

# Food Safety

NEWS

Food Safety CURRENT NEWS

## Anthrax . . . A Food Safety Concern?

### Bioterrorism Information

[www.usda.gov/special/biosecurity/safeguard.htm](http://www.usda.gov/special/biosecurity/safeguard.htm)

[www.fda.gov/oc/opacom/hottopics/bioterrorism.html](http://www.fda.gov/oc/opacom/hottopics/bioterrorism.html)

[www.fda.gov/oc/buyonline/default.htm](http://www.fda.gov/oc/buyonline/default.htm)

[www.bt.cdc.gov/](http://www.bt.cdc.gov/)

[www.foodsafety.gov/~fsg/bioter.html](http://www.foodsafety.gov/~fsg/bioter.html)

### Holiday Food Safety

[www.fightbac.org/pdf/holiday\\_giving.pdf](http://www.fightbac.org/pdf/holiday_giving.pdf)

[www.fightbac.org/pdf/holiday\\_buffet1.pdf](http://www.fightbac.org/pdf/holiday_buffet1.pdf)

[www.fightbac.org/pdf/holiday\\_buffet2.pdf](http://www.fightbac.org/pdf/holiday_buffet2.pdf)

[www.fsis.usda.gov/oa/pubs/hotpacks.htm](http://www.fsis.usda.gov/oa/pubs/hotpacks.htm)

### New Food Safety Website

[www.griffin.peachnet.edu/cfs/](http://www.griffin.peachnet.edu/cfs/)

### KSU Food Safety

[www.oznet.ksu.edu/foodsafety/](http://www.oznet.ksu.edu/foodsafety/)

[www.oznet.ksu.edu/extrapidresponse/welcome.asp](http://www.oznet.ksu.edu/extrapidresponse/welcome.asp)

All of us are shaken by the recent tragic events resulting from terrorism. These events are magnified by the threats and deaths resulting from anthrax contamination. Does anthrax affect the safety of our food supply? It is important to note that anthrax is very uncommon, even rare or non-existent in many parts of the country. It is not easily transmitted from animals to humans and cannot be transmitted from human to human. Anthrax spores can survive many years in the environment and are highly resistant to heat, cold, chemical disinfectants and long, dry periods.

Anthrax disease is caused by the spore-forming bacterium *Bacillus anthracis*. It is called a zoonotic disease because it can affect both animals and humans. Ruminant animals such as cattle, sheep, and goats are the most susceptible. Depending on the form of the disease, it can be acute and fatal or chronic and less serious. This is true if treated early with antibiotics.

There are three methods of anthrax contamination. The first is through open sores on the skin, the second is by inhaling the

spores into the lungs, and the third is by ingesting anthrax-infected food. Ingesting infected meat is very rare. If ingested, the initial signs are nausea, loss of appetite, vomiting, and fever. This is followed by abdominal pain, vomiting of blood, and severe diarrhea. Ingested anthrax almost always leads to an explosive foodborne illness outbreak. This has occurred in underdeveloped countries where dead animals are salvaged for human food.

When animals contract anthrax, they become very ill. Veterinarians will confirm their diagnosis by sending a blood sample to a laboratory. The animals are destroyed by

burning. People handling infected animals should not have open wounds and should practice good personal hygiene.

Because of the severe illness to the animal, these animals do not enter the meat supply system. Inspection of carcasses for disease is done before, during and after slaughter.

Therefore, the possibility of contracting anthrax by ingestion is rare to nonexistent.

Source:

[www.usda.gov/special/biosecurity/anthraxfs.htm](http://www.usda.gov/special/biosecurity/anthraxfs.htm)  
[www.oznet.ksu.edu/news/sty/2001/anthraxkenedy.htm](http://www.oznet.ksu.edu/news/sty/2001/anthraxkenedy.htm)  
[www.ext.nodak.edu/extpubs/ansci/livestoc/a561w.htm](http://www.ext.nodak.edu/extpubs/ansci/livestoc/a561w.htm)

## Treating Biological Threats

The Federal Trade Commission (FTC) has issued a consumer alert warning consumers about fraudulent sales of Ciprofloxacin (Cipro) through websites and e-mail. Here are some tips from the FTC, the Centers for Disease Control and Prevention (CDC), and the Food and Drug Administration (FDA).

