



# Newsletter

## Officials seeking cause of E. coli in flour

General Mills has announced that it is cooperating with CDC officials in its investigation into why several dozen people were sickened from E. coli O121. The company voluntarily recalled its Gold Medal, Wondra, and Signature flour brands after investigators discovered a common link among those sickened was the use of one of those flour brands.

At least 38 illnesses occurred across 20 states and authorities have determined that about half of the individuals involved reported making something homemade with a type of General Mills flour.

“Out of an abundance of caution and because there is any doubt, we are offering to replace the flour, but also use this opportunity to remind consumers about how to safely handle flour,” said Liz Nordlie, President of General Mills Baking Division in a press release. CDC officials discovered that some of the consumers who became sick had consumed raw batter made with the flour.

General Mills reminded consumers in its press release that flour comes from the milling of wheat, and



since it's grown outdoors, there is a risk of bacteria. That bacteria can be rendered harmless by cooking or baking the product containing flour, but that is offset if consumers cross contaminate with their hands or utensils.

Although most E. coli strains are harmless, O121 can make someone very sick. To date, no E. coli has been detected in any products or at any of the company's manufacturing plants.

None of the affected flour brands were distributed in Indiana.

### Inside this issue:

Are fermented foods safer?	2
What's bugging you - Listeria	3
What's the safe temp for poultry?	4
Budget cuts hurting other states	4
New sanitizer rinse from Ecolab	5

## What you should know about...

### Proper glove use

There is no magic connected to gloves used by food workers. Gloves are just one way to prevent bare hand contact with ready to eat (RTE) food that will not receive an additional heat treatment before serving.

Education of managers and food workers

is key to proper glove use. Gloves can also spread contamination, just like bare hands, if not used properly.

Here are some things to watch for during a foodservice inspection with glove use. Hands should be washed before putting on gloves. Having gloves on hands can

create a warm, moist environment which can promote pathogen growth.

Next, look for the type of gloves used, and their condition. Gloves may be single use, but don't have to be. Gloves that can be washed and sanitized, may be suitable

*(Continued on page 3)*

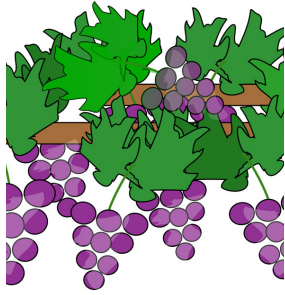
### Special points to ponder:

- *There are no magic gloves.*
- *Hands should be washed before gloves go on.*
- *Gloves should be suited to the task and changed often.*
- *A glove is considered a utensil in Indiana.*

## Are fermented foods safer than non-fermented foods?

Dr. Christian Butzke, Professor of Enology at Purdue, says fermented foods from wine to cheeses have been around for thousands of years, and there has never been a foodborne illness outbreak associated with a fermented food.

Professor Butzke says that wine was considered the original “safe food” and kept Roman soldiers from getting sick because they didn’t have potable water. He



added that with a pH of between 3 and 4, no bacterial pathogen can survive, but it is unknown how viruses are affected.

Fermented foods include items like kimchee, some cheeses, and balsamic vinegar.

With the growth of wineries in Indiana (now approximately 90), issues may arise for food inspectors as to how to handle them as food establishments. Dr. Butzke

said there is little regulation of the wine industry and that Purdue does offer guidance to startup wineries to show operators proper techniques.

He said one issue is that chemical sanitizers should not be used as the chemical residues that remain are harmful to wine. Professor Butzke suggested heat, possibly steam that can achieve a temperature around 180° F., might be the most effective sanitizing method.

## How safe is glove use for food handlers?

A misconception among many food employees is that wearing gloves makes them safe from all harm. This psychological factor may be leading to over-using gloves but under-changing them, says Jim Mann in a recent *Food Safety News* and is supported by research. This seems to apply to health care workers and foodservice workers as well. Once formed, habits about glove use and hand-

washing may be hard to change.

