaughter plants with systematic approach to humane handling
- 5. % of consumers following "best practices" cook, clean, chill, separate $_{3}$



U.S. HEALTHY PEOPLE 2020



Pathogen	1997 Baseline Case Rate (infections from all foods per 100,000 population)**	2010 FoodNet Case Rate	2020* Target
Campylobacter	24.6	13.6	8.5
Escherichia coli 0157:H7	2.1	0.9***	0.6
Listeria monocytogenes	0.47	0.3	0.2****
Salmonella	13.6	17.6	11.4

 Food Safety: <u>http://healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=14</u>; applies to <u>all food sources</u>, not just meat, poultry, and processed egg products
 *CDC MMWR – June 10, 2011; 60(22): 749-755

•**Minor revisions were made in some case rates in November 2000

• ***First met in 2004 and then again in 2009 and 2010; CDC tracks non-O157 STEC and for CY2010, the case rate was 1.0 (greater than that for O157 STEC)

****Changed to year 2005 by Presidential Executive Order



U.S. HEALTHY PEOPLE 2020 (continued)



Food	2005-2007 Baseline # <u>Outbreaks</u> from STEC O157, <i>Campylobacter</i> , <i>Listeria monocytogenes</i> , and <i>Salmonella</i>	2020 Target for <u>Outbreaks</u> *
Beef	200	180
Poultry	258	232

 Food Safety: <u>http://healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=14</u>; applies to <u>all food sources</u>, not just meat, poultry, and processed egg products
 *Represents a 10% decrease from baseline Food Safety and Inspection Service

Magnitude of the Problem for USDA

FSIS



	Measures	Goal
Pathogen	Baseline 2005- 2007	FY 2015
Salmonella**	576,436	531,574
	20,415	16,315
	1,236	1,002
All Illness	598,087	548,890

- In July 2011, Ca*mpylobacter* in poultry carcasses and in March 2012, six non-O157 STEC in raw beef will be added to the calculations for the All-Illness measure in FY2012

- A 4% decrease in illnesses associated with *Salmonella* through FY2015 is the primary driver for overall public health improvement from foods regulated by FSIS



Functional Food Defense Plan Measure*



- To be functional, an establishment must develop, write, implement, test, assess, and maintain the food defense plan
- Data is obtained from the annual FSIS Food Defense Plan Survey

Meat and Poultry Establishment HACCP Size	FY 2010	FY 2011
Large	97.1 %	96.0 %
Small	83.2 %	84.0 %
Very Small	63.6 %	64.0 %
Total	73.6 %	75.0 %





FSIS Authority at Retail

• FSIS has the authority to sample product and food contact surfaces at retail to ascertain sanitary conditions and to ensure that meat and poultry are not adulterated; activities are through the FSIS in-commerce surveillance program

 At retail, the FSIS burden for establishing adulteration is different than it is at Federal plants

At retail, FSIS has to prove that product in commerce is adulterated whereas in official establishments product cannot enter commerce until FSIS determines that product is not adulterated
FSIS focus is on high risk practices (e.g., grinding beef steaks and roasts not intended for grinding)







Mechanically Tenderized Meat and Poultry Products

The Agency expects to propose in Spring 2012 that raw, needle or blade mechanically tenderized beef products be labeled to indicate that they are "mechanically tenderized"

Cooking instructions must be validated to ensure adequate pathogen destruction under customary cooking methods

Labeling would apply to consumer ready product, product going to food service facilities, and product going to other Federal establishments for further processing

Product can be labeled as "not mechanically tenderized" or as "intact"



Retail Recordkeeping for Raw Beef

FSIS expects to propose in Spring 2012 precedent-setting recordkeeping regulations applicable to retail operations in which operators must maintain grinding log records for raw ground beef production, including evidence of sanitary control

Food Safety and Inspection Service

This action will significantly improve the ability of FSIS to conduct effective traceback investigations







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Allergens

The Agency enforces allergen-related policy using the FMIA, PPIA, and EPIA but closely aligns allergen policy according to the FDA Food Allergen Labeling and Consumer Protection Act (FALCPA)

% of Recalls by Reason from 2007 to Present



% of Foreign Material Recalls

% of Recalls in All Other Categories

SOURCE OFO/RMS





What Caused Allergen Recalls in 2011?

