



An Evaluation of Food Safety Information Transfer to Employees: One-Page Media Summary Sheets in Food Service and Retail

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The Food Safety Network (FSN) provides:

- 1-800 toll free food safety information (in Canada)
- Commentary
- Policy evaluation
- Public information on current & emerging food safety issues
- Research



Food safety communication essentials

- Rapid, relevant, reliable and repeated information
- Compel beyond education
- Get it right -- need to back up messages
- Evaluation



Food safety information sheet idea

- Food safety media coverage is increasing
- Need to provide context to food safety and the reasons of why its important
- Use FSnet infrastructure
- **Project objective:** Build the best infosheet possible, evaluate if they impact behaviour





2006 Food Safety Education Conference



Food Safety Information Summaries -- July 30, 2004

E. COLI STRIKES CAMP IN NORTHERN ONTARIO

July 28, 2004

Globe and Mail

Erin Pooley

Staff and children at a Northern Ontario hockey camp have fallen ill after eating contaminated hamburger meat. A 12-year-old boy who attended the Adventure North Hockey Camp in Sudbury during the week of July 12 is being treated at Toronto's Hospital for Sick Children with an E. coli infection. He was flown south Monday after being admitted to a local hospital on July 26. Hospital officials said the boy is undergoing tests to determine the extent of the kidney problems he's suffering as a result of the infection. Last night, two other people who were infected with E. coli bacteria from the contaminated meat remained at Sudbury Regional Hospital. A total of 25 people became sick after eating hamburger meat served at the camp on July 16. Seven were treated in hospital and released. A statement posted on the Sudbury & District Health Unit website on Monday said an ongoing food poisoning investigation suggests the outbreak is the result of undercooked hamburger served at the camp. The meat was packaged at a local Costco Wholesalers store on July 11, and as a precautionary measure, the health unit is advising the public not to consume ground beef packed at the store on the same day. Camp owner Troy Crowder said last night that he has contacted all of the parents of the children who attended his camp and they were being very supportive. "The parents have been unbelievable. That's the only thing that's kept us sane and positive throughout this," he said. "They don't blame us." Donald Sirkka's 12-year-old son was admitted to hospital on July 21 with severe diarrhea and vomiting after eating the contaminated beef. His son has since recovered and has already indicated to his father that he would like to return to the camp next summer. His nine-year-old son, who also attended the camp, did not fall ill. The camp, which is in its first year of operation, was open for only three weeks before the E. coli outbreak. It has been closed since July 23, but Mr. Crowder said he hopes to resume operation in two weeks. He added that the camp will buy only precooked hamburger patties once it reopens. Bud O'Donnell, manager of the environmental health division of the health unit, said the community will have to get through one complete incubation of the E. coli O157:H7 bacteria before the risk of secondary outbreaks is over.

SIMPLE TIPS CAN HELP PREVENT LISTERIA: PREGNANT WOMEN, ELDERLY AT GREATEST RISK FOR LISTERIA

June 27, 2004

nbc5i.com

Pregnant women, cancer patients and the elderly are among those who are at greatest risk of serious illness—even death—from eating food contaminated with a bacterium called listeria. Listeriosis is a serious infection caused by eating food contaminated with the bacterium *Listeria monocytogenes*. New concerns about this bacterium have surfaced, and as a result, the government has issued warnings about foods that pose the most dangerous for those who are most vulnerable.

Listeriosis can be avoided by following some simple tips:

Ready-to-eat foods such as hot dogs, luncheon meats, sausages and other deli-style meats should be cooked until piping hot. Always wash hands with hot, soapy water after handling any of these foods. Be sure to wash cutting boards, dishes and utensils that have come into contact with these food products.

Avoid unpasteurized milk and foods, such as unpasteurized cheese. All meats should be cooked thoroughly. Leftovers should be thoroughly reheated.

The symptoms of listeriosis include fever and muscle aches and gastrointestinal symptoms such as nausea and diarrhea. If the infection spreads to the nervous system, symptoms can include headache, stiff neck, confusion, loss of balance and convulsions. Pregnant women are about 20 times more likely than other healthy adults to contract listeriosis. Experts said that hormonal changes during pregnancy leave the immune system less able to fight the infection. Listeriosis during pregnancy can cause premature delivery, miscarriage, fetal death or illness in the newborn after birth.