**“Proper handwashing and glove use may be a good return on investment.”**

Improper use of hand sanitizers and poor quality soaps that are not easily rinsed can be factors affecting hygiene. Taking the extra step to assure hands are

washed correctly with a suitable soap before putting on quality gloves can be considered a good “return on investment” in that the “return” may be fewer people getting sick.

Inspectors should not just look for no bare hand contact, but for correct glove use, and how gloves are used, and if hands are washed with a suitable soap.

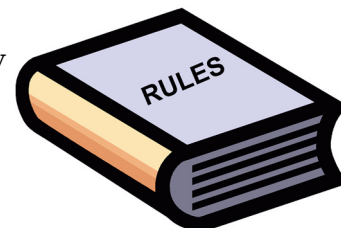
## Words change in the code, if you don’t look at it!

All food establishment inspectors, sooner or later, reach a comfort zone, where they feel they no longer need to look up sections of the food code that they tend to mark regularly.

But did you know that the words on the page will change, if you go too long before looking at the code sections again?

Open the food code to the very beginning, and look at any of the sections from 2 to 105. These are Definitions of the terms used through out the rule. (Did you know that “employee” and “food employee” have differing definitions?)

Pick code sections at random and read them thoroughly. It’s a



sure bet you will find yourself saying, “I didn’t know it said that!”

But those words were there all along. Periodically re-read the food code and see for yourself!

## What's bugging you - Listeria monocytogenes

**L**isteria monocytogenes is providing a growing challenge to food safety. It is becoming more prevalent and leading to a growing number of foodborne illnesses.



and too low to cause illness.

“Sanitation and environmental management,” he said, “are key to controlling Listeria.”

Dr. Mickey Parrish, Senior Science Advisor with the US Food and Drug Administration, spoke about Listeria at the recent IEHA Spring Conference and said FDA is working on a “Compliance Policy Guide” for industry in hopes industry leaders will adopt the zero tolerance standard for Listeria that is already in effect in most other countries. Listeria monocytogenes is just one type of Listeria, but it’s the one that is pathogenic. Contracting listeriosis, he said, will nearly always mean a trip to the hospital.

Dr. Parrish said FDA wants a “zero tolerance” policy for Listeria in ready-to-eat foods that support its growth, and less than 100 cells per gram in other foods. He said contamination is common but occurs at levels too low to measure

Listeria is common in dairy products and readily survives under refrigeration and can grow at just above freezing. Dr. Parrish added that it’s not really known what a “safe” number is for Listeria.

The increasing concerns about Listeria contamination is yet another reason to emphasize a proper cleaning and maintenance schedule at every food establishment.

Recent studies have revealed that foodservice equipment, like deli slicers, are prime targets for Listeria growth leading to cross contamination problems. Regular cleaning is essential. During inspections, ask what the cleaning

schedule is. Equipment that is designed to be broken down must be thoroughly cleaned daily, and any parts that are no longer cleanable or function properly need to be replaced. (Note: Don’t ask **if** they clean, but **how often** do they clean.) Not cleaning often enough can allow biofilms to build, making cleaning and sanitizing much tougher.

While resistant to cold temperatures, Listeria is easily destroyed by heat. It exists naturally in the environment, and can be found in moist environments, soil, and decaying vegetation.

**“It’s not really known what a “safe” number is for Listeria monocytogenes”**

Although not a leading cause of foodborne illness, it is a leading cause of foodborne illness deaths. According to CDC, a

severe form of the infection has a case fatality rate of 15% to 30%. It can lead to other serious infections like septicemia. Victims get sick by ingesting Listeria with consumed food. Listeria can then be passed cell to cell and enter the blood stream.

## What you should know about (continued)

*(Continued from page 1)*

ble, depending upon their design and construction. If a glove will hold up to washing, then it’s probably OK to use it (like heavy duty “Playtex” type gloves).

Assure that if gloves are used, they are changed at least every four hours, or after changing be-

tween types of foods. Ask open questions like, “What is your policy on glove use?” Single use gloves are thrown away when soiled or damaged.

Watch for cross contamination issues with gloves. Some food workers have a false sense of safety with gloves.



