

# Food Safety *and* Food Security

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Minnesota Department of Health  
February 24, 2005  
Dianne Mandernach,  
Commissioner

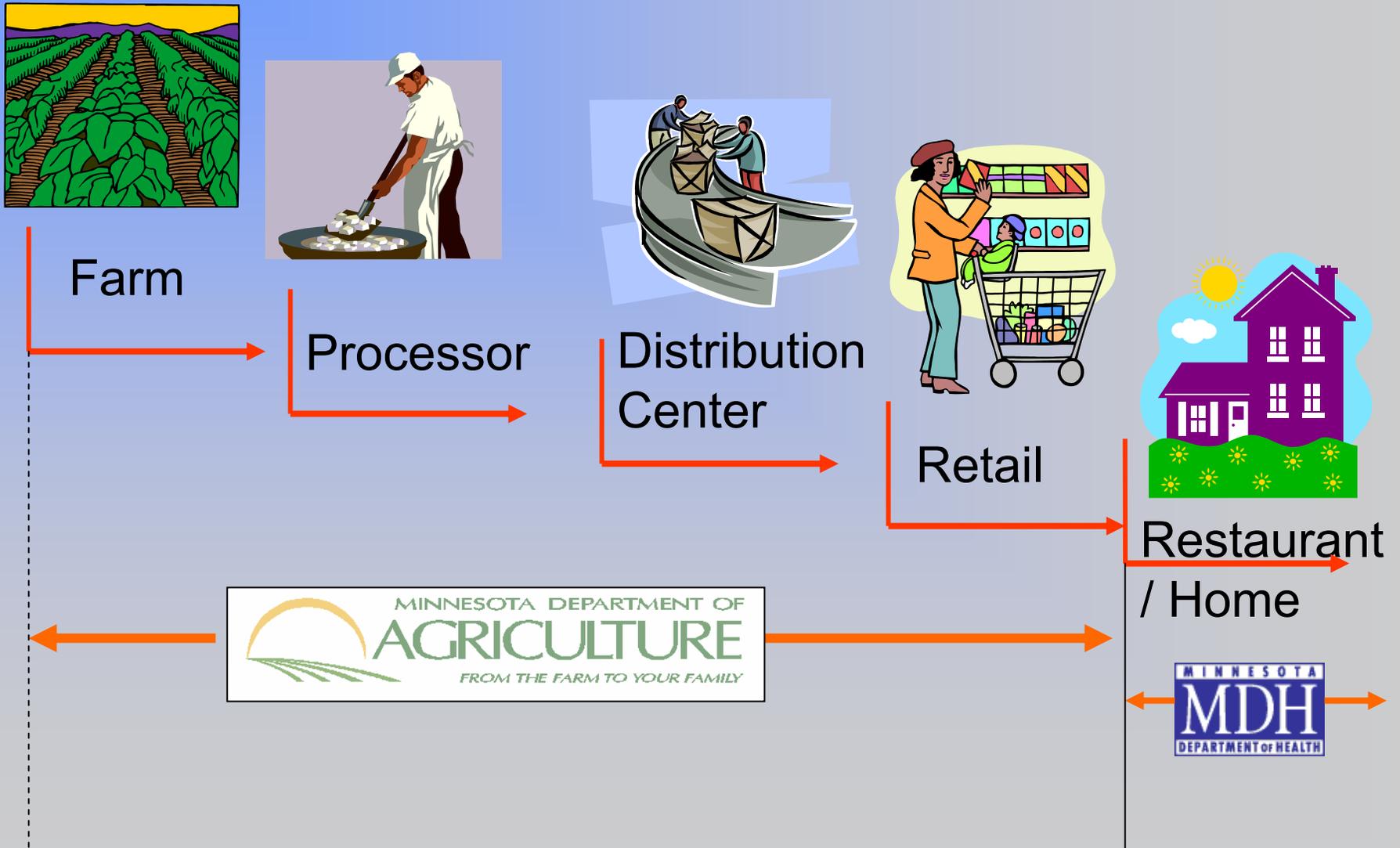
# Is it safe?

