

Outbreak Alert!

Trends in Foodborne Illness Outbreaks, 1990-2004



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Center for Science in the Public Interest
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History of Outbreak Alert

- CSPI started collecting data on FBI outbreaks in 1997 and organizing it by regulatory agency
- The data was not available from CDC without a FOIA with our continued requests, CDC started posting yearly line listing on the internet
- In 1999, we published the first line listing of FBI outbreaks organized by food category and by regulatory agency.

Unique Data

- ❖ CSPI database contains 5,000 outbreaks with both known food source and etiology which occurred in the U.S. between 1990-2004
- ❖ Outbreaks are grouped by food vehicle, and placed in one of 13 food categories
- ❖ Outbreak data was compiled from several different sources including the CDC, state and local health departments, and scientific journals
- ❖ A unique database of outbreaks linked to specific foods, as well as specific pathogens

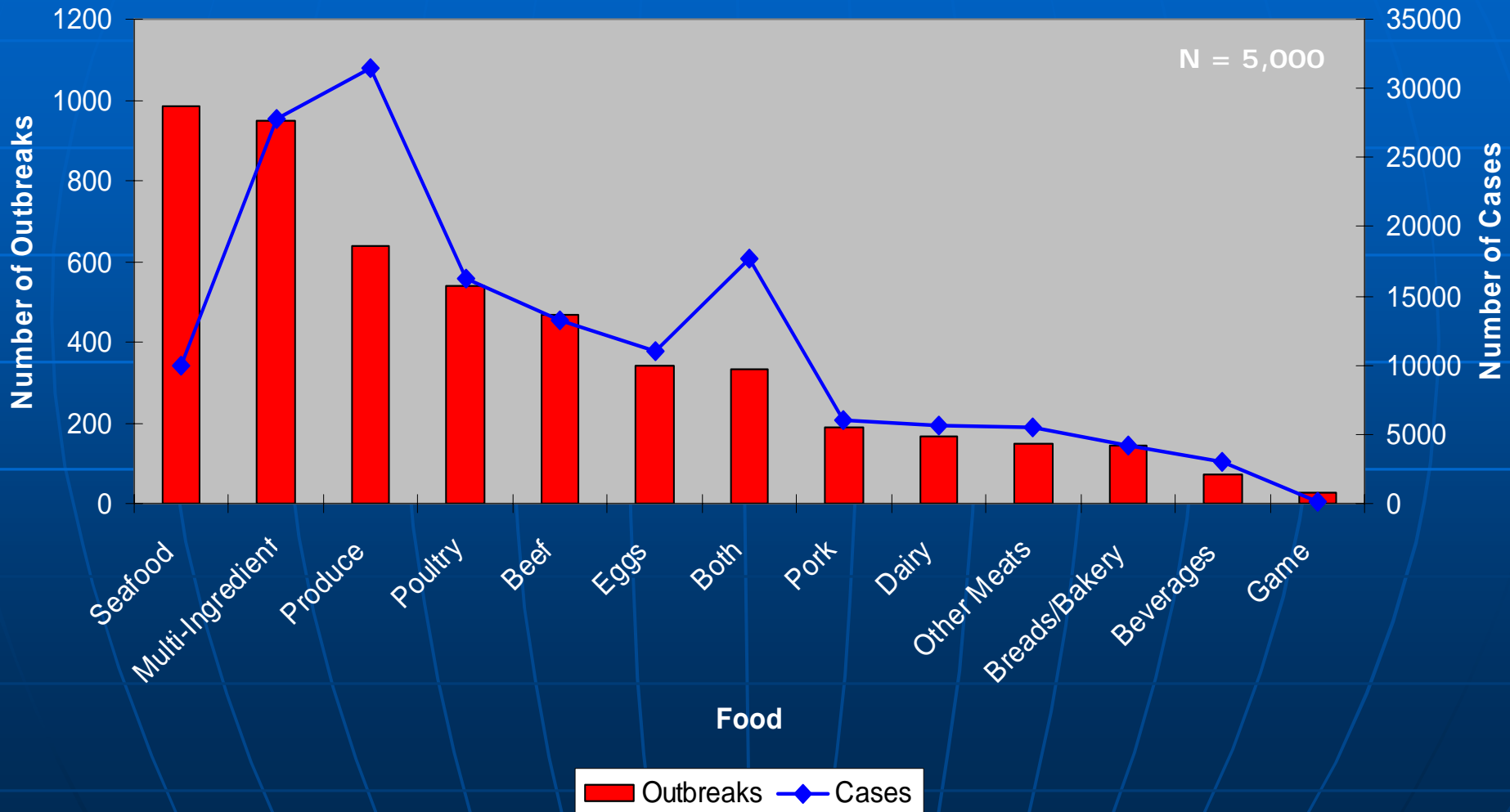
Outbreak Alert!