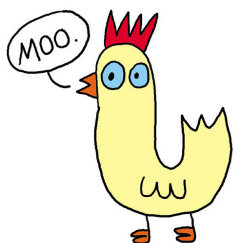
Indiana doesn’t have a “glove” law, there is a “don’t touch the food” law. Remember that foodservice gloves are just another utensil toward that end. Several sections of 410 IAC 7-24 address

glove use in a foodservice establishment.

## What is the safe internal temperature for poultry?

What is the “safe” final internal temperature for cooked poultry? If one looks at the Food Code, 410 IAC 7-24, Sec. 182, the answer is clear: 165° F. But if you check other sources, the answer is not so clear.

There is a time / temperature relationship considered for beef and pork, spelled out in the code, that allows for a lower cooking time as long as a correspondingly longer hold time is established. But can this be applied to poultry?



There are increasing numbers of cooking experts who say yes.

There is no doubt that cooking to 165° F. renders the poultry safe, but culinary advocates say this also dries out

the product unnecessarily, making the final product less appealing to consumers.

USDA’s Food Safety and Inspection Service (FSIS) has now released a document that says

time / temperature tables may be used that show a cooking temperature as low as 136°F may be used if there is a corresponding hold time of over 81 minutes. Because of a different pathogen of concern, these tables vary from those for beef and pork, although the principle is the same.

But, keep in mind that the Indiana rule has not changed so existing sections still apply for proper final cooking temperatures.

## Budget cuts hurting other states’ health departments

Mississippi food establishments will see fewer inspections after the Mississippi Department of Health (MDH) has been forced to make over 13% in budget cuts. According to *Food Safety News*, MDH has let 61 people go and can’t fill 89 vacant jobs for lack of money. It may lose another \$4 million in federal funds because it can’t provide matching funds.

Health clinics in South Mississippi have closed offices and that has caused some inspectors to work out of their cars or residences. Only low scoring establishments will see more than one inspection per year.

**“This is an unfortunate consequence of not adequately funding government.”**

Louisiana is also facing budget shortfalls causing some food inspectors there to work from their homes and cars. A spokesperson for Gov. Bel Edwards says cuts will mean 26% fewer inspections.

“This is an unfortunate consequence of not adequately funding government,” Gov. Edwards said.

## Poultry producers to beef up pathogen reduction

The USDA’s Food Safety and Inspection Service (FSIS) is giving until July for producers to meet new pathogen reduction standards for Salmonella and Campylobacter with programs the producers themselves have designed.

USDA says time is needed for inspectors to learn the new procedures for sampling. Officials cited two outbreaks in recent years

traced to chicken parts and other poultry products in which producers had not implemented effective controls for Salmonella, nor determine the source of the pathogens.

Changes could mean increased costs, but FSIS says changing procedures should not be complicated. Changes could include additional cleaning proce-



dures and application of chemical microbial agents to chicken parts. Employees might receive more sanitation training.

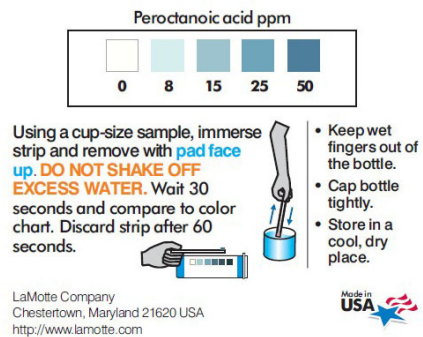
Numbers and types of samples obtained by inspectors will depend upon the size and past food safety record. The largest operations might submit 5 samples a month.

## New sanitizer from Ecolab works in their dish machines

Ecolab has introduced a new chemical sanitizer that is designed for use exclusively in their single tank dish machines.

Eric Dollens, Sales Specialist with Ecolab, told a recent gathering of Food Protection Committee attendees that it is not too likely that an inspector will encounter the product yet, but if they do, it's important that they know how to evaluate it.

