

# Data (or not) on US Foodborne Illness Due to Imports

**Dale Morse, MD, MS**  
Senior Advisor

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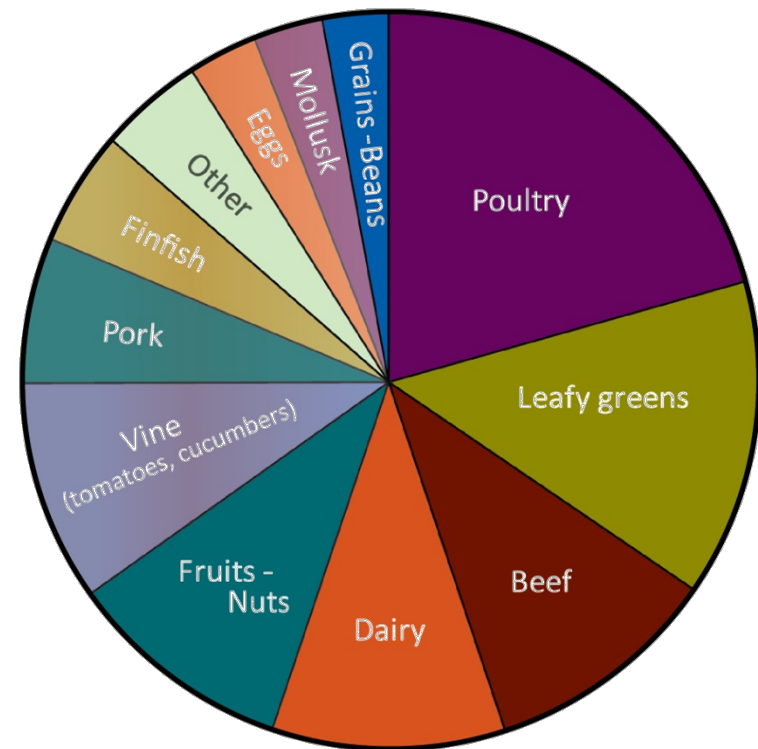
## Increasing Proportion of Specific Food Categories that are Imported

<b>Food Category</b>	<b>1980</b>	<b>1990</b>	<b>2007*</b>
<b>Fruit and Nuts</b>	<b>9.7%</b>	<b>29.4%</b>	<b>32.4%</b>
<b>Vegetables</b>	<b>4.7%</b>	<b>7.5%</b>	<b>13.6%</b>
<b>Fish and shellfish</b>	<b>45.3%</b>	<b>56.3%</b>	<b>84.3%</b>
<b>Red Meat</b>	<b>6.6%</b>	<b>8.3%</b>	<b>9.5%</b>
<b>Total food consumed</b>	<b>8.2%</b>	<b>11.3%</b>	<b>15.5%</b>

\*Jerado USDA/ERS 2007 (2007 estimates are preliminary)

**Based on US Outbreak Data —**  
*we would expect several of these foods*  
*to pose a risk for illness*

**Causes of illness  
in 1,565 outbreaks  
of single food  
commodities,  
2003-2008**



# Can we say what the risk of Imported Food Is?

- ❑ Best source of information would be outbreak investigations
- ❑ But, how many foodborne outbreaks are linked to imported foods?
- ❑ A question asking if “*contaminated food was linked to imports?*,” was added to the NORS form in 1998, but...
  - Information rarely collected, and
  - Rarely reported

# US Outbreaks Linked to Imports 1998-2009

- ❑ **33 such outbreaks reported**
  - ❑ 26 bacterial (15 *Salmonella*, 2 *E. coli* O157, 9 other pathogens)
  - ❑ 3 parasitic (2 *Cyclospora*)
  - ❑ 3 viral (Hepatitis A, 2 norovirus)
  - ❑ 1 ciguatoxin
- ❑ **13 fresh produce (9 fruit)**
  - ❑ 7 seafood
  - ❑ 7 dairy (all unpasteurized, 6 queso fresco)
  - ❑ 3 alfalfa sprouts
- ❑ **17 from Latin America, 2 from Asia/Pacific**

## However, foodborne illness data regarding imports – *is incomplete*

- ❑ Source(s) of sporadic illnesses are rarely determined
- ❑ When a food is implicated during an outbreak, the source of a contaminated ingredient may not be known or obvious
- ❑ Illustrative investigations show how helpful this information can be to prevention activities