OUTBRK05 : Form

ID:	<input type="text" value="1"/>	Cases:	<input type="text" value="12"/>
Mth:	<input type="text" value="12"/>	States:	<input type="text" value="OH"/>
Year:	<input type="text" value="1990"/>	Initial Date:	<input type="text" value="12/1/1990"/>
Category:	<input type="text" value="Breads and Bakery"/>	Reference:	<input type="text" value="1"/>
Food:	<input type="text" value="Bakery"/>	Location:	<input type="text" value="Institution"/>
Agency:	<input type="text" value="FDA"/>	Comments:	<input type="text"/>
Final Date:	<input type="text"/>	Date Entered:	<input type="text" value="2002"/>
Vehicle:	<input type="text" value="Chocolate cake with icing"/>	Initials:	<input type="text"/>
Cause:	<input type="text" value="Bacillus"/>		
Etiology:	<input type="text" value="B. cereus"/>		

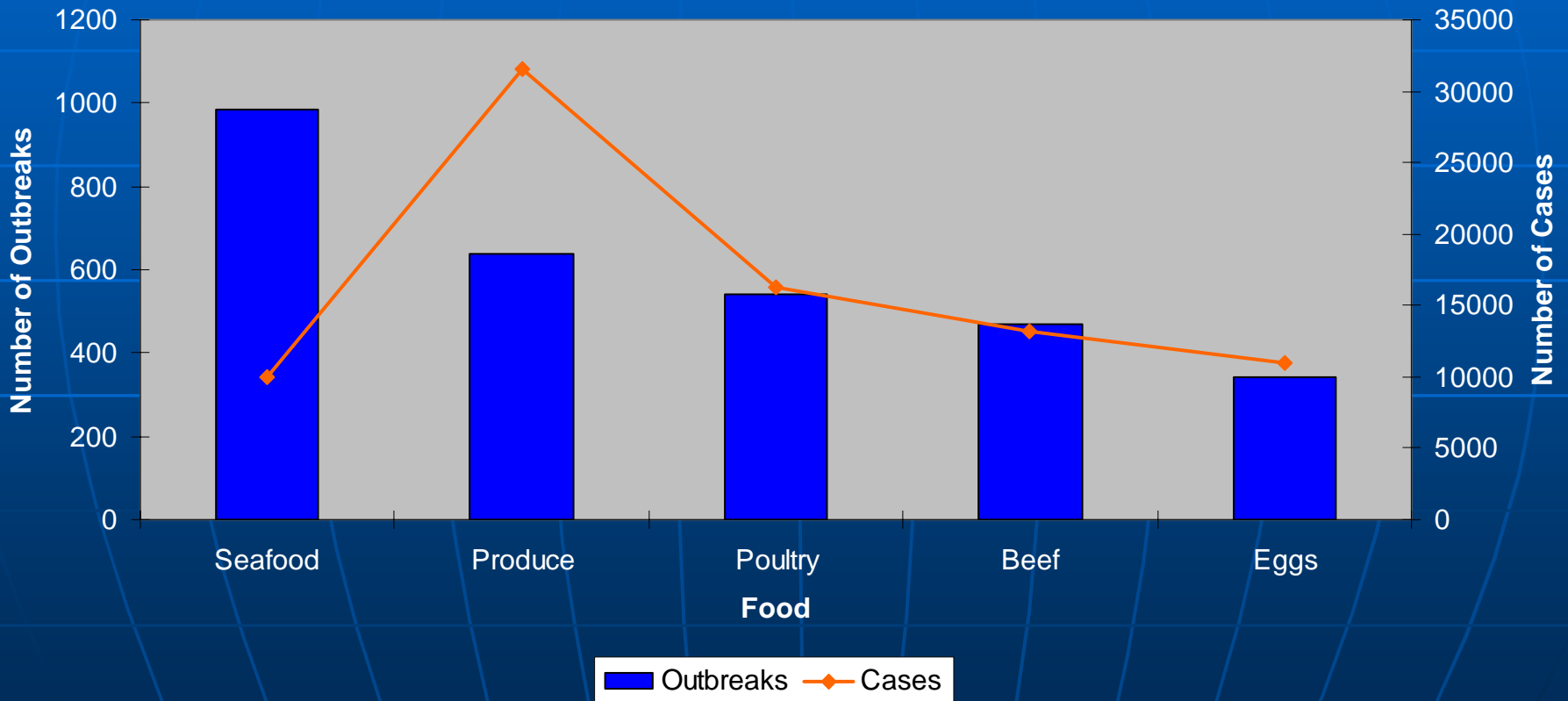
Record: of 4486

Number of Outbreaks By Food, 1990-2004



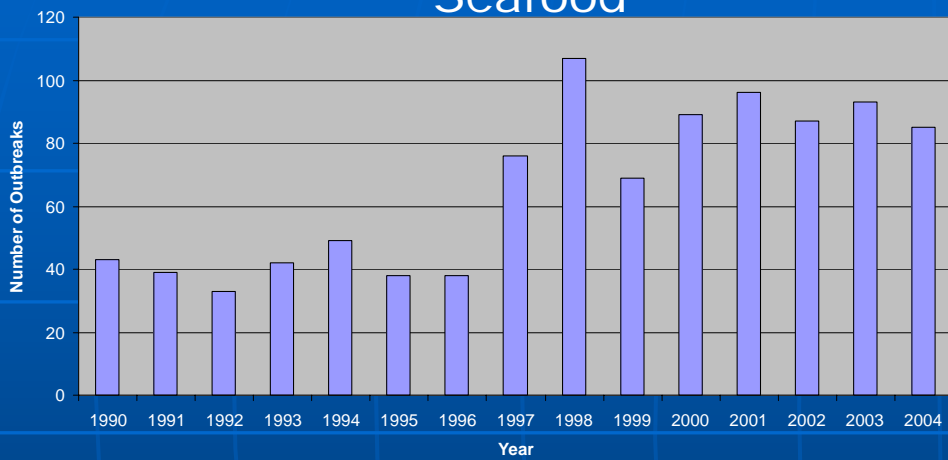
Source: *Outbreak Alert!* Center for Science in the Public Interest, 2006