While chemical sanitizing machines are nearly always chlorine-based, this product uses peroxyoctanoic acid and hydrogen peroxide as main ingredients, plus some other ingredients like surfactants. Eric offered that the new product is part of Ecolab's "concentrated liquid dish machine system" and is coupled with its concentrated detergent. Dish machines that use the new



*This sanitizer for use in Ecolab dish machines requires its own test strips and color change chart. A specific test method should be followed.*

"concentrated sanitizing rinse" will say "Ecolab" on the front and have a data plate that specifies how the machine operates.

Note that this new product is approved by EPA as a rinse sanitizer enabling a two step process (rather than three). The EPA registration number is 1677-244 and will appear on the product label.

Why this product? Eric said it might be cost effective for many customers because less product is used to achieve proper sanitation. And the smaller container takes up less space.

**"If the sanitizing solution is too hot when tested, the reading will be too high, meaning the strength is less than one sees."**

### Testing misconceptions

Like all testing strips, the chemical composition of the strip is intended to measure the strength of a particular sanitizer, by turning darker shades as strength increases. Even though a different test strip will change color, this does not mean it is telling you anything useful.

The new Ecolab product, as Eric pointed out, requires a specific testing method. The solution is gathered in a cup after the dish machine has run at least one cycle, the solution temperature must cool to 95° F. or less. Then dip a strip for one second, remove

it and wait 30 seconds, then compare the reading to the color chart.

Are inspectors taking sanitizer test readings correctly?

Even with other chemicals, solution temperature and exposure time and the correct test strip are important. Read the label for how to test for proper strength.

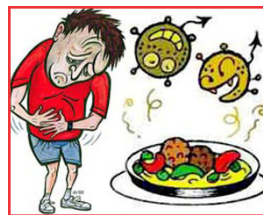
## CDC releases foodborne illness numbers for 2014

The Centers for Disease Control and Prevention has released its food-related illness statistics for 2014. The data shows 13,246 illnesses, 712 hospitalizations, and 21 deaths as a result of eating contaminated food.

Topping the list of food categories associated with outbreaks, were seeded vegetables like cucumbers and tomatoes, followed by chicken, then dairy.

Single food outbreaks had

more outbreaks connected to fish, followed by chicken and dairy.



Outbreaks covering multiple states came from ground beef and dairy equally with 5 in each category. Restaurants accounted for 485 outbreaks with most coming with sit-down facilities with a single point of preparation.

Norovirus again was the most common agent, then Salmonella, which also led to the most hospitalizations. But Listeria monocytogenes caused the most deaths.

Note that for more than half of the outbreaks, a food cause was never identified. Note, too, that most of the dairy outbreaks were linked to unpasteurized dairy products.

**Indiana Environmental  
Health Association  
Food Protection  
Committee**

Food Protection Committee  
IEHA  
P O Box 457  
Indianapolis, IN 46206-0457

**FPC Email:**  
spattee@isdh.in.gov  
jkasbury@purdue.edu  
**FPC Newsletter editor:**  
fsio9@yahoo.com

Check the IEHA website:



**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:** Sharon Pattee, Jennifer Asbury.

**FPC Newsletter Editor:** Ed Norris

## Morsels, samples and appetizers

- **51,700** - the number of public health department jobs lost between 2008 and 2014, a 20% reduction in staff. You can't keep doing more, or even the same, with less.
- The food protection breakout sessions will feature an outstanding array of timely speakers with input from the FPC. High on the "who's who" speaker choices is attorney Bill Marler of the law firm Marler Clark in



Seattle, Washington. Marler Clark specializes in litigation on behalf of victims of foodborne illnesses. Marler will also speak during a general session.

- Dr. Robert Corrigan will give a presentation on rodents in food establishments, with attendees eligible for 7A credit. Dr. Amanda Deering and Dr. Haley Oliver, both from Purdue, will discuss food safety with fresh produce, and Listeria, respectively.

- An recent accident on a New Jersey highway lead to instant deli sandwiches when a bread truck collided with a second truck carrying deli meats. No one was injured, but the website Mashable says the ingredients for more than 65,000 sandwiches were destroyed.
- The next Food Protection Committee meeting is set for 9:30 to noon on August 17, in the IDEM conference room 2525 N. Shadeland Ave., Indianapolis.
- The ISDH Food Protection Symposium is November 15, 16.