# The Silent Storm

Food Safety Issue: Foodborne Illnesses Among Us

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California State University, Northridge Contemporary Issues in Food & Nutrition Dr. Lisagor

## How many of you have had the flu?

## How many of you have had food poisoning?

Do you know the differences in symptoms?

Flu Common **Fever Aching Muscles** Chills **Headache** Fatigue Rare Nausea Vomiting Diarrhea

VS

## Food Poisonin

For Nausea Vomiting Diarrhea Fatigue Abdominal Pain and Cramps

\*different contaminants may have other symptoms

## FOOD BORNE ILLNESS

#### Defined as....

"...infections or irritations of the gastrointestinal

(GI) tract caused by food or beverages that

contain harmful bacteria, parasites, viruses, or

chemicals." (NIH)



## WHY IS ALL THIS IMPORTANT TO YOU?

"The Meal Manger"

# The Department of **FCS** strives...

"To enhance the quality of life for individuals,

families, and communities through education,

research, creative endeavors, and public

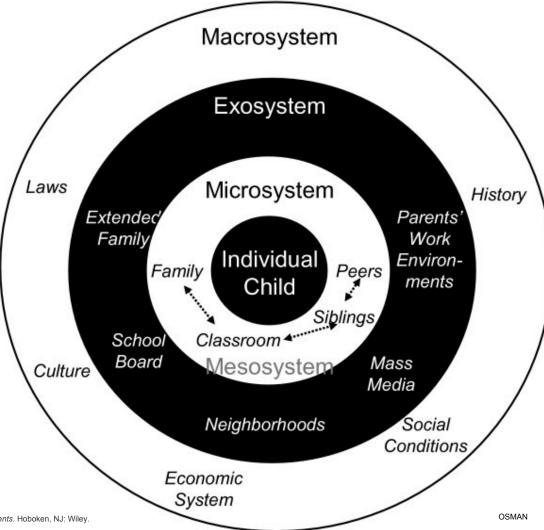
service."



Bronfenbrenner's Human Ecological Theory

The **Human Ecological Theory** is the foundation of our department that addresses how the individual both effects and is affected by the systems surrounding the individual.

As *"Meal Manager's"*, it is our duty to educate ourselves on potential issues that pose a threat to us, our families and communities; Look to elected officials.



Hauser-Cram, P., Nugent, J. K., Theis, K. M., & Travers, J. F. (2014). *The development of children and adolescents*. Hoboken, NJ: Wiley. http://brianlhoward.blogspot.com/2009/12/ecological-systems-and-our-mission-for.html



**FDA-** 1906

#### **"FSIS** enhances public health and well-being by protecting the public from foodborne illness and ensuring that the nation's meat, poultry and egg products are safe, wholesome, and correctly packaged." (USDA)

#### CDC- 1946 "CDC's mission, simply put, is to keep Americans safe and healthy where they work, live and

**GOVERNMENTAL REGULATION** 

play" (CDC)

CENTERS FOR DISEASE

"The **FDA** is responsible for protecting the public health by ensuring the safety, efficacy, and security of human and veterinary drugs, biological products, and medical devices; and by ensuring the safety of our nation's food supply, cosmetics, and products that emit radiation" (FDA)

#### " **HACCP** provides a framework for implementing preventive measures where the failure to control a critical point of control can lead to an increased food safety risk." (NACMCF, 1992)

## **НАССР-** 1970 НАССР

HAZARD ANALYSIS CRITICAL CONTROL POINT

# 42%

"Reported... Foodborne outbreaks that occurred between 1975 and 1998 in the united states"(Kadariya, p.3) "They define an

#### **Outbreak** as

"the occurrence of two or more cases of a similar illness resulting from the **ingestion of a** common food (CDC 2000) (Yasuda, p 203)



6 Million

**325,000** Hospitalizations

500

**Deaths**" linked directly to Food Borne illness in the United States. (Kadariya, p.1)

"The CDC

**IMPACTED** 

"The

covers outbreaks but **not isolated** single cases (Yasuda, p 203)

Kadariya, J., Smith, T. C., & Thapaliya, D. (2014). Staphylococcus aureus and Staphylococcal Food-Borne Disease: An Ongoing Challenge in Public Health. *Biomed Research International*, 20141-9. doi:10.1155/2014/827965

## **Types of Contaminants**

CAUTION

## **Physical Contaminants**





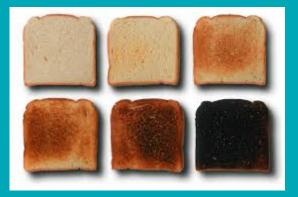






### **Chemical Contaminants**

Acrylamides –a substance that can be toxic and potentially cancerous. Found in some foods when they are cooked at temperatures above 120 degrees' Celsius. Known for causing cancers in rats but there is not enough sufficient evidence of it causing cancer in humans yet.





