

Food Protection Committee

F P C Newsletter

FALL/WINTER,
2017

Volume 3,
Issue 3

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POINTS OF INTEREST

- Upwards of 4,000 people are served on game days.
- Food is served from over 60 sites each home game.
- Because of limited space, food storage is juggled among different locations.
- HACCP procedures are always followed.
- A pending remodel will help considerably.

Serving food to thousands at once

What is it like to have to prepare thousands of meals to be served in the space of a few hours? Josh Timmons, Executive Chef at Purdue University explained to a recent meeting of the Food Protection Committee what it takes for him to achieve that task on the days of home football games, with a facility that he considers too small. Chef Timmons explained that they may serve upwards of 4,000 people, between the concession stands and the suites for paying patrons. And the menus will vary depending upon whether it's a concession stand or a suite. Over 60 sites serve food on game days.

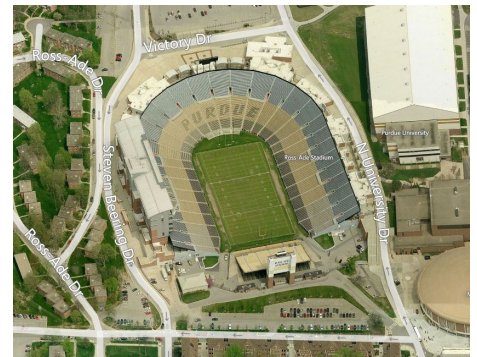
Food preparation will begin two days ahead for menus that can include pulled pork and lasagna to hotdogs and nachos. Limited menus that allow patrons to order food like steak or short ribs can be offered to those who rent suites, or they may opt for a limited buffet with food replenished throughout the games.

Besides employees, Chef Josh says he may use up to 200 volunteers on game days to complete tasks and keep the food operation running smoothly.

Because of too little storage

space, Chef Josh says it's necessary to juggle food between storage locations, but he hopes the planned remodel for next year will help fix space issues and improve preparation facilities.

HACCP procedures are followed and non-perishable food that is leftover may be donated to non profit groups.



Social media sites used for food sales

A group discussion at a recent Food Protection Committee meeting centered on social media sites promoting food sales, and mail order food being offered. Kelli Whiting with the

Marion Co. Public Health Dept. says she has encountered people offering food for sale via Instagram. Since Instagram is basically a picture only site, she said sellers would just post a picture of the food items to sell,

and wait for customers. Questions and concerns were raised as to the up tick in food delivery sites. Who, if anyone, inspects or permits such sellers? There were more questions than answers.

Flooding creates serious food safety issues

The massive flooding following Hurricane Harvey has caused massive food safety concerns. This is apart from problems that may be created by a lack of electricity.

Flood problems can occur most places but food safety concerns may be mitigated if proper care is taken.

First, always assume that any flood water is contaminated with pathogens, so anything the flood water contacts is contaminated. To help consumers, the USDA has offered the following tips for handling food subjected to flood water.

- Do not eat (or serve) any food that may have come into contact with flood water.
- Discard any food that is not in a water-proof container if there is any chance that it has come into contact with flood water. Food containers that are not water-proof include those with

“Discard any food not in water proof containers. Containers with screw tops, snap lids or crimped caps are not water proof.”

screw-caps, snap lids, pull tops, and crimped caps. Also, discard cardboard juice/milk/baby formula boxes and home canned foods if they have come in contact with flood water, because they cannot be effectively cleaned and sanitized.

- Inspect canned foods and discard any food in damaged cans. Can damage is shown by swelling, leakage, punctures, holes, fractures, extensive deep rusting, or crushing/denting severe enough to prevent normal stacking or opening with a manual, wheel-type can opener.

The USDA further advises that pots, pans, utensils should be washed in hot water (if available), rinsed, then thoroughly sanitized with an unscented bleach

solution. Or boiling water will work as a sanitizer. Allow to air dry. Counter tops and other food contact surfaces need the same procedure.

USDA says food in sealed cans and retort pouches may be saved with these steps.

- Remove the labels, if they are removable since they can harbor dirt and bacteria.
- Thoroughly wash the cans or retort pouches with soap and hot water, if it is available.
- Rinse the cans or retort pouches with water that is safe for drinking, if available, since dirt or residual soap will reduce the effectiveness of sanitizing.
 - Then, sanitize them by immersion in one of two ways: Place in water and allow the water to come to a boil and continue boiling for two minutes, or place in a freshly made bleach solution for 15 minutes. Air dry for an hour.
 - If labels were removed, relabel and include expiration dates.



Assume raw produce is not safe after a flood

The food code says raw produce is to be “thoroughly washed in water to remove soil and other contaminants” before further preparation, like slicing, cutting, or combining with other ingredients. But this assumes that the produce has been harvested under typical circumstances.

But according to FDA, fresh produce that is exposed to flood waters is considered contaminated (adulterated) and can not be made safe by any acceptable practice. Such produce must be discarded. FDA adds that edible portions of plants in fields not exposed to flood water might be evaluated on a case

by case basis. Ask these questions:

In what stage of growth is the plant?

How far above the ground is the edible portion?

What are the likely pathogens or chemicals in the flood water?

