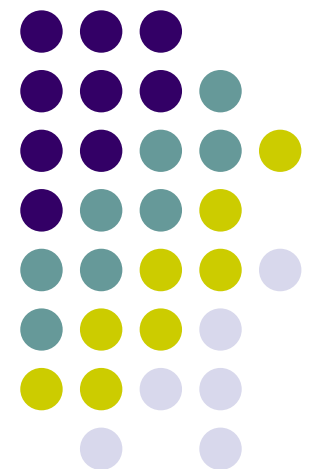


The Economics of Food Recalls: Consumer and Retailer Studies

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Washington, DC. May 6, 2008

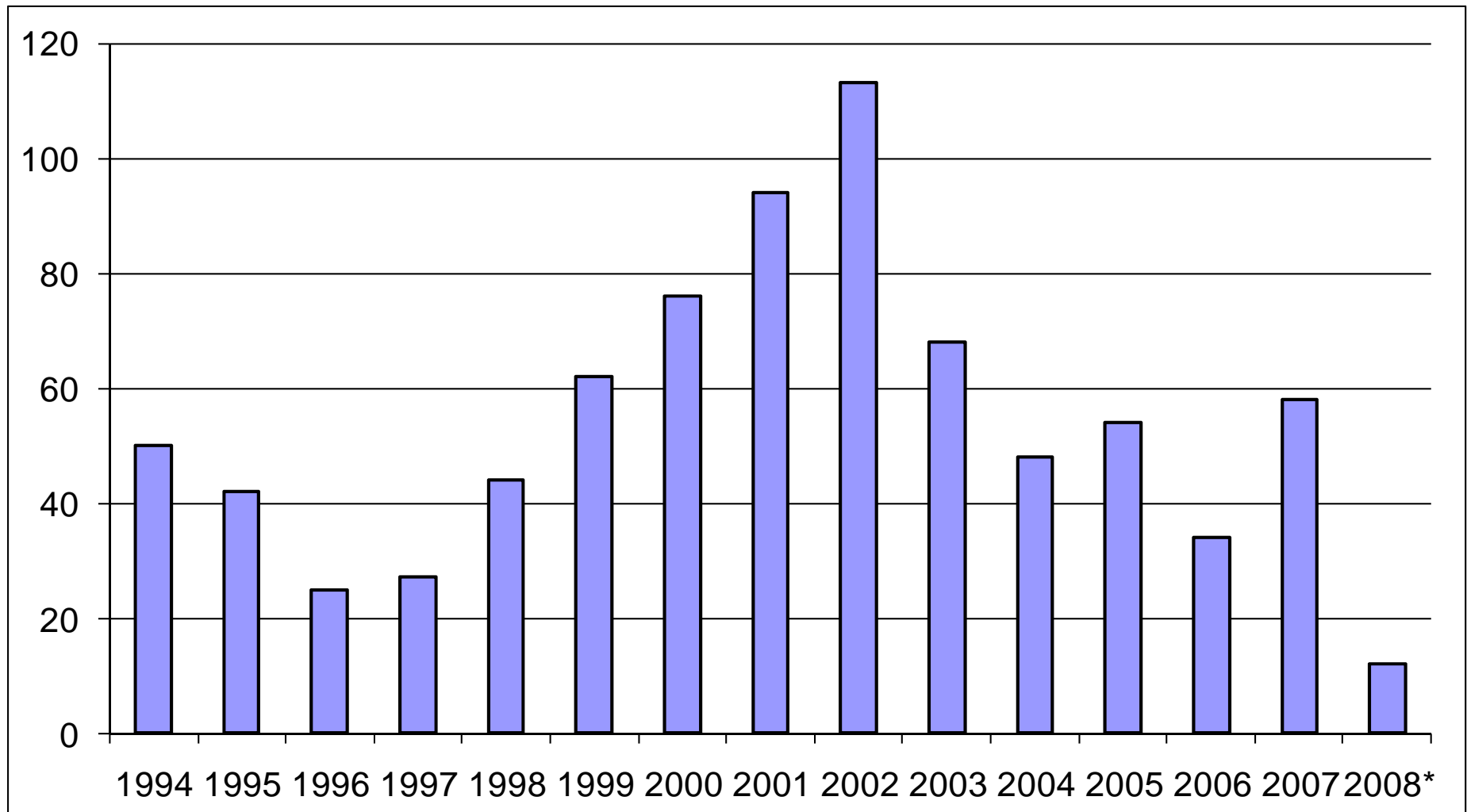
Food Recalls

Crisis Management + Risk Communication

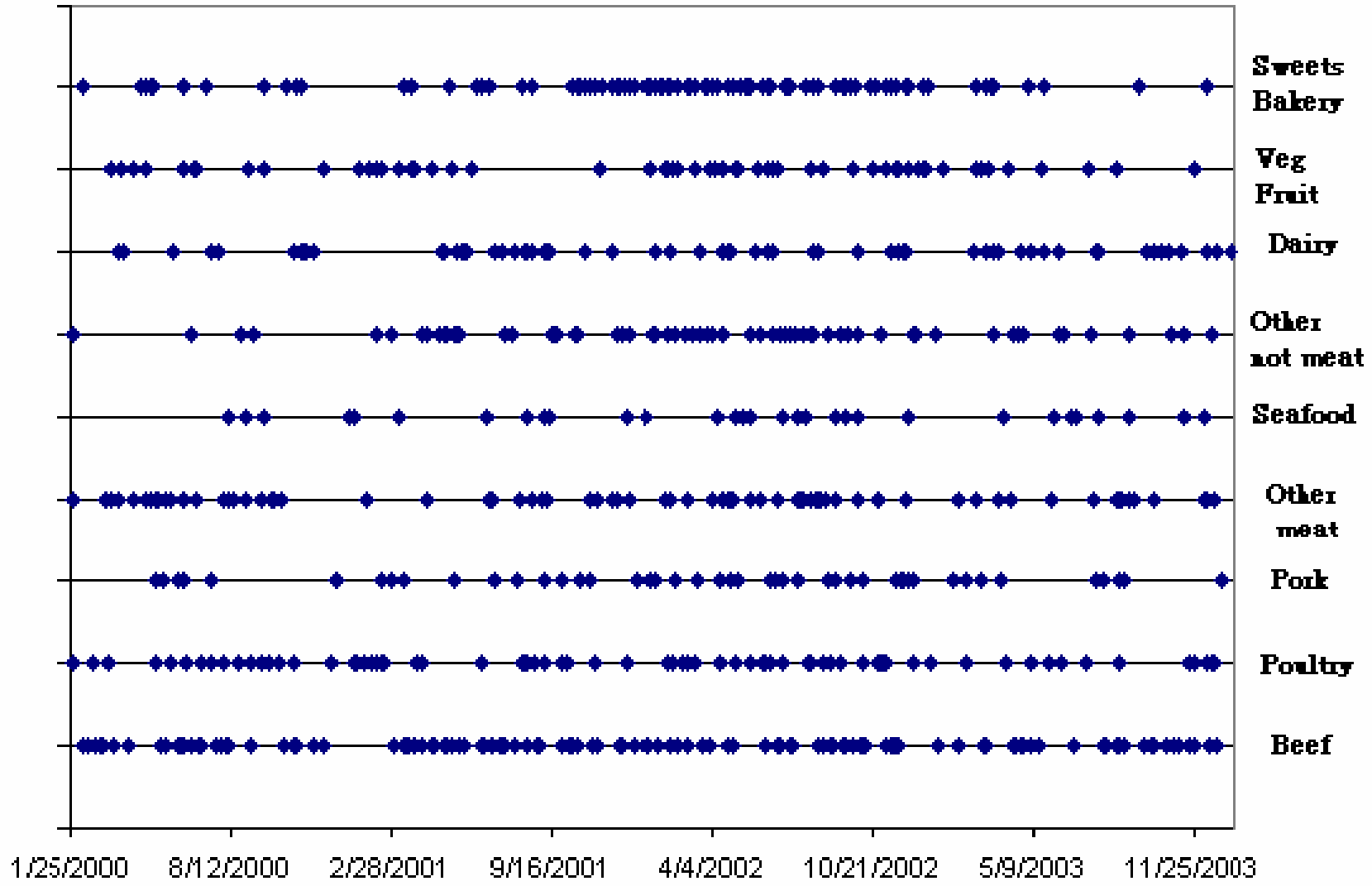
- **Uniqueness:** short shelf life, rapid distribution channels, random hazards, identification
- **Combined burden** of food safety failures: firms, consumers, government
 - **Externality:** firms unlikely to supply socially efficient level of control
 - Potentially significant **public health** impacts
 - Alternative forms of **government oversight and control** (messages, monitoring and enforcement)