For more information contact Ron Chapman (510) 870 6476 or rchapman@ucanlab.ca

Hepatitis A

FOOD
SAFETY
NETWORK
INFOSHEET

Handwashing and good personal hygiene help control the spread of Hepatitis A – as well as other nasty food-related germs such as E. coli and Salmonella.



2006
Food Safety
Education
Conference

How did we get to this?

Do they influence practices?

Hepatitis A outbreak update: 190 shots given

Infected food worker may have passed Hepatitis A to customers through food

ASHEVILLE – Officials at the Buncombe County Health Center say they've given 190 shots of immune globulin to people as of 5:30 p.m. today to prevent the spread of hepatitis A after the virus was confirmed in two people, including one worker at the Biltmore Village restaurant Trevi Pasta Seafood & Pizza.

The health center urges anyone who ate at the restaurant between Aug. 17 and Aug. 25 to get the

shot. Hepatitis A vaccine is given as a two-part series to prevent the illness. The second vaccine is given six months after the first.

People who ate at Trevi before Aug. 17 should be free from exposure to this case of hepatitis, according to the health center. Anyone who experiences symptoms of hepatitis A should contact their doctor. Symptoms can include fever, chills, abdominal pain, nausea, vomiting, diarrhea, jaundice (yellowing of the eyes and skin), and dark urine. Symptoms appear within 15 – 50

days, usually within 30 days, of exposure.

Hepatitis A stats

Number of days you may pass the virus on without knowing you have it:
30

Estimated number of Hepatitis illnesses in the US in 2004:
56,000

Number of Hepatitis illnesses as a result of a 2003 outbreak in Pennsylvania:
Over 600, 4 deaths

Hepatitis A can be associated with any ready-to-eat foods. Infected staff and ingredients contaminated before arrival have resulted in outbreaks

August 30 2006



Data sources

- Delphi group
- Food service pilots
 - design and location
 - content
 - self-reported behaviour



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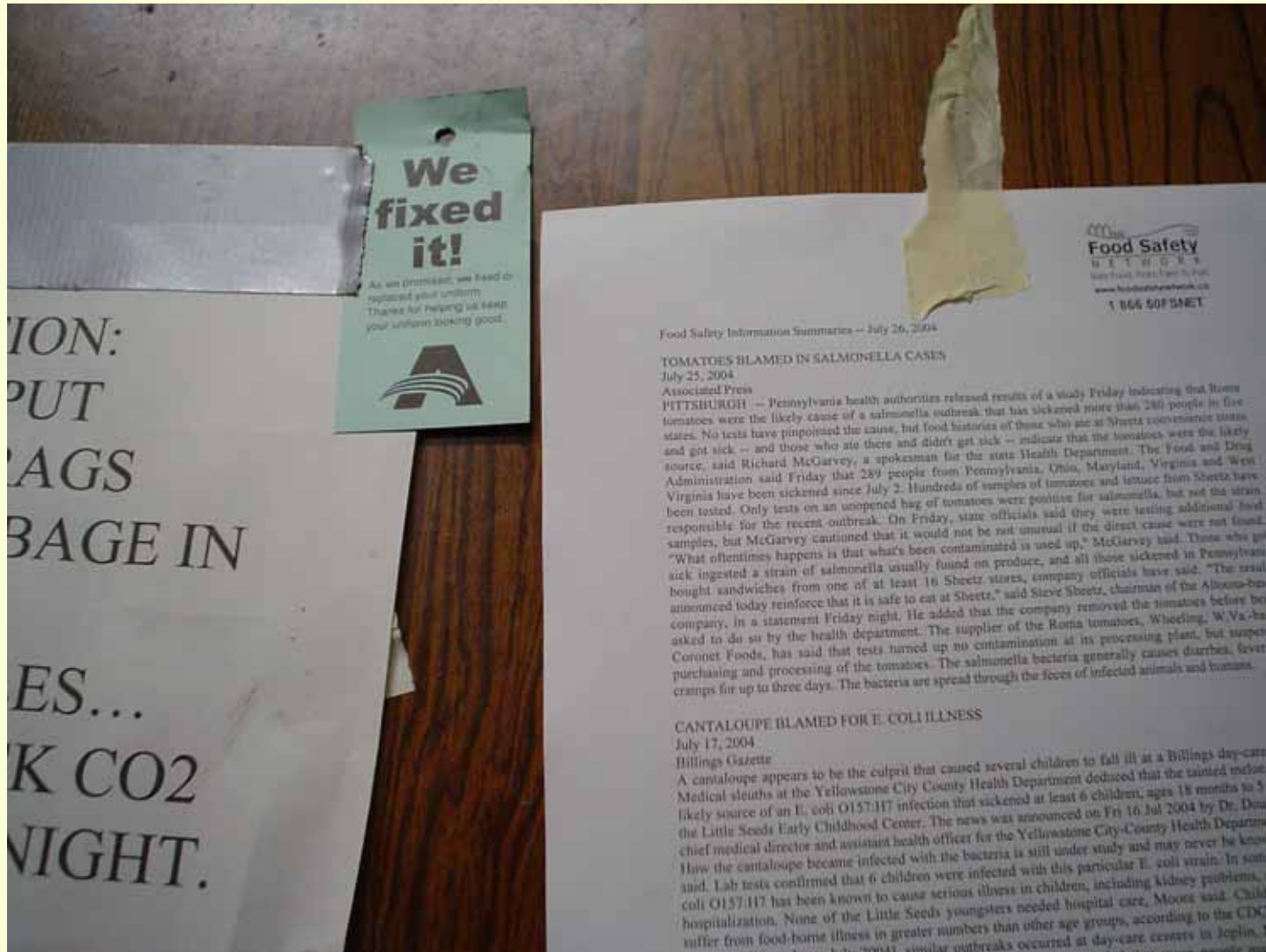
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Infosheets stats

