

# Meat Processing News

Department of Animal Sciences and Industry  
Kansas State University Agricultural Experiment Station and Cooperative Extension Service

## Food-Related Illness and Death in the United States

The Centers for Disease Control and Prevention (CDC) recently reported new estimates on the number of foodborne diseases, hospitalizations, and deaths per year in the United States. More than 200 known diseases are transmitted through food. Overall, foodborne diseases appear to cause more illnesses but fewer deaths than previously estimated. Currently, CDC estimates that foodborne diseases cause approximately 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths in the United States each year. The leading causes of death are due to Salmonella, Listeria, and Toxoplasma, which together are responsible for 1,500 or more than 75 percent of foodborne deaths caused by known pathogens. Unknown agents account for 62 million illnesses, 265,000 hospitalizations, and 3,200 deaths.

Surveillance of foodborne illness is a complicated process. Milder cases often are not detected through routine surveillance. Many pathogens transmitted through food also are spread through water or from person-to-person and are not considered as direct foodborne transmissions. Some proportion of foodborne illness is caused by pathogens or agents that have not yet been identified and, thus, cannot be diagnosed. In addition, many of the pathogens of greatest concern today, such as Campylobacter jejuni, Escherichia coli O157:H7, and Listeria monocytogenes, were not recognized as causes of foodborne illness just 20 years ago.

chilling the product to an internal temperature of  $<50^{\circ}\text{F}$  before use when the room exceeds the CL. In this example, the HACCP plan is saying that if the CL of the room temperature is exceeded, the product in the room represents a health hazard. Thus, re-chilling the room or the product to  $<50^{\circ}\text{F}$  does not change the condition of the hazardous product.

An alternative recommendation is to identify both room temperature ( $\leq 50^{\circ}\text{F}$ ) and internal product temperature ( $\leq 45^{\circ}$ ) as CLs. In this situation, if the room temperature exceeds  $50^{\circ}\text{F}$ , the corrective action would be to: (1) take internal temperatures of product in the room; (2) if the internal product temperatures do not exceed  $45^{\circ}\text{F}$  and a longer period of time is required to reduce the room temperature, then product will be moved to a cooler or freezer until the room returns to  $50^{\circ}\text{F}$  or less. If the internal product temperature exceeds  $45^{\circ}\text{F}$ , product will be put on hold for time/temperature and microbiological evaluation or destroyed. For both CLs, operating limits should be below  $50^{\circ}\text{F}$  and  $45^{\circ}\text{F}$ , respectively, so that corrective actions can be taken before the plant exceeds the HACCP CLs.

If you have HACCP plans that you would like reviewed, please send copies to Kelly Getty at Department of Animal Sciences and Industry, 214 Weber Hall, Manhattan, KS 66506 or fax them to 785-532-7059. There is no charge for reviewing plans. Kelly also is available to visit plants. She can be reached at 785-532-0191. Kelly will be available to assist plants until mid-November. She is joining the faculty at Clemson University and we wish her well in her new position.

## Modifications to Room Temperature as a CCP

Source, *NAMP Newsletter*

Some Hazard Analysis Critical Control Point (HACCP) plans for Raw-Not Ground and Raw-Ground products currently identify room temperature as a Critical Control Point (CCP) with a Critical Limit (CL) of  $\leq 50^{\circ}\text{F}$ . The HACCP plans may further list a corrective action of re-

## HACCP Self-Study

USDA/FSIS has a HACCP self-study course that can be completed and will fulfill the requirements for HACCP training. The course includes two videos and a notebook. The material was distributed to state plants by the Kansas Meat and Poultry inspectors. If you have not received a copy, contact the KS Department of Agriculture, Meat and Poultry Inspection Program at 785-296-3511.

### Upcoming Events

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KMPA  
Annual Conference  
April 14-16  
Salina  
Contact Alan Wapelhorst  
(316) 532-2727

## Selected Internet Resources

1. United States Department of Agriculture <http://www.usda.gov/>
2. United States Department of Agriculture Food Safety and Inspection Service <http://www.fsis.usda.gov/>
3. United States Department of Agriculture, Agricultural Research Services Nutrient Data Laboratory <http://www.nal.usda.gov/fnic/foodcomp/>
4. United States Department of Agriculture/Food and Drug Administration HACCP Training Programs and Resources Database <http://www.nalusda.gov/fnic/foodborne/haccp/index.shtml>
5. United States Department of Agriculture/Food and Drug Administration Foodborne Illness Education Information Center <http://www.nal.usda.gov/fnic/foodborne/foodborn.htm>
6. U.S. Meat Animal Research Center <http://www.marc.usda.gov/>
7. National Archives and Records Administration; Federal Register Online via GPO Access [http://www.access.gpo.gov/su\\_docs/aces/aces140.html](http://www.access.gpo.gov/su_docs/aces/aces140.html)
8. Code of Federal Regulations <http://www.access.gpo.gov/nara/cfr/cfr-table-search.html>
9. American Meat Science Association <http://www.meatscience.org/>
10. International HACCP Alliance <http://ifse.tamu.edu/haccpall.html>
11. American Association of Meat Processors <http://www.aamp.com/>
12. American Meat Institute <http://www.meatami.org/index.htm>
13. Institute of Food Technologists <http://www.ift.org>
14. Meat and Poultry Magazine <http://www.meatpoultry.com/>
15. Meat and Poultry Association Links <http://www.meatpoultry.com/assn.asp>
16. National Meat Association <http://www.nmaonline.org/>
17. National Pork Producers Council <http://www.nppc.org/>
18. North American Meat Processors Association <http://www.namp.com/>
19. The Meating Place <http://www.mtgplace.com/>
20. U.S. Meat Export Federation <http://usmef.org/>
21. Worldmeat <http://www.worldmeat.com.au/>

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## Assistance Available

The following services, programs and assistance are available to Kansas Meat processors through the K-State Department of Animal Sciences and Industry: product development and reformulation; quality and safety evaluation and testing; shelf life studies; nutritional labeling assistance; development of documentation programs to meet government requirements; HACCP and other food safety training; labeling assistance; plant design review; assistance in selecting and locating ingredient, packaging and equipment suppliers; and product compliance evaluation. For assistance, contact Liz Boyle at 785-532-1247.

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## Meat Processing News

Meat Processing News is published for Kansas meat processors by the Department of Animal Sciences and Industry, Kansas State University Agricultural Experiment Station and Cooperative Extension Service.

For more information or questions, please contact K-State Research and Extension, Animal Sciences and Industry at (785) 532-1247.

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