



Outbreaks Associated with Non-inspected Meat

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Outbreaks from Non-inspected Meat

- Misconception – no one gets sick from custom exempt meat
- Truth: Recalls and outbreaks associated with non-inspected meat are often not publicized
 - Customer list is usually known (custom exempt)
 - Recall is not necessary – know where the meat is
 - Or details are so sketchy there is not enough info to publicize (non-inspected, non-custom exempt)
 - Can be associated with open cases/investigations, illegal sales
 - Customer is responsible for the risk, self-inspection

Sporadic vs Outbreak Cases

- To call something an outbreak, you must have at least 2 people (usually not from the same household family) ill
- Many sporadic cases of illness associated with specific custom exempt markets that handle a lot of raw product
- Similar cause – but not related
 - Custom exempt tends to be one carcass at a time, meat is not mixed together
 - Illness often associated with poor handling practices at home

Ecuadorian Festival

- 8/17/2013 MDH notified MDA of an outbreak associated with an Ecuadorian food festival held in Minneapolis on 8/11/2013
 - Causative agent unknown at that point
 - As of 8/16/2013, 79 people had become ill and sought medical care for GI symptoms
- Interviews of those ill focused attention on one vendor that had sold a number of things, including cooked, whole guinea pig



Guinea pigs



- Slaughtered, processed, marinated and cooked at a produce wholesaler/meat retail shop
- Guinea pig breeder was determined and submitted samples of feces from pens for analysis
 - Negative for Salmonella
 - Raised for shows
 - The person who purchased the G. pigs did so every few months as a routine
- Home samples positive for multiple strains of Salmonella

Other foods



- Prepared meals
- Pork:
 - One vendor purchased 3 whole roasted hogs from an area retail firm (not under meat inspection)
 - Originated from a USDA plant
 - One other vendor purchased a pig (or pigs) from a Live Animal Market and prepared it and sold at the festival (Custom Exempt – not intended for resale)
 - After receiving negative results from the Guinea pig breeder samples, the hogs are suspected to be the source of Salmonella in this case but not confirmed





Lab Results

- Household samples of:
 - Guinea pigs:
 - Salmonella uganda, typhimurium, chailey
 - Prepared meals (rice, potatoes, corn):
 - Salmonella uganda, B, infantis, typhimurium, anatum
 - Cooked corn and unidentified meat:
 - Salmonella uganda, typhimurium

Multidrug Resistant Salmonella Newport

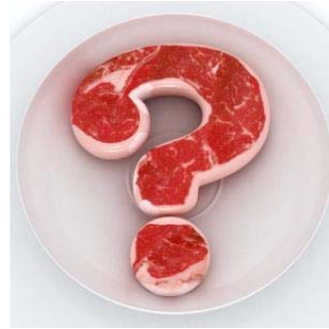


The Outbreak

- MDH notified MDA on 7/1/2013 of a multi-state outbreak of multi-drug resistant *S. newport*
- 12 Cases in Minnesota were related to local Hmong gatherings where beef was served
- Other cases were in 5 different States, but primarily (17) in Wisconsin over a period of about 3 preceding months

Specific case

- A 77 yr old white non-Hispanic reported attending a graduation party at a Hmong neighbor's house on 7/13/2013
- Multiple people that attended the party reported being sick
- Home samples were collected from this patient



Source of the beef

- Grad party organizer reported purchasing the beef from a nearby farm
- The farm owner killed the cow on his farm on 7/12/2013
- She and other family members further cut it up into more manageable pieces then brought it home



The farm



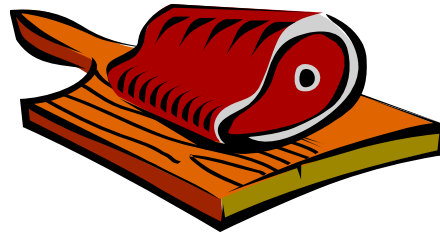
Farm Visit

- Cattle sourced from cattle jockey
- Owner sells about 15 head per year to Hmong families
- June: 6 of 12 steers that he had purchased died
 - Concern for S. newport affecting herd health
- Owner reported doing the “killing” for the customers so that they wouldn’t get hurt, but the rest done by the buyer
- WI investigation identified 4 Wisconsin farms that sell to the cattle jockey, 1 WI case linked to a Hmong gathering



Sample Results

- Home Samples
 - Beef Liver
 - S. Mueschen, Newport
 - Beef Bone and meat
 - S. Newport
 - Beef Chopped
 - S. Newport



Illegal Sales of Meat

- Outbreaks help us find these
- Often with little regard for sanitary practices
- Are the animals healthy? Were they even alive before they were harvested?
- In more recent years in MN, associated with different ethnic or cultural groups because of their desire for fresh meat and poultry
- The line between custom exempt and illegal sales can become blurred

Case #3

- 8/28/2012 17 people presented with GI symptoms to an ER in rural MN
- Most or all Laotian
- Reported receiving cuts of beef from a man who had slaughtered a cow himself and distributed it on 8/26/2012
- Beef sample positive for matching *S. enteritidis* (usually associated with eggs)

Traceback

- The man purchased the cow at an auction
- Slaughtered it himself
- Sold it to others, did not eat any himself, was not ill
- Said that the people put money in to pay for the animal
- Were not able to contact for a meat compliance case



Inspection of Meat and Facilities

- Meat is a risky food! (Raw and Cooked)
- Requires sanitary facilities and food safety plans
- Observe handling practices – even in E2 inspected meat plants we observe practices that lead to cross contamination between raw and cooked products
 - For example, bacon (a cooked product) washed in the raw product sink after it has been cooked
 - Having an inspector present helps find these and correct them

Meat Inspection

- Extent of distribution of custom exempt and usually non-inspected makes large scale outbreaks unlikely
- Once you move past that scale, larger scale effects are more likely and thus inspection becomes more critical