- Include a compelling outbreak or illness
- Topics include:
 - pathogens, cdc risk factors, research
- 283 sheets have been distributed since Fall 2003
 - email bchapman@uoguelph.ca to subscribe
 - foodsafetyinfosheets.ksu.edu
 - foodsafetynetwork.blogspot.com



Distribution

- Farmers
- Food service
- Retail
- Personal chefs
- Researchers
- Public health
- Sororities and Fraternities



Reach

- 100 + people depending on topic for health unit coordinator
- 20 grocery stores posted for workers in break room, approximately 1000 total employees
- 200 personal chefs
- Other forwarding occurring as well, from 2-40 others



Design, location and content results

- Bulleted lists
- More eye-catching
- Place in break room, not bathrooms
- Schedule board
- Page protectors and colour
- More emphasis on specific sector problems



Content results

- About half of the employees never saw the sheets
- Ones who did not like: too much text, too boring
- Managers were the key to the process
- Employees in back of house enjoy the information,
- found some too basic: more trivia/ did you know
- One restaurant withdrew, thought that the sheets were not useful to employees
 - heard similar concerns from delphi group



Redesign

- Increase focus on what staff can do to reduce risk
- Food attributions
- Colour and graphics
- Started out as stories, focus became the practices based on feedback
- Rapid and relevant
- Less frequent, more applicable



FOOD SAFETY NETWORK
INFOSHEET

E. COLI DEATH TRACED TO Church Supper

AUGUST 24, 2006

MEATBALL DISH LINKED TO ILLNESSES

ST. PAUL - A Longville woman who died from complications of E. coli apparently became ill after eating at a church supper on July 19, family members and health officials said.

The Minnesota Department of Health said Tuesday that at least 17 people, and perhaps as many as 50 in the Longville area were sickened by E. coli in the past six weeks. Nine people were hospitalized with serious complication.

Carolyn T3, d/

Practicing good food safety is important for all food handlers, whether volunteer or restaurant staff.

E. coli facts

Symptoms of E. coli include severe bloody diarrhea and abdominal cramps.

E. coli hits children and the elderly harder than healthy adults.

Cook ground beef to at least 160 degrees Fahrenheit.