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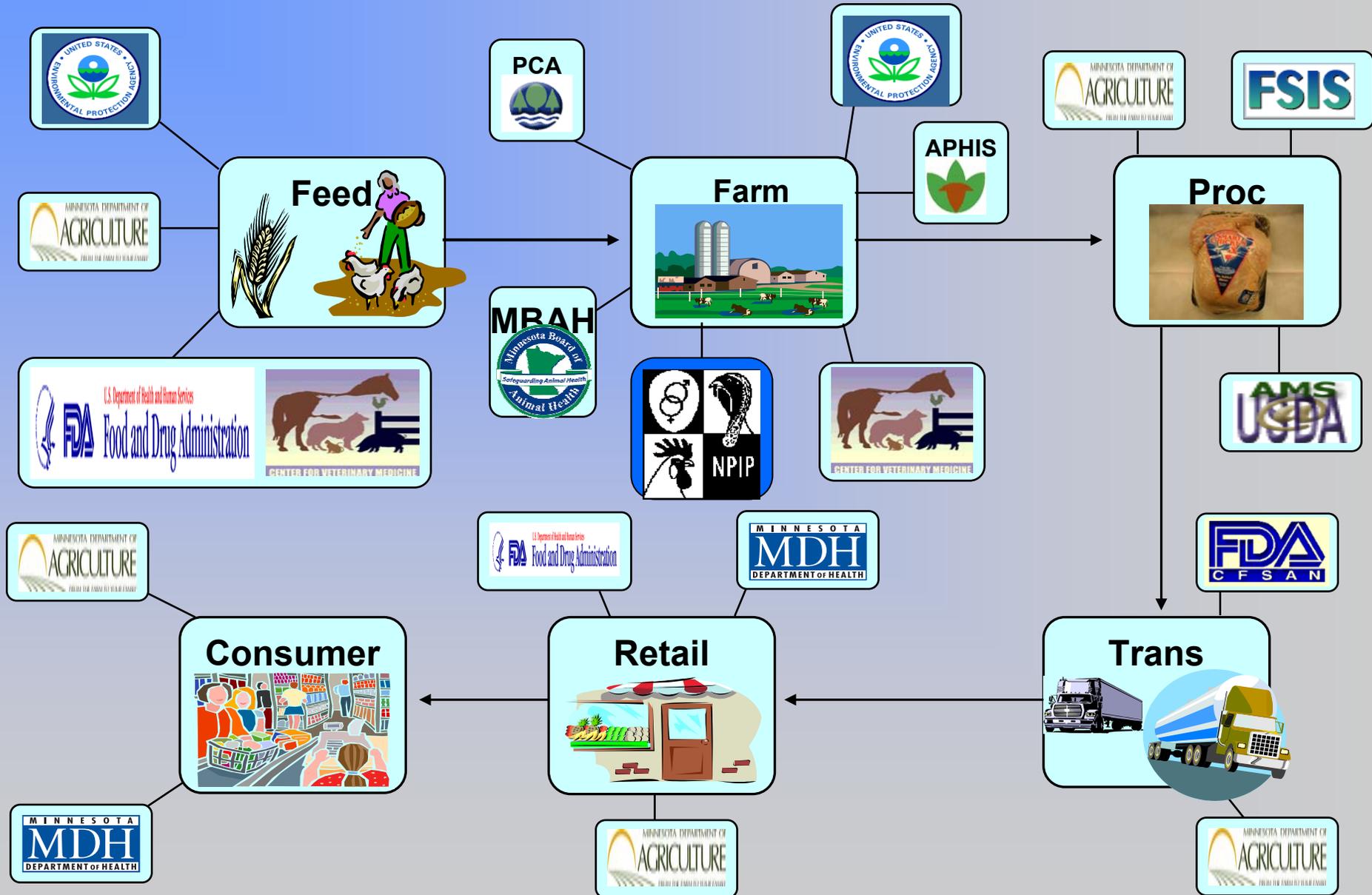
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- ★ How do you know the food you just ate was safe?
- ★ How do you know the water in your glass is safe to drink?
- ★ We all take our food safety for granted.

