

THE
PEW
CHARITABLE TRUSTS

Current thinking: FSMA implementation metrics

Safe Food Project

June 2015

Presentation overview

- **Public health based FSMA metrics**
- **The value of a tiered approach**
 - **Example 1: Product contamination rates**
 - **Example 2: Inspection-based FSMA metrics**
- **Learning from other industries**

Public health based FSMA metrics

Definition

- Reduction in foodborne illnesses due to FSMA-regulated foods
- Examples: reduction in outbreaks, sporadic cases, recalls

'Gold standard' because

- Well aligned with FSMA goals
- Directly relevant to public health
 - Consumer-facing measure
 - Few assumptions needed
- Directly relevant to stakeholders
 - Impacts on daily lives clear

Not immediately feasible because

- Several years of data required
- Reliant on source attribution
 - Methodological challenges
 - Data limitations
- Depends on surveillance system
 - Underreporting, biases, etc.

The need for a tiered approach

Proposed strategy to address limitations of public health metrics

- **Tiered approach**: short-, medium-, and long-term FSMA metrics
- **Guiding principles**:
 - Use and combine the available data in creative new ways
 - Learn from other disciplines & engage stakeholders

Examples



Product contamination measures

Definition

- Reduction in product contamination rates
- **Example:** reductions in pathogen prevalence & concentration on food

Desirable because

- Aligned with FSMA goals
- Correlated with disease risk
 - Consumer-facing
- Immediately applicable
 - Trends quickly analyzable
- Relevant to stakeholder

Problematic because

- Baseline data requirements
 - Data lacking for many foods
 - Historic data needed
- Data sharing with stakeholders
 - Complex challenges
- ‘Indirect’ public health metric

Inspection-based FSMA metrics

Definition

- Inspection performance as a measure of FSMA implementation
- Examples: ‘near-misses’, third-party audits, supplier verification

Desirable because

- Measures industry performance
 - ‘level of control’
- Data can be readily available
- Captures central part of FSMA
- Applicable in the mid-term
 - Require some historical data

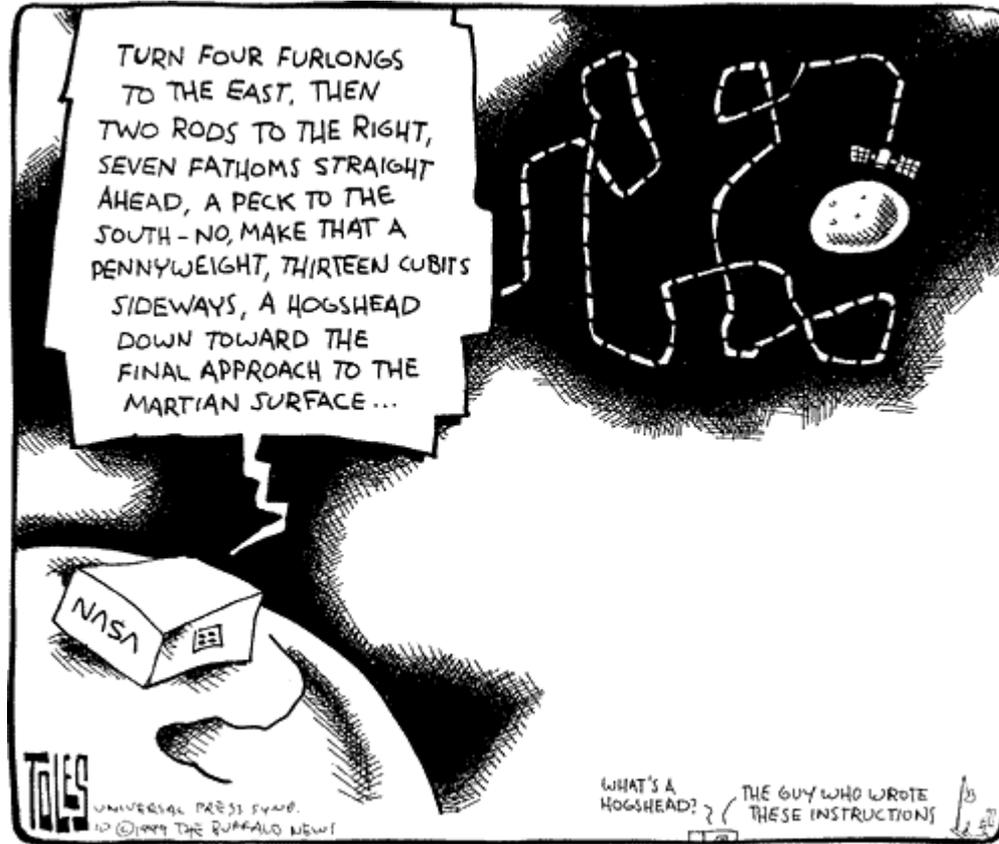
Problematic because

- Logistic challenges
 - Data collection & recording
 - Data storage & sharing
- Interpretation challenges
 - Most meaningful metrics?
 - Interpretation of changes?

Learning from other industries

- **Some key challenges with FSMA metrics**
 - **Finished product contamination & outbreaks are very rare events**
 - ⇒ **Logistical and statistical challenges**
 - **The food industry is a very complex industry**
 - ⇒ **Cause- and effect not always obvious**
 - **There are many potential confounding factors**
 - ⇒ **Attributing success to FSMA can be challenging**
- **Why other industries can help**
 - **Same fundamental challenges**
 - **Long focus on measuring success (e.g., ‘ultra-safe’ industries)**
 - ⇒ **Considerable body of research & real-world experiences**
 - ⇒ **Data on challenges and opportunities associated with metrics**
 - **Recognition of ‘organization’ factors as predictors of success**

Questions & Comments?



Source: Buffalo (NY) News, 10/04/1999