- 1. Always talk to your doctor before taking any medication.** Unless you are specifically notified or instructed by a health official to take antibiotics for anthrax, do not take them.
- 2. Some websites may sell ineffective drugs.** Some claim to sell FDA-approved drugs. In reality, however, there may be no guarantee it was made under appropriate manufacturing standards. A consumer cannot tell if the drug is an ineffective pill and could be adulterated.
- 3. Know the source of the drug.** On the internet, anyone could be selling the drug. To check a website's authenticity, check with the National Association of Boards of Pharmacy ([www.nabp.net](http://www.nabp.net), 847-698-6227) to see if the pharmacy is licensed and in good standing.

Source: [www.ftc.gov/bcp/online/pubs/alerts/bioalrt.htm](http://www.ftc.gov/bcp/online/pubs/alerts/bioalrt.htm)

**Question:** What is the best method to store oil used to fry turkey?

**Answer:** According to the National Turkey Federation, after frying the turkey, allow the oil to cool. Strain the oil through cheesecloth or a fine mesh to remove debris. Place the oil in a container and seal with a lid. Store in the refrigerator to prevent rancidity. This allows the oil to be stored for several months. It will thicken but returns to original consistency when reheated. The oil can be reused three to four times before deterioration occurs. Signs of deterioration include excessive smoke, foaming, dark color or rancidity.

Source: [www.turkeyfed.org/consumer/cookinfo/fryturk.html](http://www.turkeyfed.org/consumer/cookinfo/fryturk.html)

**Question:** What are some tips on smoking meat and poultry?

**Answer:** Smoking is slowly cooking food over an indirect heat source. This can be done using a "smoker" cooker or a covered grill with a drip pan of water beneath the meat on the grill.

If the meat is frozen, completely thaw the meat. Because smoking uses low heat, the meat will take too long to thaw in the smoker. This can leave the meat in the "danger zone" (40°F to 140°F). The meat may be marinated to add flavor and tenderize the meat. Always marinate meat in the refrigerator. Don't reuse the marinade as a dipping sauce unless it is boiled first to destroy harmful bacteria.

Don't smoke foods in cookers made of galvanized steel or materials not intended for cooking. These materials may release chemical residues when heated. Place the cooker in a well-lit, well-ventilated area away from trees, shrubbery, and buildings. During cooking, add briquettes about every hour to maintain heat. Smoke flavor is added by using hickory, apple, or maple wood chips or flakes. Soak the wood in water to prevent flare-ups.

■ See **FAQs Page 3**

## Use of Biotechnology Corn Approved

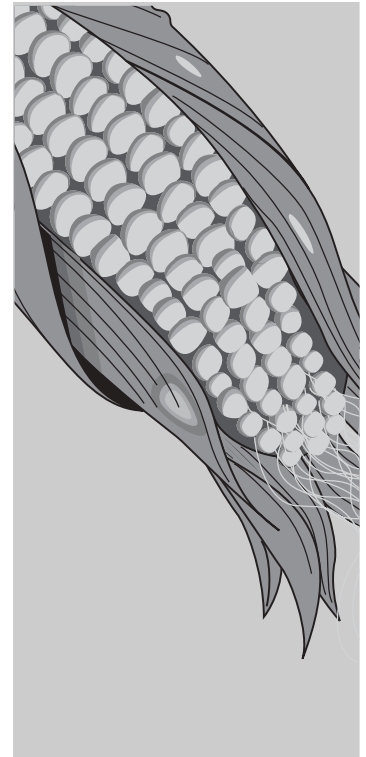
The Environmental Protection Agency (EPA) has thoroughly evaluated corn genetically modified with *Bacillus thuringiensis* (Bt) and has approved its use for another seven years. The Bt bacterium occurs naturally in soil. It produces a protein that is toxic to certain pests. By incorporating the genetic material from Bt into corn, that toxin can defend the plant from several pests. It has been proven through many scientific studies and successful history that Bt is not toxic to humans or other animals.

