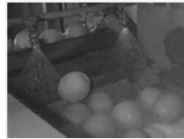


## Citrus Packinghouse Food Safety & Security

R.M. Goodrich  
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Citrus Packinghouse Day



## Overview

- ◆ GAPS
- ◆ Packinghouse HACCP & Audits
- ◆ Bioterrorism Act of 2002
- ◆ Sources of Info



## GAPs

- ◆ Basic programs to help enhance "farm to fork" food safety
- ◆ Guidance from FDA (1998)
- ◆ Focus of many programs from UFFVA, FFVA, UF/IFAS Extension and many others
- ◆ Specifics outlined in web-based document (see abstract)



## GAPs Highlights

- ◆ Water
  - ◆ Source & distribution; wells; process water; testing; cooling water & ice
- ◆ Worker Health & Hygiene
  - ◆ Employees trained; ill employees; use of gloves; use & stocking of field toilet facilities
- ◆ Field & Packing Facility Sanitation
  - ◆ Storage facilities & bins cleaned before use; maintain proper temperatures; minimize dirt brought into packing shed; establish pest control system
- ◆ Transportation & Traceback
  - ◆ Inspection before loading; maintain proper transport temps; be able to trace back and forward; documentation and record keeping critical

## HACCP

- A seven step process to minimize food safety risks
- It is NOT a zero-risk system
- Should be a concept that is already adopted by packers and processors



## Seven Principles of HACCP

1. Conduct hazard analysis
2. Determine CCPs
3. Establish critical limits
4. Establish monitoring procedures
5. Establish corrective actions
6. Establish verification procedures
7. Record-keeping and documentation

## **Food Safety vs. Food Security**

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- ◆ **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

## **September 11, 2001: Wake-up Call for Regulators**

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- ◆ Food industry identified as one area of vulnerability to terrorism
  - ◆ Power grids, muni water, IT systems, transportation, financial systems are others
- ◆ **FBI: Food and Beverage Industry, not Federal Bureau of Investigation**



## **Food Security Threats**

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- ◆ Natural occurrences – happen at the whim of mother nature
- ◆ 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

## **Terrorism**

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- ◆ Terrorism is “stateless”
- ◆ So terrorists do not fear retaliation in kind

## **Bioterrorism**

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- ◆ The use of biological, chemical, radiological, and physical agents to create terror
- ◆ Targets are humans or animals via air, food, water, etc.
- ◆ Usually physical harm is intended

## **Route of contamination**

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## Agroterrorism

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- ◆ The use of biological or chemical agents to affect animal or plant health
- ◆ Agents can be spread by air, water, feed, or by humans
- ◆ The general aim is economic disruption, but human/animal harm is possible



## Agroterrorism

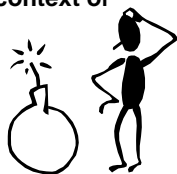
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- ◆ For example, deliberate introduction of foot-and-mouth disease into a herd

## Operational Risk Management

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- ◆ A six-step sequence to increase food safety and security by anticipating hazards and reducing the potential for loss
- ◆ FDA is discussing ORM in the context of food biosecurity



## Six Steps of ORM

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- ◆ Identify the hazards
- ◆ Assess the risk
- ◆ Analyze risk control measures
- ◆ Make control decisions
- ◆ Implement risk controls
- ◆ Supervise and review



## Key Questions

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- ◆ 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

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- ◆ PL 107-188
- ◆ June 12, 2002
- ◆ “To improve the ability of the United States to prevent, prepare for, and respond to bioterrorism and other public health emergencies.”

## **Bioterrorism Act 2002**

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- ◆ Major upcoming requirement is facility registration
- ◆ All domestic and foreign facilities
- ◆ Failure to register is a prohibited act
- ◆ Must register by mid-December 2003

## **Exemptions**

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- ◆ Farms
- ◆ Restaurants
- ◆ Fishing vessels
- ◆ Non-profit food est.
  
- ◆ NOT exempt: packinghouses and processing plants

## **Prior Notice**

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- ◆ Must notify FDA of incoming shipments of food into US
- ◆ Broker, agent or company responsible
- ◆ Issue with perishable product
- ◆ FDA can detain shipments if not properly notified

## **Take Away Messages**

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- ◆ GAPs should be implemented by your fruit suppliers
- ◆ HACCP in your packinghouses
- ◆ Packinghouses must register with FDA by December 12, 2003
- ◆ If you import, you must deal with "Prior Notice" (also FDA requirement)

## **Sources of Information**

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- ◆ Cooperative Extension:
  - ◆ <http://fshn.ifas.ufl.edu>
- ◆ National Infrastructure Protection Center:
  - ◆ [www.nipc.gov](http://www.nipc.gov)
- ◆ Food Industry ISAC:
  - ◆ [www.fmi.org/isac](http://www.fmi.org/isac)
- ◆ FDA's Main Site:
  - ◆ [www.cfsan.fda.gov](http://www.cfsan.fda.gov)