Top Five Single-Food Vehicles of Outbreaks, 1990-2004

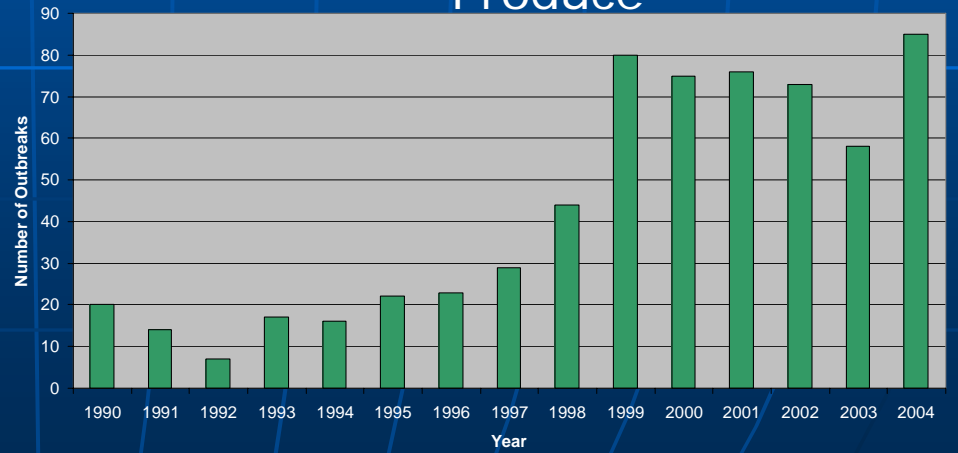


Top FDA Categories: Outbreaks by Year

Seafood

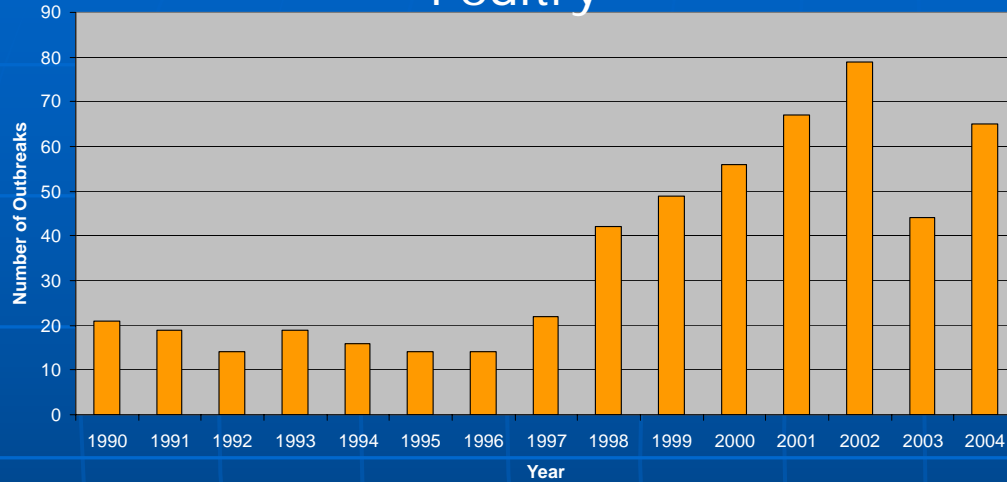


Produce