## **Cyclosporiasis: *Parasita non grata***

- ❑ *Cyclospora cayetanensis*: causes diarrhea / fatigue
- ❑ 1996: 1,465 cases in 20 states, D.C., and Canada
  - At least 55 local outbreaks
- ❑ Epidemiologically linked to raspberries grown in Guatemala
  - New seasonal crop, recently introduced
  - Flown in fresh in the months of May-June
- ❑ CDC, FDA, Guatemalan authorities identified a few possible farm sources (river water used to mix fungicide sprays?)
  - Some changes made in production and processing

## Still more cyclosporiasis...

- ❑ **1997:** More outbreaks linked to Guatemalan raspberries
- ❑ Spring illness in children of workers identified as cyclosporiasis, and linked to drinking river water
- ❑ Additional steps taken to maximize hygiene, water quality
- ❑ **1998:** US ends Imports of raspberries – outbreaks end  
Canada continues imports and has outbreaks
- ❑ Reservoir remains unknown. Local wild animal or bird?
- ❑ Ecology of contamination unclear, but the Central American Highlands are the wrong place to grow raspberries.



## Jaundice and Green Onions - 2003

- ❑ 2003: 4 large outbreaks of hepatitis in
  - Tennessee
  - Georgia
  - North Carolina
  - Pennsylvania

} Three closely related strains of the virus, previously seen on the Texas-Mexico border
- ❑ In all, 1,023 cases reported.
- ❑ In Pennsylvania alone 124 cases hospitalized and 3 died after eating at one restaurant. About 15,000 gamma globulin shots administered.
- ❑ Illness in each state linked to eating green onions.

## Jaundice and Green Onions: Solved?

- ❑ Traceback: green onions traced back to several possible source farms in northern Mexico
  
- ❑ Onsite investigation by FDA, CDC, Mexico
  - Four likely source farms
  - Water used for rinsing and ice of questionable quality
  - Poor sanitation and handwashing facilities
  - Possibility that young children were in contact with harvested produce
  
- ❑ Solutions:
  - Failsafe potability of water used in packing shed
  - Keep young children away from harvested produce

## Salmonella Litchfield and imported cantaloupe - 2008

- ❑ 51 ill in 26 states, with onset between Jan 10 - March 10, 2008
- ❑ Most adults , wide age range, 59% female
- ❑ Epidemiological investigation: strongly associated with eating fresh cantaloupe.
- ❑ Traceback of cantaloupe to one large grower in Honduras
- ❑ FDA halts imports – steps taken to reduce risk

