

Patco Food Safety Consultants

July 2006 Edition



LATEST NEWS



Integrated
Sanitation
Management
Systems

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A Newsletter Focusing on Food Safety Issues

Volume 2

To Our Valued Customers

Patco Food Safety Consultants is proud to offer our valued clients a quarterly update relating to food safety issues and concerns.

Patco hopes you enjoy these newsletters and encourages any comments, questions or thoughts to be addressed to Patco at the following Fax # 1-315-652-5671.

The **LATEST DIRT** will focus on sanitation topics, regulatory issues, general housekeeping hints for clean establishments, updates on new laws relating to food safety issues and general discussions regarding the benefits of good sanitation and the impact it has on profits and safety in your establishments.

Our second newsletter will focus on Food Safety Opportunities and Listeriosis in pregnant women.



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FOOD SAFETY OPPORTUNITIES

Food service is a huge opportunity for convenience stores – if it is done well. A good business plan for food service, that emphasizes food safety, is critical to your expanding services and needs. Planning, preparation and training are key elements for future and ongoing success.

Expanded food service, including increased cooking and reheating, have made temperatures even more critical for the convenience store industry. If you just add new products or some equipment, you may find more challenges than opportunities.

In 1998, CSP magazine surveyed food safety conditions and found opportunities to improve even for those stores with very limited food preparation. In 1998 and in 2003 FDA collected data in five key areas: “foodborne illness risk factors”. FDA reported no significant improvement for risk factors in the 5 year period. The data collection differed from the FDA study so ranges from CSP are provided.

Although the FDA data is divided by type of establishment, there is not a specific Convenience store category. The following data is for Fast Food establishments.

- Food from Unsafe Sources
- Improper Holding/Time and Temperature
- Inadequate Cooking
- Poor Personal Hygiene
- Contaminated Equipment/prevention of Contamination.

Foodborne Illness Risk Factors	Out of Compliance		CSP notes
	FDA	CSP	
Improper Holding/Time & Temperature	41.7%	27 to 87%	87% cold deli sandwiches 31% hot foods 27% hot dogs
Poor Personal Hygiene	31.2%	Indirect measurements only	28% of hand sinks dirty 06% no soap 22% no paper towels 2 sinks – no hot water
Other/Chemical	28.3%	14 to 31%	22% excessive chemicals 47% no sanitizer test kit 22% no sanitizer One store No detergent One store 4 times approved chlorine level
Contaminated Equipment/Protection from Contamination	21.9%	17 to 75%	64% Vault 75% Coffee area
Inadequate Cooking	9.1%		No cooking reported
Food From Unsafe Sources	2.3%		None reported

These findings were very similar to what we find in the field. Temperature and Time, Personal Hygiene, and preventing Cross Contamination are still the critical foundations for a good food safety program. There are plenty of opportunities to strengthen retail practices to build a better food safety program that utilizes HACCP (Hazard Analysis Critical Control Points).

The FDA study indicates that a Certified Food Protection Manager appears to positively impact certain risk factors, especially Personal Hygiene. Our experience supports this statement but we would like to emphasize quality of training. Passing the exam (certification) is an important accomplishment, but training is a unique opportunity to market and teach food safety. 'Active Managerial Control' from a knowledgeable and committed Manager is critical in preventing and controlling risk factors. Operationally and scientifically correct training programs should be used.

'Active Managerial Control' includes continuously preventing or minimizing problems rather than reacting to a problem or a health department violation. It is a major commitment from every Employee, Manager and Executive to make sure that food safety is incorporated throughout the entire food program. Each and every Employee has an important role in food safety. Monitoring, correction, and follow through are critical components.

- Be proactive and manage food safety.
- Lead by example.
- Prevent or control risk factors
- Use good Personal Hygiene Practices
- Practice Temperature and Time control (thermometers, temperatures, code dating)
- Prevent Cross Contamination
- Provide supplies – thermometers, tools, chemicals, gloves, sink supplies etc.
- Communicate and Train
 - Is food safety a positive or a negative?
 - Effective Training - What, How, Where, When and Why?

Active Managerial Control, including auditing, can create unique opportunities to find potential problems. First you have to know the problem exists and then you have the opportunity to prevent the problem or fix it.

Key answers for better food safety are not magical. They do require commitment, management and supervision. They are very basic and according to these two studies the list has not changed in the past few years.

- Temperature and Time
 - Keep food hot or cold or don't keep it.
 - Code date product and check for expired dates daily
- Personal Hygiene
 - Never prepare food when you are sick
 - Wash your hands (and wear gloves)
- Cross Contamination
 - Clean and Sanitize
 - Store foods to prevent cross contamination

People in the food industry work very hard to support their customers. We need to find the best way to use this commitment and food safety to support food service and our goal to provide high quality food to our customers. The following information is a limited summary of problem categories and recommendations for improvement.

