Food Safety: The Role of Traceback

30 Aug 2001 R.M. Goodrich



1997 Food Safety Initiative

- Juice HACCP Rule (2000)
 immediate issue for juice processors and producers
- Guidance for Industry: Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables - "The Guide" (1998)

1997 Initiative (con't).

- Better information transfer among local, state and federal officials
- Better coordination during traceback investigations

Traceback Investigations

- A method used to determine the source and distribution of the implicated product associated with an outbreak, and
- Identification of potential points where contamination could have occurred

How does it start?

- Most outbreaks in the US are reported by consumers who suspect a connection with a food they have eaten and an illness they are experiencing
- Reported to local health officials
- Nationwide network of CDC, FDA, USDA and state health depts

Recent Produce Tracebacks

Product	Year	Pathogen	#
Cantaloupe	2000	Salmonella	43
Raspberries	2000	Cyclospora	16
Raspberries	2000	Cyclospora	17
Parsley	1998	Shigella	>400
Leaf Lettuce	1996	E.coli O157:I	H7 43

Source: Guzewich & Salsbury, 2000.

FDA Involvement

- Each outbreak involved interstate commerce
- All outbreaks were traced to primary source of contamination
- Some farms were/are being visited

"The Guide"

- Covers broad areas of:
 - Water
 - Manure and Municipal Biosolids
 - Worker Health and Hygiene
 - Sanitary Facilities
 - Field Sanitation
 - Packing Facility Sanitation
 Transportation
 - Traceback

Traceback

• "The ability to identify the source of a product can serve as an important complement to good agricultural and management practices intended to minimize liability and prevent the occurrence of food safety problems".

Produce Challenge

- Fresh produce is often quickly consumed; often gone by the time outbreak is reported
- Current industry practices make tracing difficult:
 - recycling of shipping containers
 - co-mingling during distribution and retail
- Difficulty of confirmation at the farm/packinghouse level

Advantages

- Protection from false association with a particular outbreak
- Rapid and effective traceback can minimize consumer anxiety and adverse publicity
- Competitive advantage to those that can demonstrate an effective program

Practical Matters

- Larger operations may have more direct distribution and marketing chain
- All packers can keep complete records
 - farm/field
 - sanitation
 - supplies
 - production codes

Minimum Documentation

- Date of harvest
- ♦ Farm Identification
- Handling chain from grower to receiver
- All aspects of packinghouse operations

Partnerships Needed

- Growers, packers and shippers have to work with partners in transportation, distribution and retail to identify the whole system
- Industry trade groups can help with this effort, and also help implement technologies
 - coding
 - labels
 - software

Resources & References

- Guzewich & Salsbury. 2000. "FDA's Role in Traceback Investigations for Produce". Food Safety.
- FDA website: www.cfsan.fda.gov
 - Guidance Document
 - Surveillance Data
 - Juice HACCP Rule