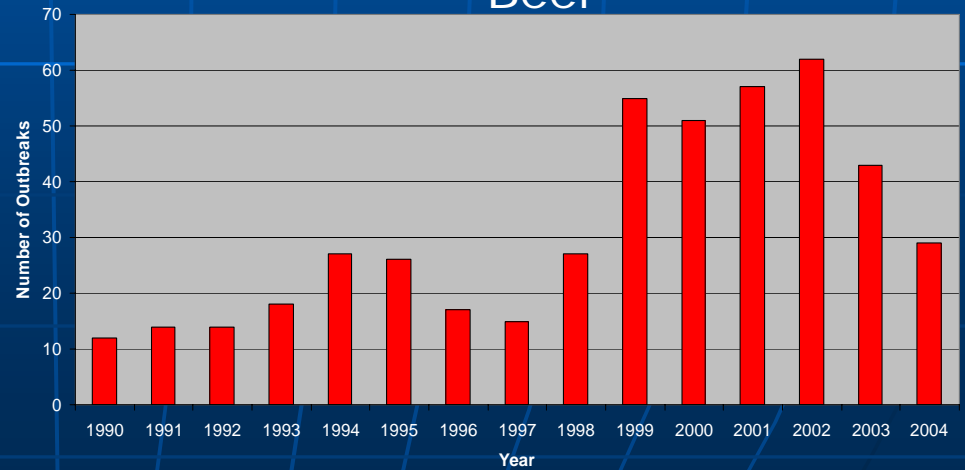


Top USDA Categories: Outbreaks by Year

Poultry



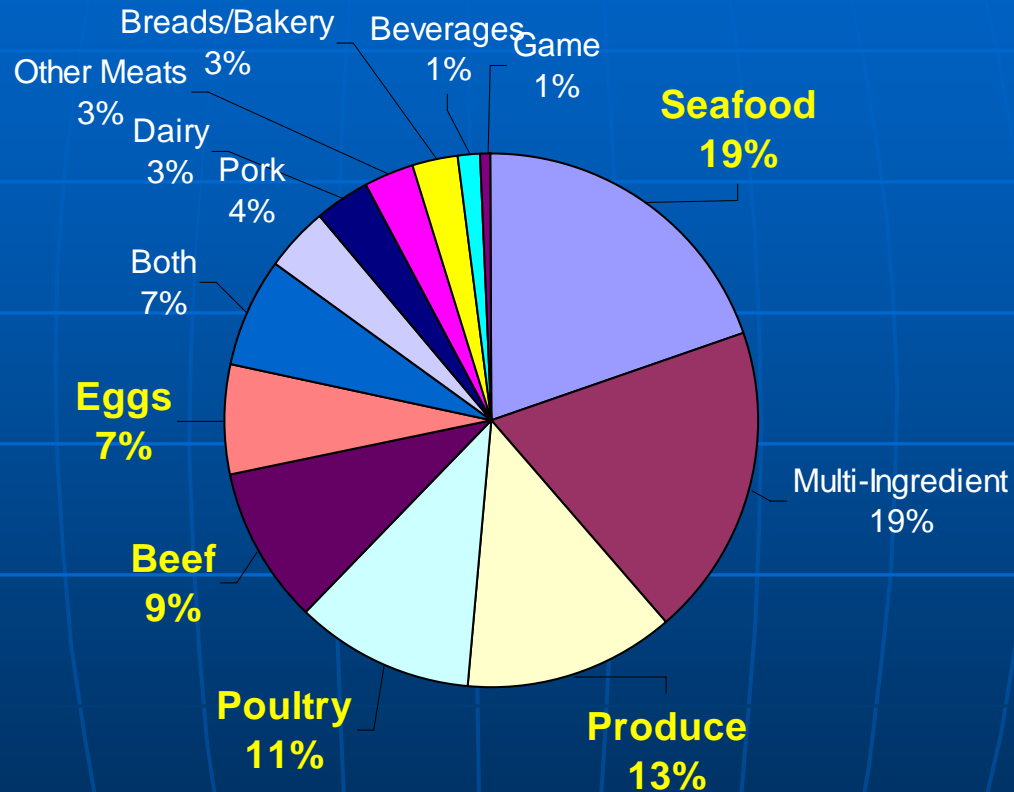
Beef



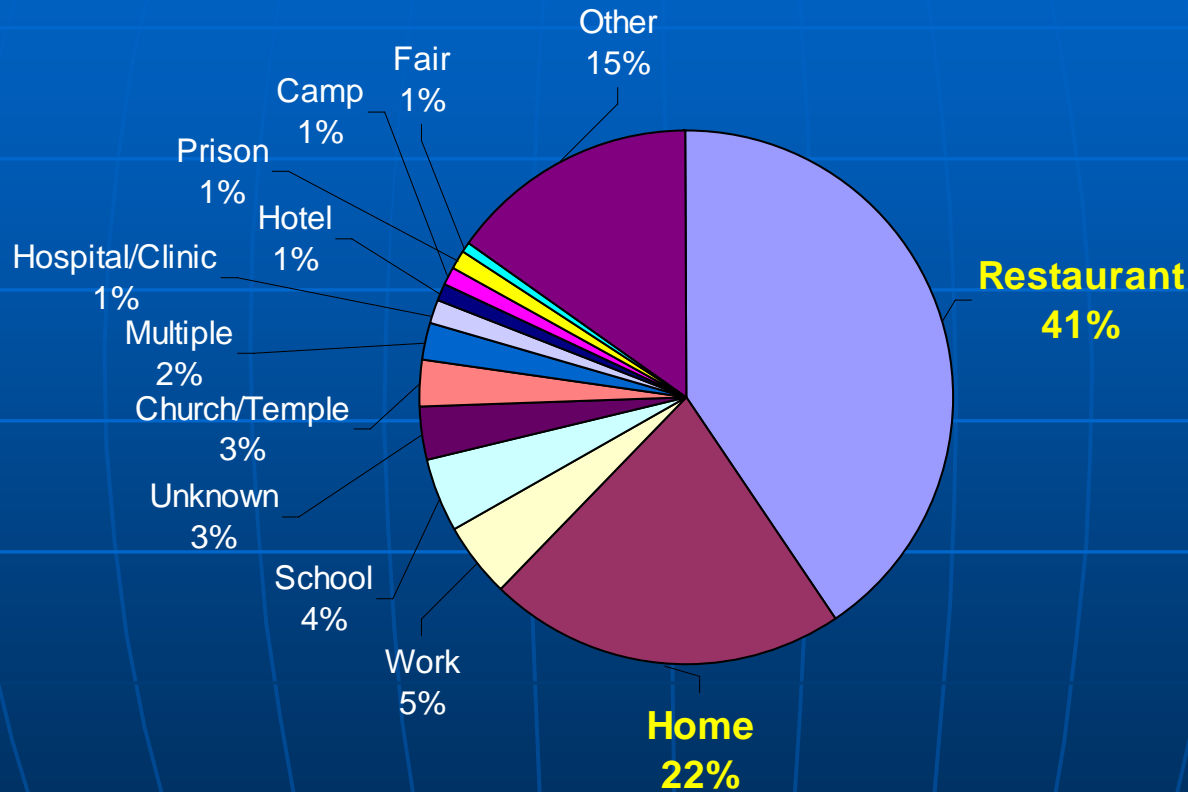
Database Applications

- ❖ Outbreak data with food attribution is critical to conduct a food/hazard assessment for HACCP
- ❖ Assesses food types most often linked to FBI outbreaks by location
- ❖ Assesses pathogens causing outbreaks by location and food type