Temperature and Time Control

During store audits, we regularly find hot and cold potentially hazardous foods at dangerous temperatures, missing or out of calibration thermometers, incomplete temperature logs, and code date problems.

To keep cold foods (especially sandwiches) at 41°F or colder, the cooler or vault air temperature must be colder than 41°F (usually 36 to 38°F or colder). Case designs and environmental conditions (heat and humidity) also affect the food temperatures.

Many cold temperature problems are related to practices not equipment, for example not closing doors or stocking large quantities of warm products. For example, a large delivery of warm beverages may overwhelm the cooling capacity and actually increase the food and air temperature in the cooler.

Packing food tightly limits air flow, increases food temperatures, and decreases safety and shelf life. In some cases, sandwiches can only be displayed one deep to maintain safe temperatures. If you are making sandwiches on site, limit the amount of food removed from refrigeration as well as the amount of time it is out of refrigeration. Prepare food in smaller batches to keep the food cold.

Some food facilities store the highest risk foods (meats, cheeses, dairy products) near the door for easy access. This is also the warmest area of the cooler. Find the coldest area of the cooler to store potentially hazardous foods. Prevent Cross Contamination and allow for good air flow.

Hot holding, cooking, and reheating problems are also consistent observations. Roller grill problems are frequently observed because they are used to reheat and display food. Employees tend to set the grill temperatures too low to rapidly reheat the food because they want to minimize drying out the food. Many instructions for cooking foods list temperatures for the cooking unit or oil without listing the final food temperature.

Thermometers are frequently missing, dirty, out of calibration, and not used. Thermometers should be calibrated daily and cleaned and sanitized as needed (at least every use) to prevent cross contamination. Temperature logs, including calibration information, should be easily accessible, supplies should be available (paper, pen, recording device), and Managers and Supervisors should check the logs. If entries are missing or the food is out of temperature, then additional training is needed. Corrective actions for food out of temperature (product reheated if appropriate, product destroyed, etc.) are critical log entries.

Code dating is a critical factor for minimizing the growth of bacteria that can grow at cold temperatures for example *Listeria monocytogenes*. Make sure that all product is code dated. Never sell or use product beyond the expiration date (manufacturer and company policy). Rotate foods – use FIFO (First in First out). Check for expired product daily.

FDA guidelines recommend that establishments keep food at 41°F or colder or 135°F or hotter. State and Local regulatory requirements generally range from 40°F to 41°F and 130, 135, to 140°F. Cooking temperatures vary by type of food and generally range from 145 to 165°F. Reheating temperature requirements are generally 165°F for products made on site or 135°F for sealed packages of fully cooked food from licensed manufacturers.

Personal Hygiene

People should not prepare food when they have or carry contagious illnesses. Company policy should be enforced to minimize the risk of transfer through contact or food.

Training and a good relationship can help a Manager minimize this risk. It can be very difficult to make sure that an ill employee does not work when they are ill.

Clean uniforms, especially aprons, and hair restraints will also minimize transfer of contaminants from people to food.

Poor Personal Hygiene was the highest percentage out of compliance for FDA when they averaged data for all types of facilities. According to the CSP study, Employees could not effectively wash hands in more than 25% of the facilities.

Hands should always be washed before preparing food, while preparing food, and after preparing food: whenever they are contaminated. The frequency and timing varies with the type of food, for example, cooking raw meat versus preparing deli sandwiches.

Hand sinks should be clean and sanitized, easy to get to, well supplied, and not blocked with trash cans or other items. Supplies should include hot and cold water, hand soap, and a method to dry hands. Hands should be scrubbed at least 10 to 15 seconds. Hot water is needed because cold water will not dissolve grease or fat. Avoid touching contaminated surfaces (paper towel to turn off sink, open doors, etc.). Always wash hands in the food preparation area again after washing hands after using the restroom.

Hand antiseptics (former called sanitizers) can be used after cleaning hands not instead of washing thoroughly.

In addition to hand washing, single use food gloves should be used when touching ready to eat foods. They must be changed when contaminated or damaged.

Cross contamination

Ready to eat and raw foods can be contaminated. Cross contamination occurs any time that these foods touch a food, utensil or piece of equipment, a hand, a glove, an apron, or any other surface. Cross contamination also occurs when these surfaces then touch other foods or surfaces. Contact can be direct (raw chicken dripping into cooked food) or indirect (contamination from raw chicken to a knife that transfers the contamination to cooked meat).

