

Current mantra (and the core of FSMA):

“Risk Based Food Safety System”

J. Glenn Morris, Jr., MD, MPH&TM
Emerging Pathogens Institute
University of Florida

You Dropped Food on the Floor Do You Eat It?

Was it sticky? — No. — Did anyone see you? — YES.

No.

YES.

Is it an
Emausaurus?

Is it a
raw steak?

Was it a
boss/lover/parent? — No.

**EAT
IT.**

No.

No.

YES.

Was it expensive? — YES.

YES.

Did the cat
lick it?

Are you
a puma?

No.

Can you cut off
the part
that touched
the floor?

Are you a
Megalosaurus?

YES.

No.

YES.

No.

YES.

No.

Is it bacon?

No.

YES.

YES.

No.

**DON'T
EAT IT**

**EAT
IT.**

**DON'T
EAT IT**

**EAT
IT.**

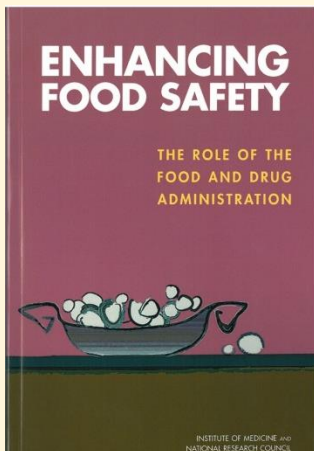
Is your cat
healthy?

YES.

No.

**YOUR
CALL**

**EAT
IT.**



**Step 6:
Monitoring and Review**

- Collect and Analyze Data on Evaluation Measures
- Interpret Data and Evaluate Intervention Results
- Determine Whether Public Health Objectives Are Being Met
- Communicate Results to Stakeholders
- Review and Refine the Process as Necessary to Accomplish Intermediate Outcomes and Public Health Objectives So As to Achieve Continuous Improvement

**Step 1:
Strategic Planning**

- Identify Public Health Objectives
- Establish a Risk Management Plan
- Establish Metrics to Measure Performance

**Step 2:
Public Health Risk Ranking**

- Develop or Select Tools for Public Health Risk Ranking
- Rank Risks Based on Public Health Outcomes
- Report Results and Solicit Feedback

**Step 3:
Targeted Information Gathering and Consideration of Other Factors**

- Identify and Consider Additional Criteria for Decision Making
- Conduct Targeted Information Gathering
- Identify Priority Risks for Intervention (Instrument) Analysis

**Step 5:
Design of an Intervention Plan**

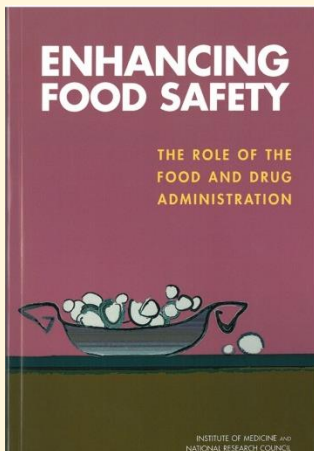
- Develop a Plan for Implementing the Selected Interventions
- Allocate Resources and Implement Interventions

**Step 4:
Analysis and Selection of Intervention(s)**

- Identify an Appropriate Level of Protection for Each High-Priority Risk
- Identify Intervention Options
- Identify the Type of Technical Analysis Needed to Evaluate the Options
- Gather Information
- Choose Intervention Strategies
- Report Results, Solicit Feedback, and Modify Intervention Strategies If Needed

Healthy People 2020: Food Safety

- FS-1: Reduce infections caused by key pathogens transmitted commonly through food.
- FS-2: Reduce the number of outbreak-associated infections due to Shiga toxin-producing *E. coli* O157:H7, or *Campylobacter*, *Listeria*, or *Salmonella* species associated with food commodity groups.
- FS-3: Prevent an increase in the proportion of nontyphoidal *Salmonella* and *Campylobacter jejuni* isolates from humans that are resistant to antimicrobial drugs.
- FS-4: Reduce severe allergic reactions to food among adults with a food allergy diagnosis.
- FS-5: Increase the proportion of consumers who follow key food safety practices
- FS-6: Increase the proportion of fast-food and full service restaurants that follow food safety practices that prevent foodborne illness outbreaks.



Step 6: Monitoring and Review

- Collect and Analyze Data on Evaluation Measures
- Interpret Data and Evaluate Intervention Results
- Determine Whether Public Health Objectives Are Being Met
- Communicate Results to Stakeholders
- Review and Refine the Process as Necessary to Accomplish Intermediate Outcomes and Public Health Objectives So As to Achieve Continuous Improvement

Step 5: Design of an Intervention Plan

- Develop a Plan for Implementing the Selected Interventions
- Allocate Resources and Implement Interventions

Step 1: Strategic Planning

- Establish a Risk Management Plan
- Identify Public Health Objectives
- Establish Metrics to Measure Performance

Step 2: Public Health Risk Ranking

- Develop or Select Tools for Public Health Risk Ranking
- Rank Risks Based on Public Health Outcomes
- Report Results and Solicit Feedback

Step 3: Targeted Information Gathering and Consideration of Other Factors

- Identify and Consider Additional Criteria for Decision Making
- Conduct Targeted Information Gathering
- Identify Priority Risks for Intervention (Instrument) Analysis

Step 4: Analysis and Selection of Intervention(s)

- Identify an Appropriate Level of Protection for Each High-Priority Risk
- Identify Intervention Options
- Identify the Type of Technical Analysis Needed to Evaluate the Options
- Gather Information
- Choose Intervention Strategies
- Report Results, Solicit Feedback, and Modify Intervention Strategies If Needed

INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

Advising the nation / Improving health

“Although intermediate measures are useful, direct measures of public health impact are essential for truly evaluating the effectiveness of food safety interventions in the long term.”

NAS, Enhancing Food Safety, p. 94