# Foodborne Disease Outbreaks from Imported Foods

## General Observations

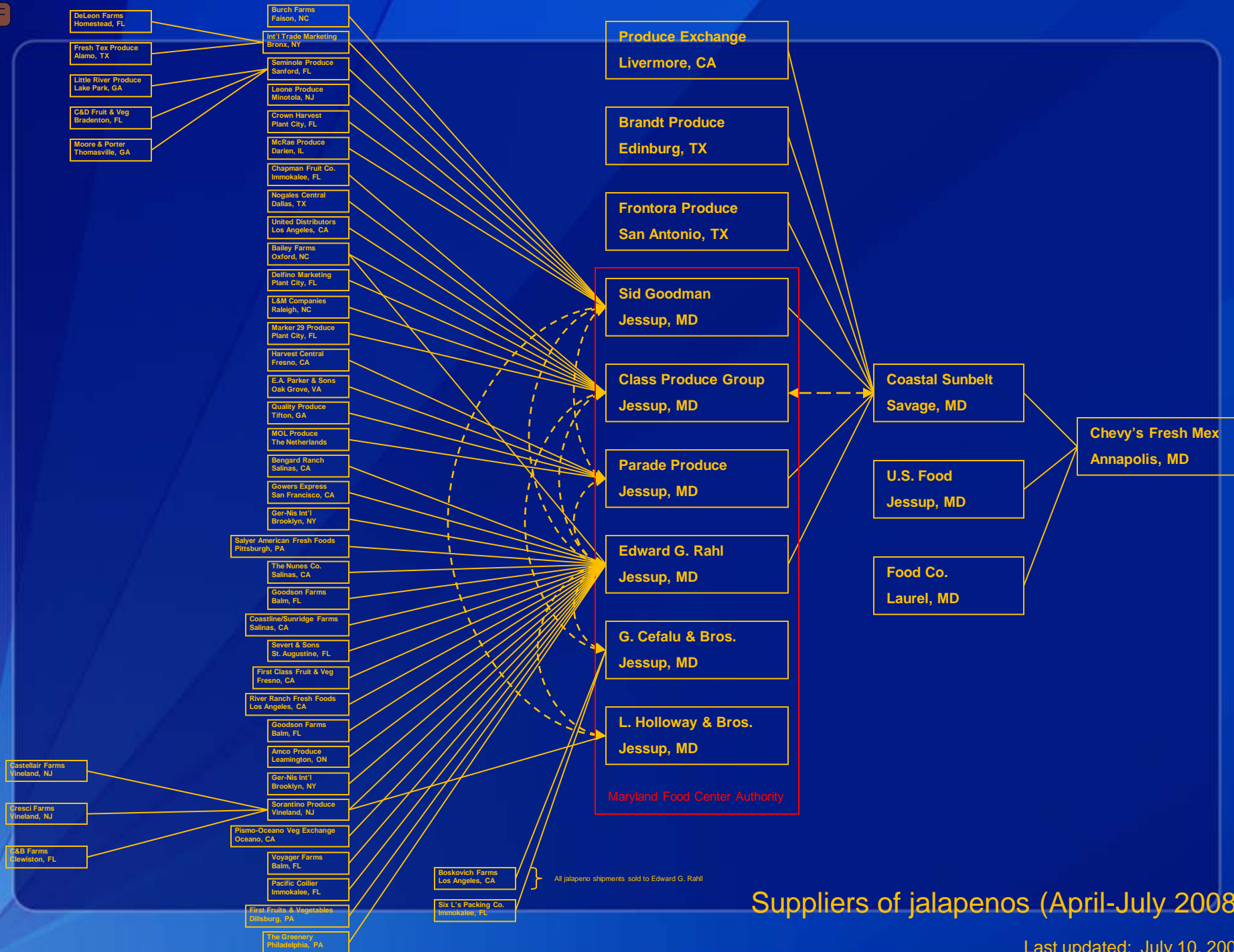
- ❑ Only a small number of outbreaks are recognized
- ❑ These “recognized outbreaks”:
  - Often involve produce eaten without cooking
  - Sometimes involve imported ingredients used in a domestically produced food
  - Are labor intensive and require multiple agencies
  - Require close international collaboration
  - Provide useful information

## Most of these outbreaks were multistate , but...

- ❑ **Of 5,696 foodborne outbreaks in 2004-2008:**
  - Only 68 or ~1% were multistate
  - 165 or ~3% were multicounty within a state
  - The rest or 96% were from a single county
- ❑ **Conclusion: Most outbreak data is local**

**So why don't health departments  
track implicated imported food items  
to their source?**

**After all, how hard can it be?...**



# Suppliers of jalapenos (April-July 2008)

Last updated: July 10, 2008

## Post script (P.S.) ...

### Whose responsibility is it to do tracebacks of implicated (imported) foods?

- ❑ Health Departments investigate outbreaks, but once a possible source is indentified, they refer to USDA or FDA for tracebacks
- ❑ Thus, it is not a health department responsibility and could be considered:
  - An unfunded mandate
  - Duplicative of federal responsibility
- ❑ Also, State/local Health Departments are on life support
  - 14,000 state job losses
  - 30,000 local job losses



## How do we get better import outbreak data?

- ❑ Clarify traceback responsibility
- ❑ Streamline traceback process
- ❑ Improve traceability mechanisms
- ❑ Improve sharing of traceback information
- ❑ Monitor international outbreak data
- ❑ Consider funding sites that are in place, FoodNet or Outbreak Sentinel sites, to help collect needed information

# Questions?

## CDC Food Safety Site:

<http://www.cdc.gov/foodsafety/>

**For more information please contact Centers for Disease Control and Prevention**

1600 Clifton Road NE, Atlanta, GA 30333

Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348

E-mail: [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov) Web: [www.cdc.gov](http://www.cdc.gov)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

National Center for Emerging and Zoonotic Infectious Diseases

Division of Foodborne, Waterborne, and Environmental Diseases