Meat and Poultry Recalls

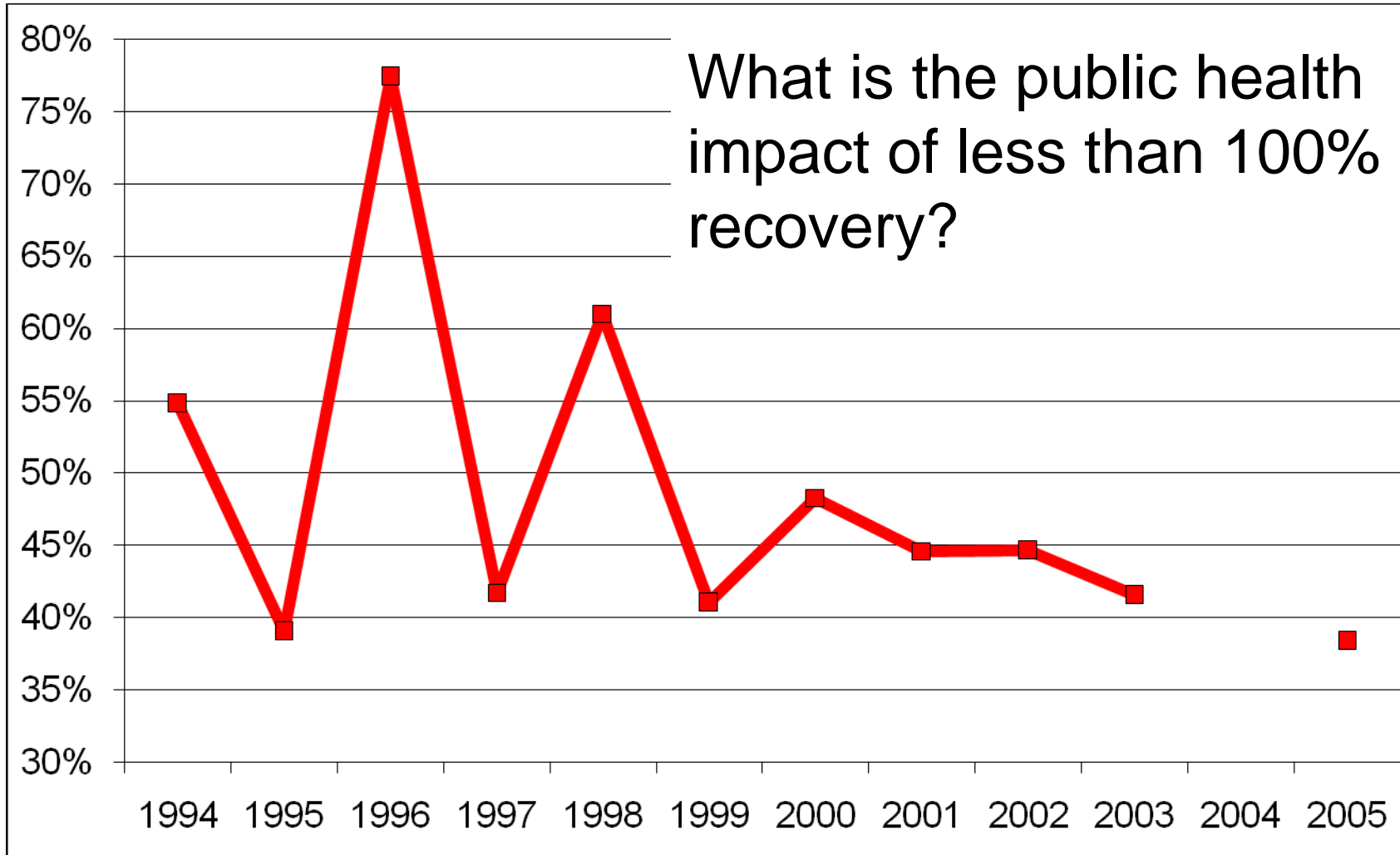
6 million pounds in 1988 to ~36 million pounds in 2003



Not Just Meat and Poultry



Recovery Rates: Less than half of the product is ever accounted for



Retailer Disclosure – New Policy?

