What do these 4 phenomena have in common?

- Mad cow disease
- Soaring health-care costs in the U.S.
- The fall of communism
- Fears of a world-wide influenza epidemic that could kill millions

**Answer:** They all have important roots in the organization and performance of the food system

**Analysis of Food System Organization and Performance**

- The course title implies:
  - An analytic approach
  - A systems approach
  - Emphasis on organization (structure)
  - Emphasis on measuring and evaluating performance.
Course Overview

- Broad concepts of Economic Organization in the Agri-Food System
- “Standard” Economic Theory: Economy is organized around “spot” markets
- “Modern” microeconomics: Information issues and their impact on market organization

Economic Organization

- Who decides what is useful and how does that message get communicated?
- What are the incentives to respond to those signals?
- How can we define “good performance” of a food system and then design actions to improve that performance?
**Building Blocks**
*Concepts from Economic Theory*

- “Production” as creation of time, form and space utility
  - Farmers aren’t the only producers in the system!
- Pricing efficiency
- Imperfect competition
- Transaction costs
- Asymmetric information

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**A Systems Framework**

- What is the “Agri-Food System”?
  - Choices at one level affect other levels
  - Optimal choice at one level does NOT imply optimal choice for system
  - Need for COORDINATION across levels
The Economics of Mad Cows

- December 23, 2003 --- First BSE case in U.S.
- Industry and Government Response
  - “U.S. Consumers will remain confident…”
  - “Finding is reassurance that system is working…”
- U.S. beef exports = 10% of production
- Cow ultimately traced to Canada
- January 9, 2004 --- USDA's FSIS
  - Issues four new rules to further enhance safeguards against BSE entering food chain

Story continues….2004

- January, 2005: Japan bans imports of US beef
- U.S. continues import ban on Canadian cattle following discovery of case of BSE in Canada in late 2003
- Dec. 2004: US lifts import ban on Canadian cattle
Let the market take care of it....

Hayek argues that markets are extremely efficient ways of organizing economic activity because they effectively synthesize lots of highly dispersed information regarding consumers’ desires and producers costs and express that information in prices.

Are Hayek’s arguments valid for dealing with food safety issues like Mad Cow Disease? Why or why not? What alternatives do you suggest?

No Big Deal?

Estimates are that fewer than 300 people in the world have died from the human equivalent of Mad Cow Disease over the past 10 years. The US Center for Disease Control and Prevention estimates that annual deaths from food poisoning in the US are between 5,000 and 9,000.

Has the emphasis on the risk of Mad Cow disease been disproportionate relative to other health risks from food? Why or why not?
How Much is it Worth?

- Resources have opportunity costs for society. They can be used to fund other public health programs (e.g., childhood vaccinations), education, transportation, pollution control, etc.
- How would you go about thinking about how much we should invest to reduce the risk of Mad Cow disease?