

**Environmental Health Specialists Network (EHS-Net)**

**2<sup>nd</sup> Annual National Foodborne Epidemiologists Meeting**

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## Presentation Outline

- EHS-Net Background
- EHS-Net Studies
- Examples of Study Findings
- How Can This Information Be Used?

## EHS-Net Background Goals


- To identify environmental antecedents to illness and disease outbreaks
- To translate findings into improved prevention efforts using a systems approach
- To offer training opportunities to current and future environmental health specialists
- To strengthen collaboration among epidemiology, laboratory, and food protection programs

## EHS-Net Background Partners

- EHS-Net is a partnership among
  - ◆ Food and Drug Administration
  - ◆ U.S. Department of Agriculture
  - ◆ Environmental Protection Agency
  - ◆ Centers for Disease Control and Prevention
  - ◆ Nine states

## EHS-Net Background State Partners

- California
- Colorado
- Connecticut
- Georgia
- Minnesota
- New York
- Oregon
- Tennessee



Rhode Island and Iowa joined EHS-Net in 2005

## EHS-Net Studies

- Restaurants
  - ◆ Outbreak and Non Outbreak Restaurants
  - ◆ Food Handling Policies / Practices For Specific Foods (example: eggs & tomatoes)
  - ◆ Workers / Manager
- Environmental Health Specialists
- General Public

## Examples Of Findings

### Food Workers and Managers

#### Ill workers and certified kitchen managers:

- 5% of food workers reported working while sick with vomiting or diarrhea
- Ill workers are a major contributing factor to outbreaks
- Certified kitchen managers were associated with a reduced risk for an outbreak

### Food Workers and Managers

#### Hand washing:

- 23% of food workers reported they did not always wash their hands between handling raw meat and ready to eat foods
- Hand washing only occurred in 27% of activities where hand washing was appropriate

### Food Workers and Managers

#### Hand washing:

- Of those who attempted hand washing, 81% did so correctly
- Hands were washed only 22% of the time after handling raw animal products
- There were 6 activities per hour requiring a hand wash

### Food Workers and Managers

#### Glove use:

- 33% of food service workers reported they did not always change gloves between handling raw meat and ready-to-eat foods
- Glove use—a positive or negative factor in safe food preparation practices?

### Food Workers and Managers

#### Glove use:

- Gloves were used to some extent across all activity types
- Glove removal occurred in only 26% of activities when it was appropriate

## Food Workers and Managers

### Glove use:

- Hand washing occurred after 24% of activities in which gloves were not worn and after 11% of activities in which gloves were worn
- Findings lend support to contention that glove use may reduce appropriate hand washing

## Food Workers and Managers

### Positive factors impacting practice:

- Managers and co-workers who emphasized food safety
- Worker characteristics, such as age and experience

## Food Workers and Managers

### Negative factors impacting practice:

- Time pressure
- Structural environment

## How Can This Information Be Used?

### Improve implementation of safe practices:

- Certified kitchen managers
- Ill workers—policy implementation
- Hand washing—process engineering
- Glove use

## How Can This Information Be Used?


### Food safety program management:

- Certified kitchen managers—regulation
- Linking prevention measures with impact on the occurrence of outbreaks—it can be done


## Future Focus

### •Improve Environmental Evaluations In Food Borne Outbreaks

- Characterization Of Outbreak Establishments
- Improve Contributing Factor Identification and Reporting



## Acknowledgments



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