Benzene, is an organic compound which can cause leukemia and other blood cancers. Benzene has been showing up in drink products which is raising concerns of potential rise in cancer

Melamine is a chemical that is organic based and is usually used in plastics, dishware and adhesives. Has been found in powder infant formula and dog food. There has been no evidence that it has caused harm to humans but it has been proven to cause death in animals.



#### **Biological Contaminants**



A bacteria that is found mostly in beef but also seen in unpasteurized milk, alfalfa, sprouts and contaminated water. It is usually contracted eating undercooked meat contaminated with animal feces during slaughtering.



A bacteria that is found in raw or contaminated meats, poultry, milk and eggs. Can be spread through unclean surfaces where contaminated food was cut and knives.



A bacteria found in hot dogs, packaged lunch meats, cheeses and unwashed produce. It is usually spread through contaminated soil and water. Listeria has more flu like symptoms than E-coli and Salmonella



# What is a Recall?

"A voluntary action by a manufacturer or distributor to protect the public from products that may cause health problems or possible death"

## How Does a Recall Happen?

Discovery of an organism in a product which may make

Discovery of a potential allergen in a product

Mislabeling or misbranding of food.

consumers sick

https://www.foodsafety.gov/recalls/

## **Past Recalls**







## **Current Recalls**

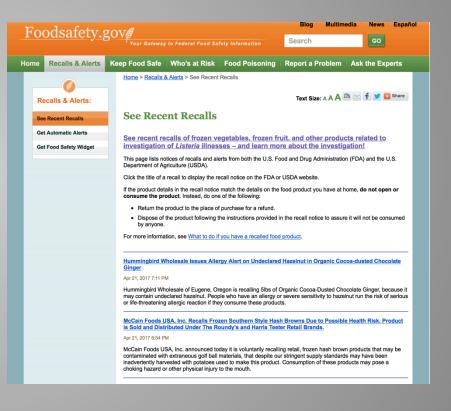






## How to Stay Informed

	A U.S. FOOD & DRUG							lex   Follow FDA   En Español		
	MINISTRATIC					Search FDA				
	Food Drugs	Medical Devices	Radiation-Emitting Pr	oducts Vaccines, Blood	& Biologics	Animal & Veterinary	Cosmetics	Tobacco Product		
Safety										
Home > Sa	afety > Recalls, Mar	ket Withdrawals, & S	Safety Alerts							
Recal	ls Mark	ot With	drawals	& Safety A	lorte		Spotlight			
f BHARE   Y TWEET   IN LINCEDN   IP PINT   IMAGE   IMAGE   IP PINT     he list below provides information gathered from press releases and other public notices about certain recalls of DA-regulated products. Not all recalls have press releases or are posted on this page. See Additional information bout recalls for a more complete listing.     For recall notices older than 60 days, see the Recall and Safety Alerts Archive.     Image: Sign up to receive Recalls, Market Withdrawals and Safety Alerts.							DKH Cheese Recalls (Listeria monocytogenes contamination Frozen vegetable products (Listeria monocytogenes)/CRF related Recalls Undeclared Peanut (from Curnin Ingredient) Recalls Enforcement Reports Recalls of Raw (Fresh and Fresh Frozen) cysters, clams, mussels, and whole and noe-or			
		ecalis, Market v					scallops			
Filter by Keyword(s):			Filter by Recall Type:		\$ Clea		Industry Resources			
			7.01					or Industry: Produc luding Removals tions		
Date ¢	Brand Name \$	Proc	luct Description	Reason/ Problem	Coi	mpany \$	Industry Guidance: Information on Recalls of FDA Regulated Products ORA District and Headquartere			
04/21/2017	Hummingbird		anic Cocoa-Dusted colate Ginger	Undeclared Hazelnuts		mmingbird olesale				
04/21/2017	Roundy's Brand an Teeter Brand	d Harris Froz	en hash browns	May be contaminated with extraneous golf ball materials.		Cain Foods A, Inc.	Recall Coordinators Industry Notices and Guidance Documents			
04/21/2017			eno Flavored Kettle Salmonella ed Potato Chips		Frit	ito-Lay				
04/21/2017	Hospira Inc	2504	Doxtropa Injustion	Particulato matter /huma	n hair) Ha	onira Ino	Consumer Re	sources		



Awareness

Hygiene

## Recommendations

**Check Expiration Dates** 

**Clean Food Before Cooking** 

Let Your Voice Be Heard!

Get Ready to Play...

# DON'T CONTAMINATE

# How to Play

In an effort to educated you about proper **Food Safety Practices**, you and your groups will:

- 1. Divide in 3 Groups (Home, School, Restaurant)
- 2. You have 1 Minutes to....
- 3. Collaborate....
- 4. Identify...



## References

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