Companies approved to use Bt corn must continue to monitor the corn and collect data to make sure the continued use does not lead to insect resistance or

unexpected human or environmental problems. Growers must learn the best methods to plant Bt corn to minimize insect resistance. Growers must sign contracts to grow Bt corn, follow grower guides and abide by the terms and conditions of the contract.

Extensive research was conducted on the potential risks to monarch butterflies. It has been determined that Bt corn does not put monarch butterflies in danger. This also holds true for endangered species. Extensive research was also conducted to determine if Bt corn caused food allergy problems. There was no evidence that Bt corn causes allergy problems.

Source: EPA Press Release 10/16/01, *Biotechnology Corn Approved for Continued Use*



## Perceptions of Foodborne Illness

Do you know what the most common pathogens are that cause foodborne illness? That question was asked of the Tennessee Department of Health during a series of lectures. Participants in this survey included epidemiologists, public health nurses, laboratory staff, health department physicians, and environmentalists. There were 388 participants.

Participants were asked what they thought were the three most common pathogens that caused foodborne illness in the United States. Overall results showed that the three pathogens most commonly believed to cause foodborne

illness actually accounted for 12 percent of the disease. Fewer than 3 percent of the participants identified the most common pathogens.

According to the Journal of Emerging and Infectious Disease, the most common pathogens related to foodborne illness include Norwalk-like virus, *Campylobacter*, *Salmonella*, *Clostridium perfringens*, and *Giardia*. Survey participants listed *Salmonella*, *E. coli*, *Staphylococcus*, and *Shigella*.

Why such a discrepancy between perceived and actual causes of foodborne illness? This is unknown. Some pathogens cause severe illness and generate high amounts of

media attention. There may be lack of knowledge of common pathogenic causes of foodborne illness. Thus, the personnel responsible for recognizing, reporting and intervening in a foodborne illness are compromised. There is no evidence that other public health personnel across the country have different understandings of the causes of foodborne illness. It is important to educate these persons on the front lines of health care to help reduce the onset of foodborne illness.

Source: *Journal of Emerging and Infectious Diseases*, Vol.7, No. 5, pp. 904-905

# Educating Seniors on Food Safety at Home

It is well known that the population of people age 60 and over is increasing. It is also known that this population is at an increased risk of foodborne illness because of weakened immune systems, increased intake of medications, and a belief that they are immune to foodborne illness. Seniors want to keep their independence, live at home and prepare their own meals. A study was conducted by The Pennsylvania State University to determine the need to educate seniors, what information should be provided, and how it should be designed and presented.

Focus groups were conducted in rural and urban areas at local senior centers. Participants were asked how they cook, cool, and thaw meat products. They were asked how they learned to use the methods they used. They were introduced to proper meat handling procedures. Participants were asked what the consequences were if methods were not followed, potential problems if they used them, and what would convince them to always use the proper procedures.

Results showed both inappropriate and proper practices of cooking safely. The most common problems were relying on a specific amount of time, using utensils to test for doneness, and relying solely on sight to check doneness. A limited inappropriate example is relying on pop-up thermometers. In contrast, many participants said they used thermometers.

When the participants were asked if they would change the way they cook meat products, many were resistant to changing old ways and others did not



have the resources to change. An example is not knowing how to use a thermometer or not being able to afford one.

When cooling food, the most common inappropriate methods were storing in large containers and leaving at room temperature for long periods of time. The most common proper methods to cool food was dividing the food into smaller portions and refrigerating within the proper time. They also cited cooling food in a cold water bath before refrigerating.

To thaw food, the most common inappropriate responses were to thaw on the counter more than 2 hours and to thaw in a sink full of cold water. Appropriate responses were to thaw in the refrigerator and to thaw in the microwave followed by immediate cooking.

In comparison to the general population, seniors use a wide variety of inappropriate methods to handle food safely. This clearly indicates the need to educate seniors in proper food handling. To facilitate this, previous education was provided by television, print media and package labels. This study suggested using classes targeted to seniors, videotapes, and church bulletins. Educational program locations could be in libraries, health centers and churches, and provide free thermometers to all participants to promote participation.