- New Ingredient and/or New Supplier
- Misprinted Label

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- Product in wrong package
- Product reformulated
- Ingredient reformulated



<u>ALWAYS</u> make <u>SURE</u> <u>ALL</u> ingredients and sub-ingredients are declared on the finished product label

SOURCE: OFO/RMS





Cross-Contamination at Retail

Facts:

- Higher prevalence and level of Listeria monocytogenes (Lm) in products that are sliced at retail vs. sliced by manufacturer (Gombas et al., 2003; NAFSS, 2008)
- 83% of the listeriosis cases associated with deli meats are from those sliced at retail (FSIS Comparative Lm Risk Assessment (2010); Endrikat et al., 2010)

✤ Hypothesis: at retail

- Additional cross-contaminations?
- Temperature abuses?

Risk Management Questions:

- "What are the key processes that lead to additional *Lm* contamination / higher levels at retail?"
- "How much is the relative risk/serving reduced according to specific risk management options?"



(NAFSS, 2008)





Overview: Interagency Retail Lm Risk Assessment Model

- Retail cross-contamination model
 - Models from retail to consumption and corresponding risk of listeriosis
- All incoming Lm contamination is tracked and the accounted for in this model ("mass balance")

Considers:

- Prevalence and levels of incoming RTE products that will be sliced, opened, and/or prepared at retail (deli salad, cheese, deli meats)
- Transmission among: product, slicers, handles, display cases, utensils, etc. (multiple pathways)
- Growth of Lm (time/temp.; pH, water activity, presence of growth inhibitors)
- Inactivation of Lm (cleaning/sanitizing; removal of gloves)





"What if" Scenarios

- 1. Worker Behavior & Sanitation
- 2. Growth Control & Incoming Lm on Product
- 3. Control the "level" (load) of Lm on incoming product





General Risk Assessment Findings

- The incoming level of Lm on RTE foods is the primary driver of the public health risk for products prepared, sliced, or exposed to the retail environment
 - All RTE foods, including those that do not support Lm growth, "seed" the retail environment and are major contributors to cross-contamination at retail
- Control of niches in the retail environment is critical
 Translate "lessons learned" from processors to retailers
- Use of growth inhibitors in formulating RTE products significantly reduces the public health risk (mitigating growth at retail and out to the consumer)





General Risk Assessment Findings continued

- Maintaining deli case temperatures <5°C (41°F) reduces the risk by 43%
 - Cost-effective control for retailers ("low hanging fruit")

The role of sanitation to mitigate risk needs to be further explored in model

Challenge: cross-contamination at retail occurs in minutes, while sanitation is done in hours; result: sanitation may never be frequent enough (evaluate the role of harborage)

Caveat: only test for Lm (Lspp not correlated to Lm at retail)





FSIS Plans to Enhanced Controls for Lm

- Develop a surveillance program aimed at better ensuring that RTE meat and poultry products at retail operations are not adulterated through insanitary practices at that operation
 - Evaluate the sanitary conditions, including the microbial profile of the environment (non-food contact surfaces) that could lead to sampling of product and food contact surfaces
 - Outreach to that operation could include best practice mitigations for preventing insanitary conditions from emerging, as informed by the interagency risk assessment
 - Collaboration with FDA and State/local public health partners will play a key role in this new focus by FSIS





Finalize Lethality Performance Standards for RTE Products

- Follow-up on the 2001 proposed rule to establish food safety lethality performance standards for all RTE meat and poultry products
- FSIS is currently working to issue this rulemaking before the next CFP (expect a less rigorous lethality than proposed for meat -- now 5 log reduction for *Salmonella*; a 7 log reduction for *Salmonella* in poultry product) and a less rigorous cooling time frame for cooked products





Thank you

Dr. Daniel Engeljohn 1400 Independence Ave. S.W. 349-E JWB Washington, DC 20250 Daniel.Engeljohn@fsis.usda.gov 202-205-0495

As well as a special thanks to the FSIS CFP Team: Kristie Barlow John Hicks Jennifer Webb