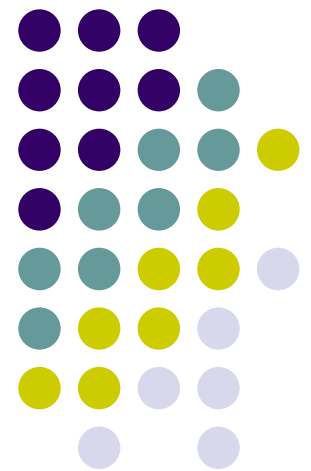
- Class-action lawsuit: WA, ground beef, BSE, Quality Food Centers (Kroger)
 - Using loyalty program to warn consumers
- California Senate Bill 611 (July 1, 2007)
 - Compile customer list, Class I and II, **may** notify public, food service mostly exempt
- USDA Proposed Rule – Retail Consignees
 - Class I only?
 - When and how are consignees identified?

Assessing Efficacy of Recalls

Response across communication channels

Response to different messages

Response by types of consumers



HoneyBaked Recall (2006)

After HoneyBaked Foods Inc. of Toledo issued a voluntary recall for certain hams and sliced and glazed turkey breasts on Wednesday, officials decided to open their store on Merger Drive for part of yesterday's Thanksgiving Day holiday.

“We didn't want people driving up and saying, ‘They're not here,’” Craig Kurz, an officer and shareholder of the company ... **contacting customers by phone and e-mail.** He said the company does not yet know the number of people who may have been affected.

The recall affects hams and turkeys sold between Sept. 5 and Nov. 13 at the company's retail store at the Merger Drive location and at kiosks in The Andersons stores in Toledo, Maumee, and the Woodville Mall in Northwood.

Targeted Risk Communication

- Point of sale messaging
 - Link to consumer at subsequent transaction
- Phone call
- Email
- Postcard/mail



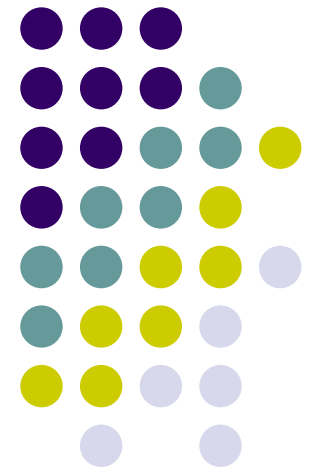
Crisis Communication Kiosk

- “Amber Alert” for food safety
 - Tracking recalls
- Alternative/addtional uses
 - Diet/nutrition advice
 - Provenance and production stories
 - Menu planning
 - Promotion/coupons



Retailer Response

Small (non-chain)



Survey Data

- 116 retailers in Ohio, West Virginia and Kentucky
 - 65% rural, 77% single store, 65% 7 or less part time employees; >50% annual sales of less than \$1m
- Infrastructure (IT) and loyalty card programs likely to be restrictive in conducting risk communication
- History of FDA and USDA recalls
 - Within the past 36 months 57% never had any food recall
 - 85% of retailers had 3 or fewer recalls
 - 95% of retailers had 3 or fewer meat/poultry recalls

Comparing Risk Communication Tools

- **Mass:** flier, bulletin board, local newspaper, store webpage
- **Targeted:** inform at checkout, by phone or email
- **Conditions**
 - **Baseline:** Current USDA recall policy requirements
 - **Scenario 1:** USDA names retailer
 - **Scenario 2:** USDA requires targeted communication
- **Results**
 - Few retailers use mass communication (14%)
 - Less than 10% have affinity/loyalty program
- **Targeted communication difficult**

Testing: Baseline vs. Scenarios

- Adoption of risk communication strategies increases
 - Exception of announcements in local newspaper
- Constraints
 - Cost main factor
 - Consumer loyalty and legal liability have small positive effect on decision
 - Upstream/Supplier reaction little effect on decision
- In both versions, majority of retailers don't think FDA will adopt rules (69% and 77% respectively)

Would this Improve Recalls?