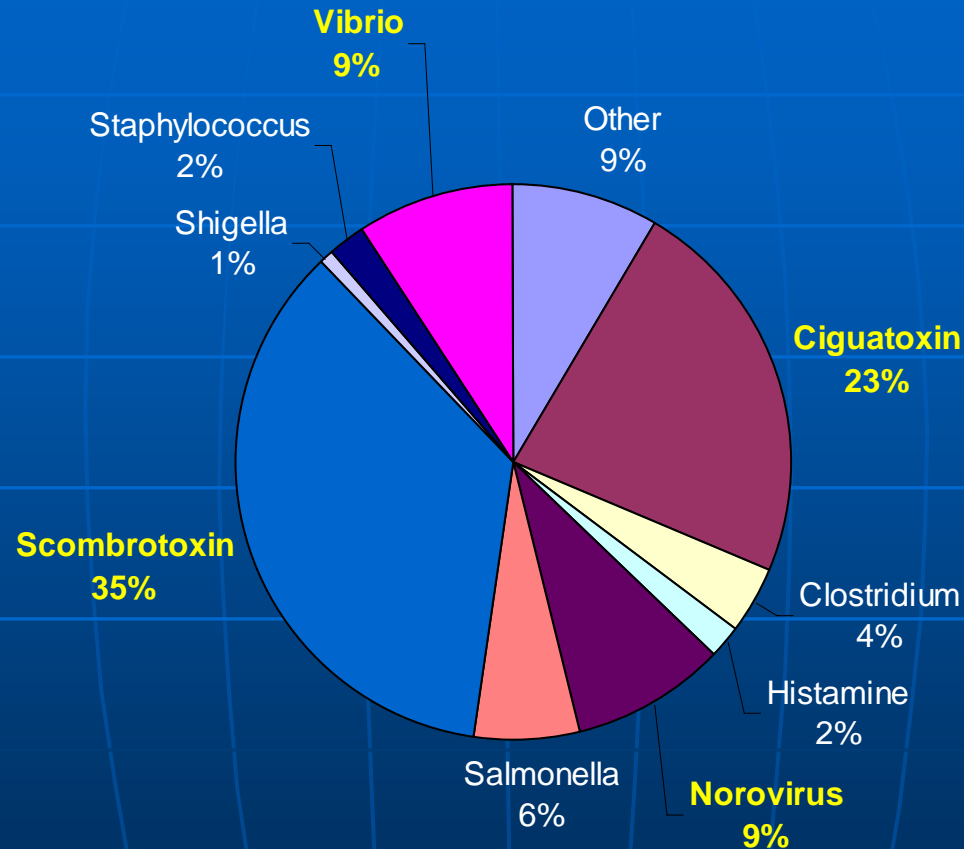
Outbreak by Vehicle, 1990-2004



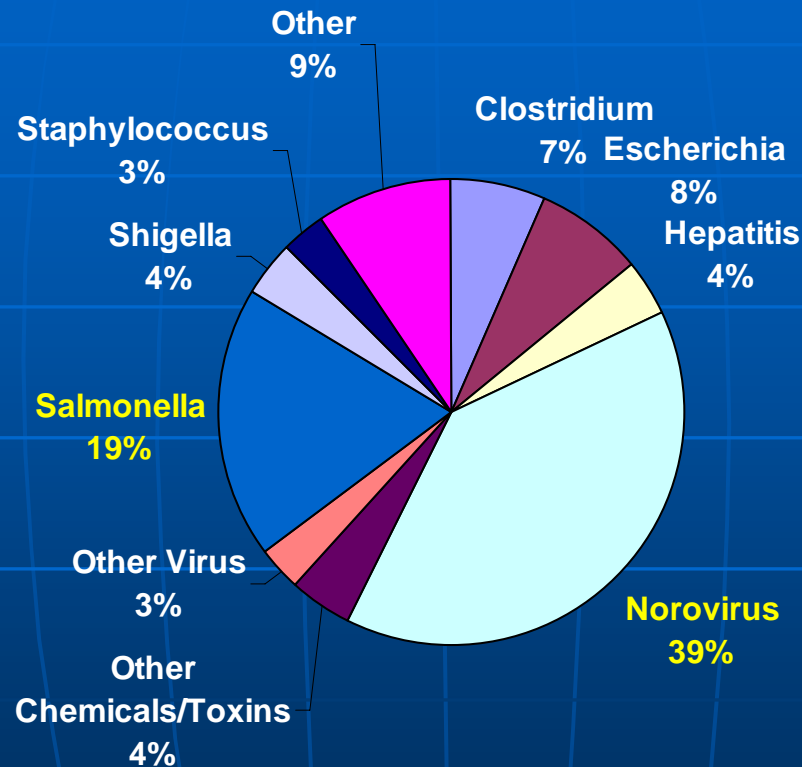
Outbreaks by Location, 1990-2004



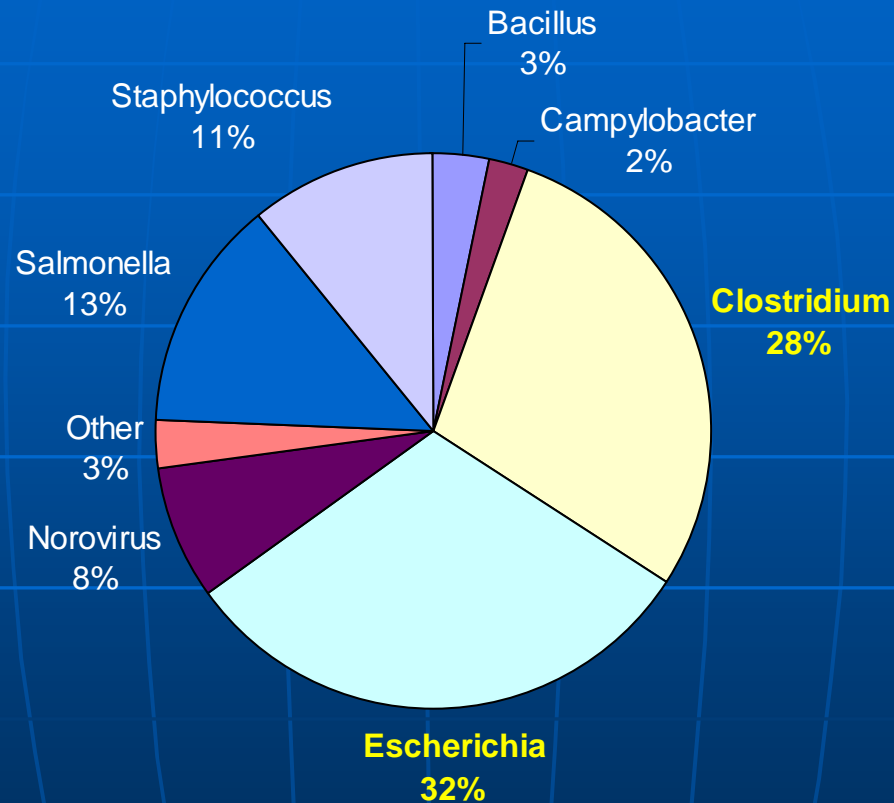
Causes of Seafood Outbreaks



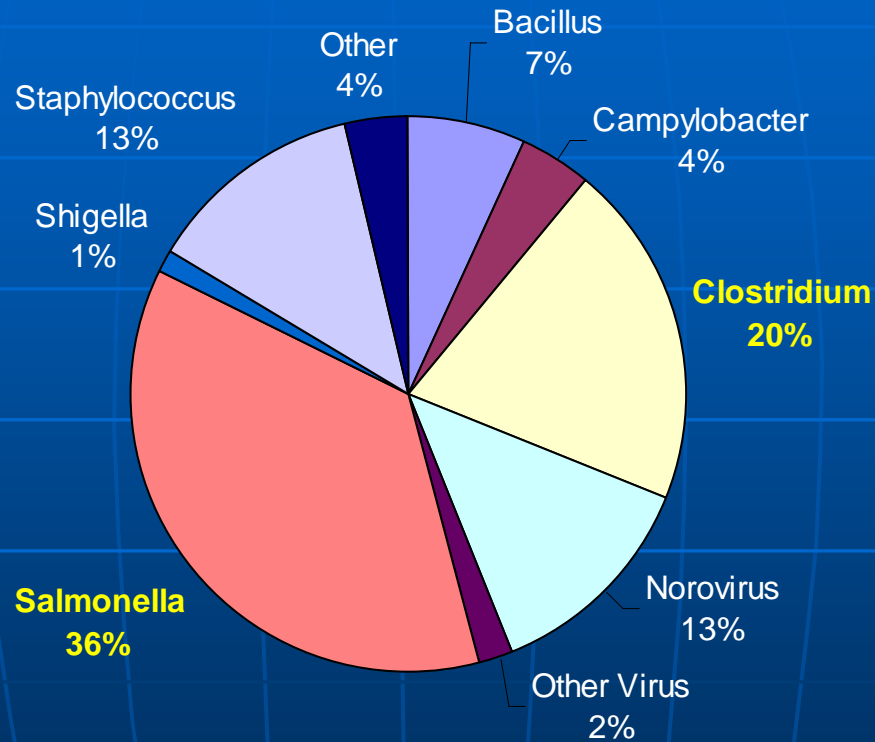
Causes of Produce Outbreaks



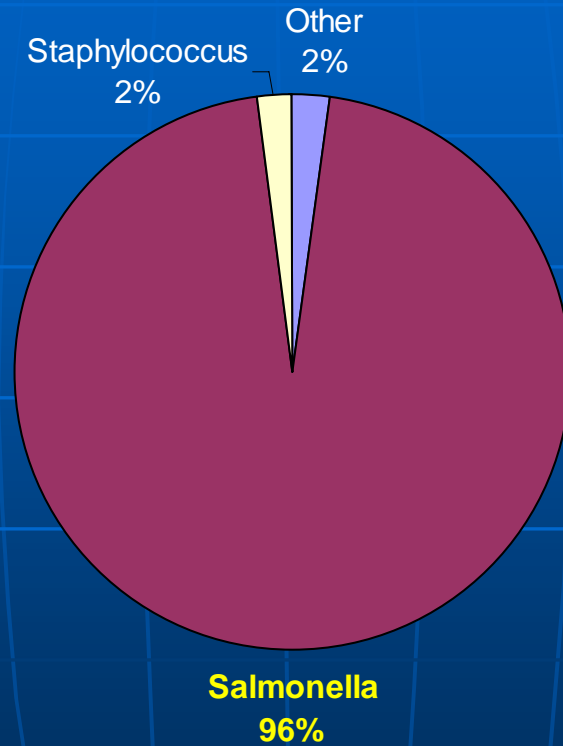
Causes of Beef Outbreaks



Causes of Poultry Outbreaks



Causes of Egg Outbreaks



Limitations of CSPI's database

- Represents a small percentage of actual foodborne illnesses
- Represents only about 25%-30% of reported foodborne outbreaks, others include unknown food of pathogen.
- Sporadic cases of foodborne illnesses are omitted, e.g. *Campylobacter* and *V. vulnificus* are underreported in the data.

Outbreak Alert!

- Useful for alerting consumers to food safety hazards, providing information for better food safety resource allocation, and identifying gaps in the U.S. outbreak reporting system.
- Food Protection Trends article _____ (date) describes methodology for developing the database.
- *Outbreak Alert!* Version 8 is scheduled to be released in Fall 2006. Available at:
<http://www.cspinet.org/foodsafety/>

Conclusion

- U.S. surveillance programs need to be more integrated and coordinated.
- A single, unified food safety agency would strengthen the U.S. food safety system and give a single voice to food safety oversight and policy in the U.S.

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