



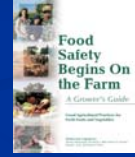
## Packinghouse Food Safety and Biosecurity

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## Why this topic?

- President's Food Safety Initiative in 1997 led to increased interest in produce-related food safety
- Publication, in 1998 and continuing, of various guidance documents related to the safe production and handling of produce
- Bioterrorism Act of 2002 has focused food industry on better food security practices, throughout entire food production system



## GAPs - Water

- Water
  - Agricultural water source and distribution
  - Proper maintenance of wells
  - Processing water tested regularly
  - Cooling water and ice are clean and sanitary



## GAPs – Worker Health & Hygiene

- WHH
  - Teach workers about food safety and their role in preventing microbial contamination of fresh fruits and vegetables
  - Provide clean restrooms with soap, water, and single-use towels
  - Enforce proper use of facilities
  - Re-assign ill employees



## GAPs – Packinghouse Sanitation

- Packinghouse Sanitation
  - Proper sorting and culling of produce
  - Detectable free chlorine in wash waters
  - Enforce good worker hygiene
  - Exclude all animals from packinghouse or shed, especially insects, birds and rodents
  - Clean and sanitize equipment



## GAPs – Traceback

- Traceback information
  - At point of sale (POS; where product was sold or prepared) need product identification, including type, packaging, lot number
  - Distribution information, shipping delivery records, bills of lading and receiving
  - Distributor interviews, data collection (RFIDs, TTIs)
  - Warehousing and storage information



## HACCP

- A seven step process to minimize food safety risks
- It is NOT a zero-risk system
- Has been widely implemented by processors; increased adoption by packers due to customer requirements



## Seven Principles of HACCP

- Conduct hazard analysis
- Determine CCPs
- Establish critical limits
- Establish monitoring procedures
- Establish corrective actions
- Establish verification procedures
- Record-keeping and documentation



## HACCP Information

- FDA website on HACCP:
  - <http://www.cfsan.fda.gov/~comm/haccpov.html>
- UF/IFAS General Factsheet:
  - <http://edis.ifas.ufl.edu/pdf/FS/FS12200.pdf>



## Food Product Liability

- Product liability applies to:
  - Supplier
  - Manufacturer
  - Wholesaler
  - Distributor
  - Retailer
- As opposed to negligence (which may be minimized if company can show good faith efforts in food safety programs)



## Food Safety vs. Food Security

- Food Safety
  - Prevention of unintentional contamination from hazards within the system
- Food Security
  - Prevention of purposeful contamination from hazards or pernicious agents outside the system



## Food Security Threats

- Tampering – deranged individual, or criminal extorting or murdering
- Terrorism – political agenda (attention to a cause/exact political concessions) drives perpetrator to incite fear or cause economic damage; big issue post 9/11



## Agroterrorism

- The use of biological, chemical or other agents to adversely affect animal or plant health or the agricultural industry (including food)
- Agents can be spread by air, water, feed, or by humans
- The general aim is economic disruption, but human/animal harm is possible



## Key Questions for the Produce Industry

- Can purposeful on-farm contamination incident be prevented?
- What can be done throughout packing/distribution?
- Can we adequately trace product from farm to table? Backwards?



## Bioterrorism Act of 2002

- “Public Health Security and Bioterrorism Preparedness and Response Act of 2002”
- June 12, 2002 (very swift legislation)
- “To improve the ability of the United States to prevent, prepare for, and respond to bioterrorism and other public health emergencies.”



## Bioterrorism Act 2002 – Key Requirements

- Facilities (domestic and foreign) must be registered
  - This includes packinghouses, but not farms
- Certain records must be maintained
- If importing, must provide “Prior Notice”
- URL for FDA information on BT Act of 2002: <http://www.fda.gov/oc/bioterrorism/bioact.html>

## Distribution and Biosecurity Issues

- Documentation more rigorous since implementation of BT Act of 2002
  - Importers
  - Record keeping
  - Traceability
  - Recall procedures
  - Prior notice
- Auditors are focusing on these areas



## Increased Focus on Food Security

- Has led to new and rigorous requirements regarding plant security, record keeping, and food distribution tracking, recall and traceback (required)
- Has also affected general facility biosecurity programs (guidance), which will appear on 3<sup>rd</sup> party audit programs



## Food Security Preventive Measures Guidance

- Prepare for possibility of tampering or other malicious, criminal or terrorist actions
- Provide proper supervision
- Consider employee screening
- Visitor policy
- Training
- Have secure facility



■ <http://www.cfsan.fda.gov/~dms/secguid6.html>

## Questions?