# What the Food Safety system looks like from Farm to Table



# Minnesota Food Safety network (Poultry)



# “Food Safety” vs. “Food Security”

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- ★ a question of terminology
- ★ “food safety” is part of our public health vocabulary
- ★ we all have a good idea what it means
- ★ it covers a range of activities

# Food Safety includes....

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## ★ Preventing foodborne illness

- protecting crops and food animals from contaminants and pathogens
- Preventing contamination/adulteration during processing and distribution
- regulating and inspecting food establishments (enforcing food codes)
- educating about food handling at hygiene (in the home and elsewhere)

# Food Safety includes....

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- ★ Identifying & responding to outbreaks
    - effective surveillance for foodborne illness
    - using genetic fingerprinting, other lab techniques to identify or rule out outbreaks
    - sharing of information through vehicles like PulseNet
    - identifying and addressing the sources of foodborne illness (outbreak investigation – closing the loop)

# Food Safety includes....

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- ★ Addressing emerging foodborne disease threats (e.g. – BSE in cattle)

# In short, food safety is....

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- ★ everything we do to protect the food supply
- ★ a basic function of public health

# On the other hand....

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- ★ “Food Security” is
  - a relatively new term
  - not always used consistently
  - not clearly distinguished from “food safety”

# A suggested definition....

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## ★ “Food Security”

- is a *part* of the broader food safety picture
- deals primarily with *intentional* efforts to harm or compromise our food supply

