

Critical Importance of Epidemiologic Evidence to Food Safety Policy Development

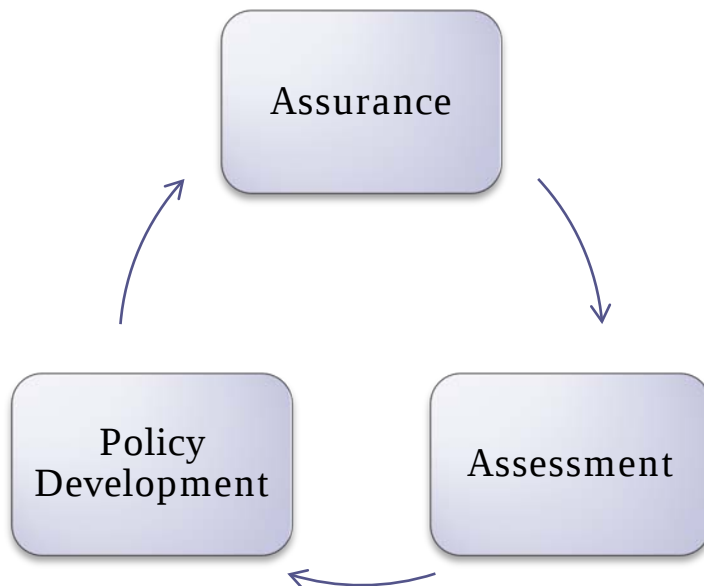
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FSIS Application of Public Health Model

Public Health Model

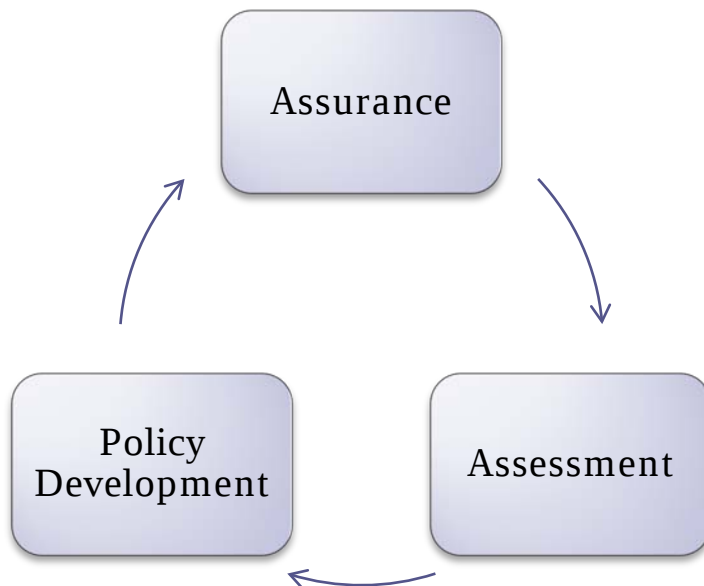


Assessment

- Foodborne Illness Burden and Trends
 - Partnering with FoodNet, OutbreakNet, PulseNet, etc.
- Collaborative Foodborne Illness Investigations
- Risk Assessments
- Pathogen and Residue Analysis of FSIS-regulated Products

FSIS Application of Public Health Model

Public Health Model



Policy Development

- Science and Data Driven
 - Epidemiologic Data
 - Inspection Data
 - Laboratory Data
- Guided by Risk Assessment
- Major Initiatives for Pathogen Reduction
 - *Campylobacter*
 - *E. coli* O157:H7
 - *Listeria monocytogenes*
 - *Salmonella*

Salmonellosis Associated with Not Ready-To-Eat, Stuffed Poultry Products

Assessment

- At least 6 outbreaks since 1998
 - *Salmonella* Enteritidis, Heidelberg, I 4,[5],12:i:-, Typhimurium
 - MN lead investigative role
- Illnesses associated with multiple establishments
- Many case-patients report not following cooking instructions
 - Cooking instructions often poorly validated

Policy Development

- 2006 recall action and public health alert
- 2006 NACMCF consumer guidance recommendation
- 2006 FSIS recommendation to industry on labeling and product validation
- 2008 public health alert
- 2008 industry meetings
- 2010 consideration as adulterant

Risk of Exposure from Non-Intact, Mechanically-Tenderized Beef Products

Assessment

- At least 5 investigations and/or recalls since 2000
 - *E. coli* O157:H7
 - Multiple states involved
 - Mechanical tenderization, often marinated
- Equipment sanitation issues identified
- Illnesses associated with multiple establishments

Policy Development

- 2002 FSIS comparative risk assessment
- 2005 FR Notice mandating a reassessment of HACCP plans for operations that produce non-intact, mechanically-tenderized beef product.
- 2009 ARS study of cooking effect on, and growth of, *E. coli* O157:H7 in non-intact product
- 2010 FSIS revisiting risk assessment
- 2010 Consideration of labeling requirements

Retail Recordkeeping, Ground Beef, and Foodborne Illness Investigations

Assessment

- Records and traceback are critical components during investigations
- Multiple ground beef investigations where incomplete grinding logs and records limited Agency actions
- 2009 EHS-Net study of recordkeeping practices in 3 states

Policy Development

- 2002 Federal Register notice included verification sampling
- Initiation of FSIS workgroups
- 2009, 2010 FSIS public meetings on traceability
- 2010 proposed Federal Register notice for records requirement clarification