What you should know about...

BIOFILM FORMATION

A biofilm is a community of cells that attach to each other and a surface, increasing the density of bacterial growth and providing protection from harsh environments. Researchers have discovered that common disinfectants face an uphill battle killing Salmonella once it has had the time to form a biofilm.

Food Safety News has reported that researchers at the National University of Ireland, Galway, grew *Salmonella enterica* cells for seven days, then applied three types of disinfectant — sodium hypochlorite, sodium hydroxide and benzalkonium chloride, including common sanitizer ingredients used daily in foodservice establishments.

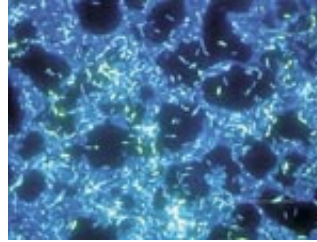
They found that none of the disinfectants was able to kill the

cells after one week. Even soaking the biofilms in disinfectant for an hour and a half failed to kill the microbes.

“Once Salmonella cells are allowed to become established on a surface, the number of cells will increase over time, making it difficult — if not impossible — to completely eliminate or kill all cells once part of a mature biofilm,” said Mary Corcoran, one of the authors of the study published in the journal *Applied and Environmental Microbiology*.

The strains she tested were able to form a biofilm on glass, steel, polycarbonate plastic, glazed tile and concrete.

“In terms of ‘real world’ environments, it is estimated that most organisms are capable of



this, and that a high percentage of micro-organisms will form a biofilm to optimize growth and survival,” Corcoran said.

She added that once biofilms grow, it is possible that abrasive cleaning or higher concentrations of disinfectants could reduce the pathogen count, but “the recommended concentrations — frequently used in industry — did not kill the biofilm cells.”

Corcoran added that it is most likely that a similar pattern is true for other serotypes of *Salmonella* and other organisms such as *E. coli*.

To address this issue, frequent cleaning using the appropriate methods is necessary to avoid the buildup of biofilms. Proper food handling practices including avoiding cross contamination can also help.

“After a week of biofilm growth, none of the disinfectants was able to kill the cells. Even soaking failed to kill the microbes.”

Third-party certification assures compliance

If a manufacturer wants to be certain his product meets applicable standards of quality and safety, and meet appropriate national (and state) regulations, he may turn to a third-party qualified to certify the product. NSF International is such a provider and may be best known.

Following extensive testing, the approved product will have a seal affixed that describes what “standards” the product now meets. Finding the seal can assure inspectors that a piece of equipment (for example) meets the requirements for construc-

tion, durability, and wear. Equipment without a third party certification may be used in a food facility, but it then falls to the owner / operator to demonstrate the code criteria are met.

WHO SETS THE STANDARDS?

NSF International is itself accredited by the American National Standards Institute (ANSI) and standards for foodservice equipment, utensils, and chemicals, etc., are developed by stakeholders in entities that may be affected by those standards. This can include members from



the federal government, the military, academic and research institutions, or others that may regulate the standard.

Once a specific standard is created, it will be thoroughly documented and the documentation will be available. With NSF, Standards may be searched from the nsf.org website.



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FOOD PROTECTION COMMITTEE

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IEHA MISSION:

To promote, preserve and protect environmental public health in the State of Indiana, and to encourage a spirit of cooperation among all environmental health stakeholders while serving its members in the regulatory, industry and academic communities.

The **Food Protection Committee (FPC)** is one of four standing subcommittees of the **Indiana Environmental Health Association**. The committee meets approximately four times per year with dates and locations chosen by the members. Its focus is to discuss food safety related issues of interest to its members. While all IEHA members and guests may attend meetings, only voting members, as specified in the IEHA Constitution and Bylaws, may vote. Meeting information is disseminated by email. To be added to the email list, contact one of the co-chairs, or your IEHA chapter representative.

FPC Co-chairs: Jennifer Asbury, Lisa Chandler

FPC Newsletter Editor: Ed Norris

Tidbits and morsels

ROBOT FOOD PREPARATION

More robots are entering food service. As robotic skills improve, more devices will be employed in many aspects of food preparation, and in some cases, a robot might prepare the entire food order.

The trend toward robot food preparation is not abating, so what does this mean for a food inspector? Is a robot that prepares food a food employee? Or is it food equipment? A food employee, by definition, is an "individual" indicating that it is a person. So food preparing robots would be treated as equipment. But as artificial intelligence grows, how long before that changes? And how long before the food inspection can be done by a robot?



Momentum Machines has constructed a robot to make hamburgers from cooking to toppings with no humans needed.

A startup company called Momentum Machines has debuted a fully automated machine that could make up to 400 burgers per hour, from grilling the meat to adding the toppings. According to *Business Insider*, the company seeks only a "restaurant generalist" to oversee the work. But beyond food safety this job might require knowledge in software troubleshooting.

ELECTION OF OFFICERS

Voting members of the Food Protection Committee will select officers for 2018 at the November 30 meeting. All meetings are held at the IDEM office conference room at 2525 N. Shadeland Ave. in Indianapolis. Voting members consist of one representative from each chapter. But all IEHA members may attend.