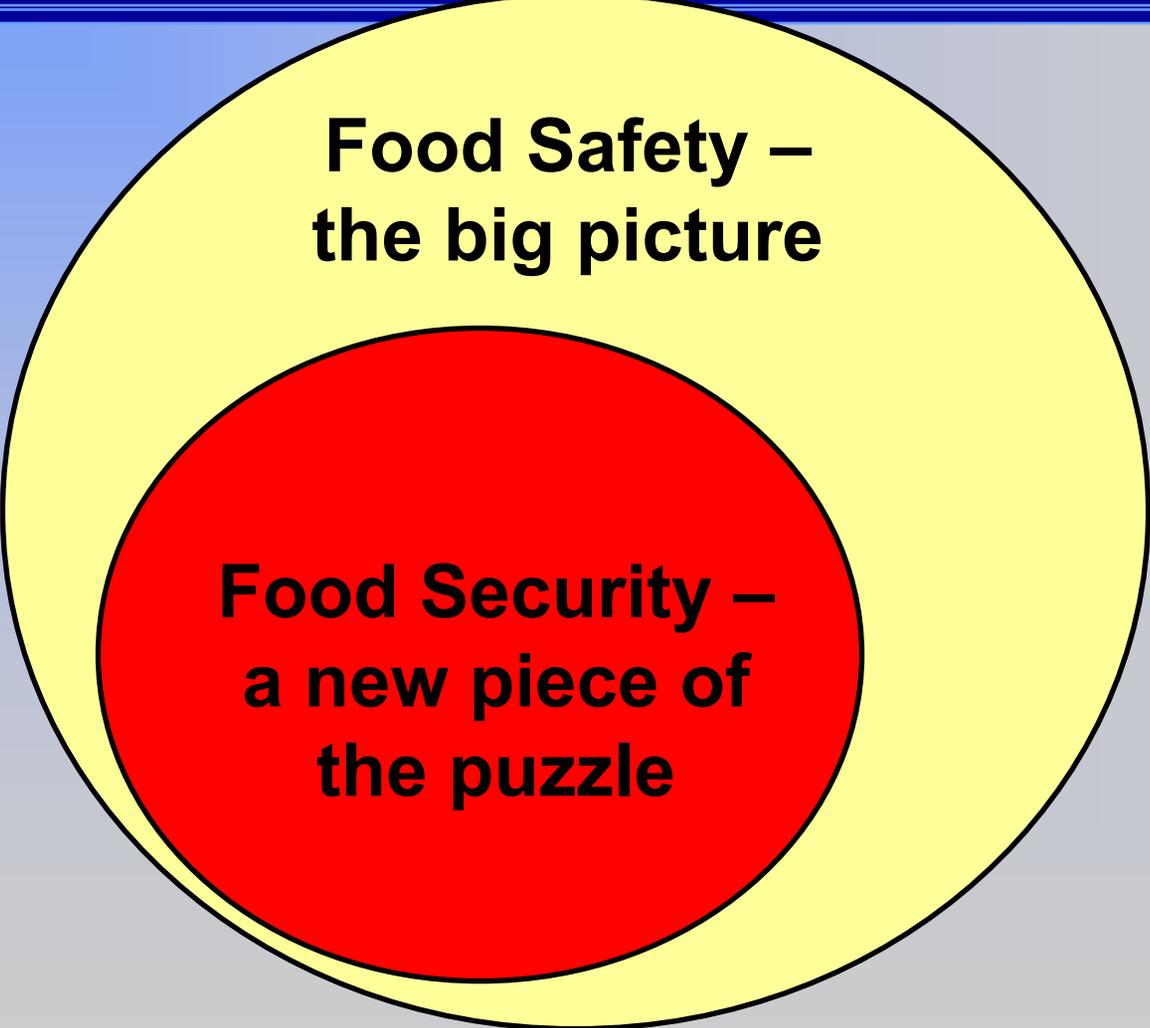
# Food Safety vs. Food Security

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**Food Safety –  
the big picture**

# Food Safety vs. Food Security

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**Food Safety –  
the big picture**

**Food Security –  
a new piece of  
the puzzle**

# But is it so new?

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- ★ We didn't think much about food security before 9/11
- ★ In fact, our food supply has always been vulnerable to mischief
- ★ First bioterrorism incident in modern era involved *foodborne disease*

# The Rajneeshee cult

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- ★ Oregon – mid-1980s
- ★ Spiked restaurant salad bars with salmonella
- ★ Objective was to influence local election
- ★ Had no effect on election – but caused widespread disease

# *We are vulnerable*

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- ★ An attack on our food supply could take many forms
  - targeting of crops and food animals – using agents like soy bean rust or foot-and-mouth (severe economic impact)
  - contamination of food with pathogens or toxic materials – anywhere between the farm and the table

# Human health and economic impacts

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## ★ Potential for widespread illness-unprecedented numbers

- 76 million cases of “natural” food borne illness in US each year
  - 325,000 hospitalized
  - 5,000 died (CDC)

- ## ★ Costs would be measured in billions of \$
- \$6.9 billion/year for 5 pathogens (USDA/ERS 2000)
  - Mars candy hoax cost \$4.5 million loss

# What are we doing?

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- ★ A look at some state/federal initiatives:
  - Government Coordinating Council
  - ASTHO; Food Safety and Security Taskforce
  - Other states
  - Multistate Partnership for Agrosecurity
  - Minnesota

# Government Coordinating Council (GCC)

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- ★ Government Food and Agriculture Sector GCC works with Private Sector entities
- ★ Part of National Infrastructure Protection Plan (NIPP) of Homeland Security
  - Identify critical infrastructure, assess vulnerabilities, prioritize high risk assets, implement protective measures, measure effectiveness
- ★ Food and Agriculture Sector -- Homeland Security Information Network (HSIN-F&A)\

# HSIN is designed to

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- Improve and streamline communications and information sharing
- Provide access to resources
- Enhance collaboration
- Provide incident and infrastructure monitoring capabilities
  - Pilot testing scheduled