It is important to educate seniors on proper food safety practices. When they learn of the health consequences of poor food safety procedures, they can help continue their independent living inside their own home by following sound, updated practices.

*Source: Journal of Nutrition Education, Vol. 33, No. 3, pp. 148-153*

## New Resource for Seniors

A new video to teach current food safety topics to seniors is available from K-State Research and Extension offices in Kansas. *To Your Health: Food Safety for Seniors* is a 14-minute

*Source: FDA and USDA-FSIS*

video and booklet explaining why seniors may be more vulnerable to foodborne illnesses. It outlines four steps to food safety at home and offers tips for safe eating when eating out.

## FAQs from Page 2

Monitor the temperature of the meat and the air temperature of the smoker. The air temperature should stay between 225 and 300°F during the entire process. Some smokers have built-in thermometers. Cooking time will depend on the type of meat, size, shape, distance from the heat source, temperature of the coals, and the weather. Because of these factors, monitoring temperatures is important.

*Source: USDA Food Safety Facts, Smoking Meat and Poultry, Oct. 2001*

## Food Safety Video Wins Award

The Food and Drug Administration (FDA) and the National Science Teachers Association (NSTA) won an Emmy Award for their video "Dr. X and the Quest for Food Safety." This video won in the category Outstanding Children's Program/One-time Only Special. This video is one component of the food science curriculum "Science and Our Food Supply" by FDA and NSTA.

The video features Dr. X and a student who introduces and reinforces science concepts of food safety from farm to table. They explore laboratory research and the latest food safety technologies. Students learn about microorganisms and how they live, grow and spread.

The "Science and Our Food Supply" educational kit that includes this video is free of charge to middle and high school teachers. Contact NSTA at [www.nsta.org/professionalinfo](http://www.nsta.org/professionalinfo). You can also contact them by mail at NSTA, Science and Our Food Supply, 1840 Wilson Blvd., Arlington, VA 22201-3000 or faxed to 703-522-5413.

*Source: [www.fda.gov/bbs/topics/ANSWERS/2001/ANS01116.html](http://www.fda.gov/bbs/topics/ANSWERS/2001/ANS01116.html)*

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and U.S. Department of Agriculture Cooperating

All educational programs and materials are available  
without discrimination on the basis of race, color,  
religion, national origin, sex, age, or disability.

## Upcoming Events

**January 10**

**St. Louis, MO**

HACCP Verification and Validation  
For Food Processors  
Contact: Ryan Baumert, Univ. of Nebraska  
888-688-4346

**January 11**

**St. Louis, MO**

Sanitation and GMP's  
For Food Processors  
Contact: Ryan Baumert, Univ. of Nebraska  
888-688-4346

**February 5 & 6**

**Wichita**

Serving Safe Food  
Sedgwick Co. Extension Education Center  
Contact: Teresa Lang, 316-722-7721

**March 7 & 8**

**South Hutchinson**

Serving Safe Food  
Reno Co. Extension Office  
Contact: Barbara Lilyhorn, 620-662-2371

**March 12 & 13**

**Lawrence**

Serving Safe Food  
Douglas Co. Extension Office  
Contact: Susan Krumm, 785-843-7058  
Cindy Williams, 785-863-2212

**March 26 & 27**

**Topeka**

Serving Safe Food  
Shawnee Co. Extension Office  
Contact: Cindy Evans, 785-232-0062

**April 15 & 22**

**Fort Scott**

Serving Safe Food  
FSCC – Greyhound Room  
Contact: Ann Ludlum  
620-223-3720

**April 16 & 17**

**Pratt**

Serving Safe Food  
Pratt Community College  
Contact: Jean Clarkson-Frisbee  
620-672-6121

**May 21 & 23**

**Junction City**

Serving Safe Food  
First United Methodist Church  
Contact: Donna Martinson  
785-238-4161

**May 29 & 30**

**Garden City**

Serving Safe Food  
SW Research Extension Center  
Contact: Linda Walter  
620-272-3670