Keep raw meat separate from ready-to-eat foods.

Wash hands, counters and utensils with hot soapy water after they touch raw meat.

FOOD SAFETY NETWORK INFOSHEET AUGUST 21, 2006

LATHAM'S CHECKED FOR SALMONELLA



WHAT HAPPENS AFTER AN OUTBREAK

- Increased news coverage
- Extended restaurant closures
- Increased inspections
- Testing of food and employees for the bug

30-40 SUSPECTED ILL. 4 HOSPITALIZED FROM BUG NORTH JACKSON TENNESSEE

Latham's Meat Co., a North Jackson restaurant, voluntarily closed its doors for two days in late July after some 30 to 40 people who claimed to have gotten sick from eating barbecue there tested positive for salmonella, the Madison County health department confirmed Friday.

Health department officials could not say for sure that the salmonella infection came from Latham's, according to Steven Bell, the health department's regional environmental manager.

The health department's evidence pointed to Latham's as the likely source of the salmonella infection. He said health officials couldn't say for sure where the infection came from.

The day it did its inspection, the health department did find "a lot of food" on a display table that was not the correct temperature, Bell said. The food was not hot enough, he added.

THOSE CLAIMING TO HAVE GOTTEN SICK HAD TAKE-OUT OR RECEIVED THE FOOD THROUGH CATERING



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Questions

- Where were they posted?
- What did you notice about them?
- Did anything surprise you?
- What did you like about them?
- What would you improve?



Does it change what you do? (self-reported)

- Interviews and focus group
- Stories major focus of interview
- Unprobed -- handwashing increases
- “We talk about it back there”
- “I didn’t know that there were that many outbreaks”
- One respondent cited time issues
- “Aesthetically pleasing”



FOOD SAFETY NETWORK INFOSHEET

WWW.FOODSAFETYNETWORK.CA

Bagged Spinach Possibly Linked to Death September 15, 2006

Spinach and other fruits and vegetables have been associated with an estimated 400 foodborne illness outbreaks in the past 15 years.

Salmonella, E. coli and Hepatitis A are all of concern



FDA warning on serious foodborne E.coli O157:H7 outbreak

One death and multiple hospitalizations in several States

September 15, 2006

The U.S. Food and Drug Administration (FDA) is issuing an alert to consumers about an outbreak of E. coli O157:H7 in multiple states that may be associated with the consumption of produce. To date, preliminary epidemiological evidence suggests that bagged fresh spinach may be a possible cause of this outbreak. "Given the severity of this illness and the seriousness of the outbreak, FDA believes that a warning to consumers is needed. We are working closely with the U.S. Centers for Disease Control and Prevention (CDC) and state and local agencies to determine the cause and scope of the problem," said Dr. Robert Brackett, Director of FDA's Center for Food Safety and Applied Nutrition (CFSAN). E. coli

O157:H7 causes diarrhea, often with bloody stools. Although most healthy adults can recover completely within a week, some people can develop a form of kidney failure called Hemolytic Uremic Syndrome (HUS). HUS is most likely to occur in young children and the elderly. The condition can lead to serious kidney damage and even death. To date, 50 cases of illness have been reported to the Centers for Disease Control and Prevention, including 8 cases of HUS and one death. At this time, the investigation is ongoing and states that have reported illnesses to date include: Connecticut, Idaho, Indiana, Michigan, New Mexico, Oregon, Utah and Wisconsin.

Based on the current information, FDA advises that consumers not eat bagged fresh spinach at this time.

FOR MORE INFORMATION CONTACT BEN CHAPMAN BCHAPMAN@UOGLI.PH.CA
OR DOUG POWELL DPOWELL@KSU.EDU



Progression

- Software has helped 20 min turnaround
 - (Microsoft word, adobe illustrator, Apple iwork)
- Used to have daily, weekly and farm-related lists -- now one or two a week
- Staying on top of the distribution takes time and dedication
- Future work
 - retail -- reflective diaries and observation
 - sororities and fraternities