# Kentucky DPH's food security information sheet

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- ★ Distributed to all food establishments holding a food permit
- ★ Information, tips for increasing overall food security and managers' and employees FS awareness
  - Lock doors to prevent unauthorized entry
  - Restrict unauthorized personnel in food production areas (kitchen)
- ★ The sheet also provided space for local emergency phone numbers to be written

# North Carolina

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- ★ NC DHHS participates in NC Food Security and Safety Coalition
  - Coalition has conducted series of tabletop exercises on food security issues
    - **“Dark Pantry”**

# Dark Pantry

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## ★ Designed to:

- Exercise state, federal, local agencies' and industry's
  - Response to
  - Crisis management of
  - Consequence mitigation of
- A lethal contamination of the state's food supply

# Dark Pantry--Food Security Problems

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- Vulnerabilities within the food chain not fully understood
- Known vulnerabilities not tied to current threat reduction efforts
- Threat reduction effort not tied to National Threat Alert Schemes
- Intelligence assessment and industry threat detection not coordinated or integrated
- Response and mitigation plans not coordinated with vulnerability or threat/intelligence assessments

# Multi-State Partnership for Agriculture Security

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- ★ Collaboration of several state departments of agriculture
- ★ IA, MN, WI, SD, MI, KS, NE, IL
- ★ Received \$2 million for joint projects
  - Risk communication
  - Response plan template and assessment
  - Assessment of animal and plant disease surveillance

# What is Minnesota doing?

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- ★ Multifaceted approach to food safety, food security
  - MN Dept. of Agriculture
  - MN Dept. of Health
    - Food-borne illness surveillance
      - Epidemiologists+Public Health Lab+clinical labs
    - EH Food Service regulation/education
  - Board of Animal Health
  - University of Minnesota
  - Homeland Security and Emergency Management (HSEM)

# Minnesota Dept. of Agriculture

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- ★ Issued recommendations on preventing terrorist activities at food and dairy facilities
- ★ Providing guidelines for facilities and producers to do advance planning for emergency management.
- ★ Offering security tips for chemical storage facilities
- ★ Offering security tips for feed manufacturers.

# Minn. Dept. of Agriculture

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- ★ Enhancing GIS capacity
- ★ Agricultural Commodity Vulnerability Assessment
  - With Univ. of Minn.
  - Use assessment of fluid milk supply as template for others
- ★ Education/Outreach
  - With local Emergency Management Directors
  - Seminar w/ UoM on food security held in 5 major cities

# Minn. Dept. of Health

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- ★ MDH-EH efforts have been mainly to:
  - 1. Raise awareness among all players, public and private sector
  - 2. Develop response and recovery plans as a food annex to the MDH emergency response plan
  - 3. Build connections between different parts of the system

# MDH advice to food service

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- Maintain cleanliness and sanitation in establishments;
- Restrict access
- Monitor work areas;
- Encourage customers to report suspicious behavior;
- Remove clutter and unwanted chemicals;
- Ensure that salad bars are supervised; and
- Inspect incoming orders, maintain tracking of ingredients and outgoing food.

# Minn. Dept. of Health

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- Held workshop, “Identifying the gaps in Food Emergency Response Plans” in May 2004
- Conference for Food Protection public-private workgroup
- Increased overall communication capabilities: GovDocs

# What if prevention fails?

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## ★ Maintain and strengthen surveillance system

- MN enjoys strong interaction between the state public health lab, state epis, all clinical labs and MDA
  - Proves itself again and again:
    - Detected E. Coli O157 in frozen steaks sold door to door in several midwestern states

# What are we learning? What do we need to do?

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- ★ Good food safety maximizes food security
- ★ Prevention important, but need adequate response to limit impacts. Work toward national real time capabilities.
- ★ State departments of Agriculture are not getting adequate preparedness dollars
  - Need to find way to get \$ from USDA and FDA to state and local levels

# What else are we learning? What else do we need to do?

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- ★ Communication is key!

- Keep trying to cut across “silos” and build connections among all players, especially local entities

- ★ Remember: All disasters are local!