- Poor consumer awareness about food recalls
 - *Ex post* option
- Sufficient technology is available in a portion of the food retailing industry (large firms)
- Retailers & consumers
 - Build consumer's **trust** and a sense of partnership
- Retailers & regulators
 - Special attention to **privacy concerns**



- **Question:** Will my information be shared with other vendors?
- **Answer:** We may provide purchase information to vendors in aggregate form...
- Provide customer phone numbers to a vendor when there is a need for a **product recall notification**
- Vendor required to sign Non-Disclosure Agreement

Thank you!

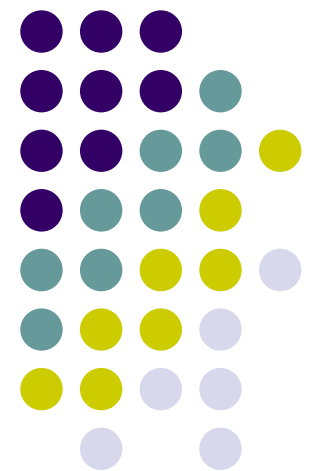
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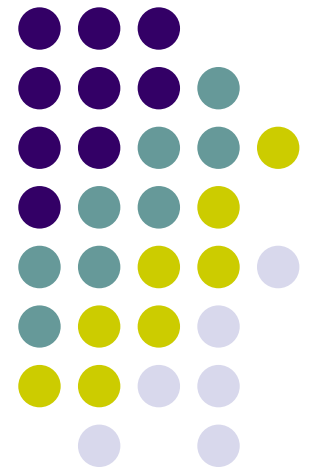
The Ohio State University

<http://aede.osu.edu/>



Other Recall Research

Exploring costs
Assessing policy



Firm Costs of Recalls

- One estimate suggests
 - Cost = 3*retail price of product*recalled amount
Shiptsova, Thomsen and Goodwin (2002)
 - Limited empirical validation
- If recall costs are low, insurance mitigates risk, and identification is imprecise, events may be common
 - Stock price may not react (much)

Results: Stock Price Impacts

- Recalls - very different severity, firm size and lines of business - yet **little evidence of statistically significant impacts**
 - Effects do not last long, consistent with what one would expect from an 'efficient' stock market
 - Volatility effects last longer

Other (Timing) Studies

- Updating USDA, expanding to FDA recalls
- Pet food recalls vs. human food recalls

- Reaction to new event
- Pets are big business
- Brands



- Speed of recovery for consumer demand

Crisis Management Effectiveness

- FSIS recalls 1994-2002 (429)
- Recalls carried out by the smallest sized plants, those that took place after PR/HACCP, and involving processed products are **more effective**
- Little difference in effectiveness of crisis management for meat vs. poultry plants, plants part of a larger firm, or Class I/microbiological recalls

Recall Event Timing

- Discovery and completion times compared across subgroups of plants
 - Large plants, multi-plant firms, and plants with prior recall experience **do not** perform better
 - Government agency sampling programs enhanced the speed of discovery
 - National distribution networks contributed to the risk that cases remained open for a longer period

Imports!

A Report to the President Interagency Working Group on Import Safety



November, 2007

<http://www.importsafety.gov/>

Action Plan for Import Safety:

A roadmap for continual improvement



Response

In the event that an unsafe import does make its way into the domestic stream of commerce and may or does injure consumers or animals, swift actions must be taken to limit potential exposure and harm.

Recall

Recommendation 11 – Maximize the Effectiveness of Product Recalls.

1. make it unlawful to sell a recalled product
2. authorize follow-up recall authority
3. require all recalling firms to provide the name and address of companies that supplied or received product
4. authorize FDA to issue a mandatory recall when voluntary recalls are not effective.

Thank you!

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