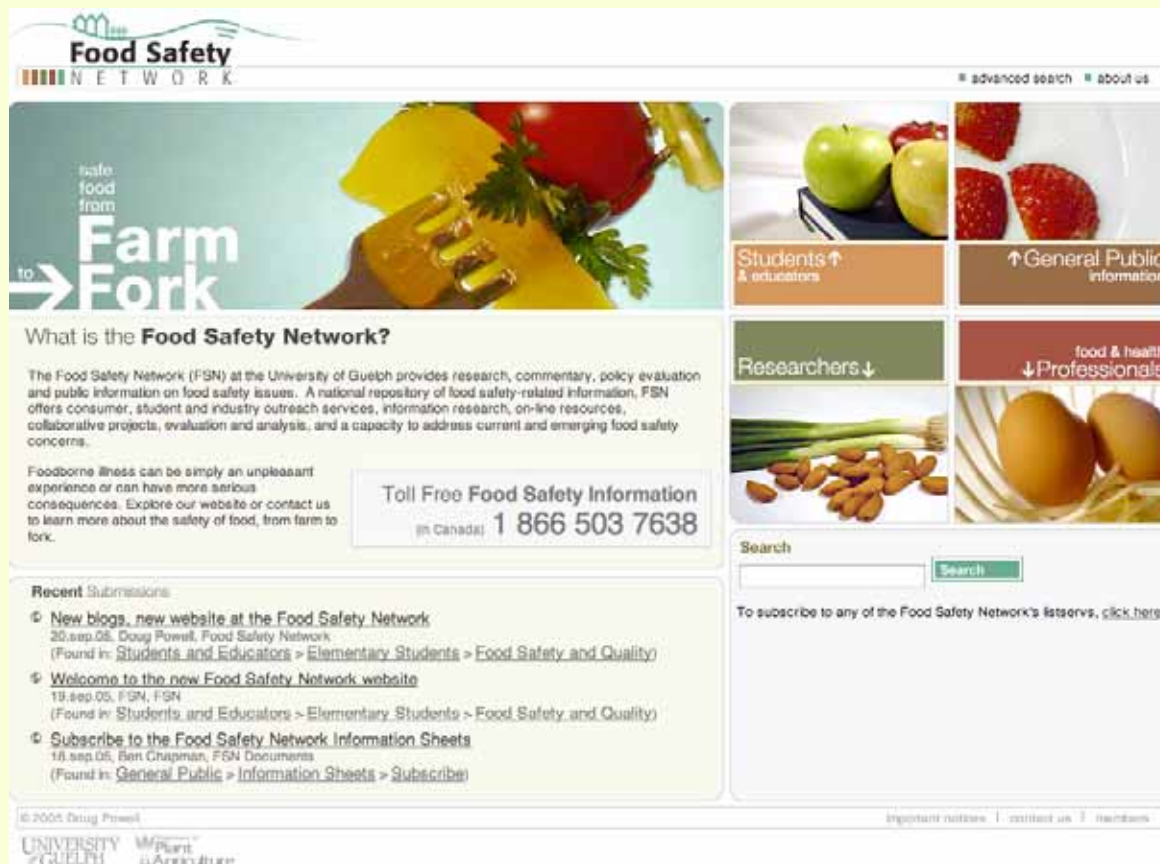


Conclusions

- Good intervention from managers/public health
- Know audience
- Public health not interested in distributing
- Has reach, and potential for rapid response
- Self-reported behaviour changes





The screenshot shows the Food Safety Network website interface. At the top left is the logo with the text "Food Safety NETWORK". To the right are links for "advanced search" and "about us". A large banner features the text "Safe food from Farm to Fork" with an image of a hand holding a knife over fresh vegetables. Below the banner is a section titled "What is the Food Safety Network?" with a paragraph of text and a toll-free number: "Toll Free Food Safety Information (In Canada) 1 866 503 7638". To the right of the text are four navigation buttons: "Students & educators", "General Public information", "Researchers", and "food & health Professionals". Below these is a search bar with a "Search" button and a link to "subscribe to any of the Food Safety Network's listservs, click here". At the bottom left, there is a "Recent Submissions" section with three entries. The footer includes the University of Guelph logo and the text "© 2005 Doug Powell" and "important notices | contact us | members".

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