Washing hands and using gloves properly are important practices to help prevent foodborne illness.

Using separate equipment for raw and ready to eat foods and cleaning and sanitizing between different types of food are the best ways to prevent cross contamination from utensils or equipment. Cleaning and sanitizing is a three step process: Wash with hot water and detergent, rinse in clean water, sanitize (chemicals, hot water, or steam).

Store foods in a way that prevents their contamination or their ability to contaminate other foods Never store raw foods over ready to eat foods, for example raw chicken over cooked chicken. Store different types of raw food (beef, chicken, pork, vegetables, etc.) separate from each other – never allow one to drip into or touch another. Keep foods covered to prevent cross contamination. Raw meat and vegetables (before and after cleaning) can contaminate ready to eat foods. Some ready to eat foods (for example deli products) can contain microorganisms that cause illness and decrease shelf life.

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Convenience Store Information Group, CSP magazine October 98
The original study was based on an earlier FDA Food Code and used 130°F.

www.cfsan.fda.gov/~dms/retrsk2.html

WHY LISTERIOSIS RATES ARE 20 FOLD HIGHER DURING PREGNANCY

Safe Food Handling for a HEALTHY Pregnancy

Listeriosis is a serious infection caused by eating food contaminated with the bacteria **LISTERIA MONOCYTOGENES**.

When you're expecting, it's natural to be concerned about your health and the health of your unborn baby. Maintaining a healthy diet, drinking plenty of liquids, and taking prenatal vitamins are all important for the health of the expectant mother and her baby. Food safety is also very important.

Sometimes what we eat can make us sick, food contaminated by harmful bacteria may cause serious illness. Food-borne illness carried by listeria in pregnant women can result in premature delivery, miscarriage, fetal death and/or severe illness or death of a new born because of the infection.

For years doctors have been puzzled over why pregnant woman are 20 times more likely than others to be infected by the bacteria *listeria monocytogenes*. Researchers at the University of California, Berkeley now think they have the answer. Their research shows that bacteria can invade the placenta, where-protected from the body's immune system; they proliferate rapidly before pouring out to infect organs such as liver and spleen. The illness they cause often result in miscarriage or infection of the fetus. Researchers theorize that miscarriage is a defense mechanism as it is very rare for a pregnant woman to be infected, but once she is, she can't clear the infection unless the placenta is expelled.

What steps can I take to prevent *listeriosis*?

By carefully following food safety precautions, persons at risk for listeriosis can substantially reduce their chances of becoming ill.

USDA's Food Safety and Inspection Service (FSIS) and the U.S. Food and Drug Administration (FDA) provide the following advice for pregnant women and all at-risk consumers:

- **DO NOT EAT** hot dogs, luncheon meats, or deli meats *unless they are reheated* until steaming hot.
- **DO NOT EAT** soft cheeses such as feta, Brie, Camembert, blue-veined cheeses, and Mexican-style cheeses such as "queso blanco fresco." Hard cheeses, semi-soft cheeses such as mozzarella, pasteurized processed cheese slices and spreads, cream cheese, and cottage cheese can be safely consumed.
- **DO NOT EAT** refrigerated pâté or meat spreads. Canned or shelf-stable pâté and meat spreads can be eaten.
- **DO NOT EAT** refrigerated smoked seafood *unless* it is an ingredient in a *cooked* dish such as a casserole. Examples of refrigerated smoked seafood include salmon, trout, whitefish, cod, tuna, and mackerel which are most often labeled as "nova-style," "lox," kippered," "smoked," or "jerky." This fish is found in the refrigerated section or sold at deli counters of grocery stores and delicatessens. Canned fish such as salmon and tuna or shelf-stable smoked seafood may be safely eaten.
- **DO NOT DRINK** raw (unpasteurized) milk **OR EAT** foods that contain unpasteurized milk.

What can all consumers do to prevent listeriosis and keep their food safe?

Because *Listeria* can grow at refrigeration temperatures of 40°F or below, FSIS and FDA advise all consumers to:

- Use all perishable items that are precooked or ready-to-eat as soon as possible.
- Clean their refrigerators regularly.
- Use a refrigerator thermometer to make sure that the refrigerator always stays at 40°F or below.

RESOURCES:

- ✓ www.foodhaaccp.com
- ✓ <http://www.rxpnews.com/research/obstetrics/article4632/shtml>
- ✓ <http://www.fsis.usda.gov> CENTERS FOR DISEASE CONTROL AND PREVENTION/FOOD-BORNE ILLNESS.
- ✓ <http://www.cdc.gov/foodsafety>
- ✓ <http://www.foodsafety.gov>
- ✓ <http://www.fightbac.org>