

FoodBytes

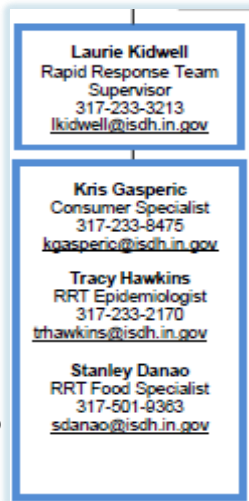
August 2018

Volume 18 Issue 1

RRT Newsworthy

What is a Rapid Response Team?

Rapid Response Teams (RRTs) are multi-agency, multidisciplinary teams that operate using Incident Command System (ICS)/National Incident Management System (NIMS) principles and a Unified Command structure to respond to human and animal food emergencies.



<https://www.fda.gov/ForFederalStateandLocalOfficials/ProgramsInitiatives/ucm475021.htm>

Indiana RRT and Local Health Departments

- The purpose of establishing an Indiana RRT is to strengthen the ability to respond to outbreaks and other food-related emergencies, preventing additional illness or injury.
- ISDH individuals are working in the name of this initiative, but a much larger cooperative team is needed.
- The ISDH team acts as a resource, not a replacement, for local health department investigations. We all have an active role.
- Indiana RRT has developed a written framework in which to operate; to include written instructions for environmental assessments, sampling, recalls, trace-backs as well as internal and external communication.

Local Level Involvement: This level of response occurs when a food-related incident remains within a county with fewer cases identified; an example is a contaminated meal served at a church event that caused a small outbreak within the local community. Local health departments will be responsible for responses to small local outbreaks. However, local health departments may call upon the Indiana RRT for guidance or assistance.

Information Sharing

In the near future, local health departments will be encouraged to adopt FDA 20.88 Agreements. Agencies will be required to have a 20.88 Agreement in place before sharing FDA acquired information. Once covered, commercially confidential information to include distribution lists can be shared with local health department jurisdictions. In addition, short term 20.88 Agreements can be facilitated quickly when information needs to be shared with another jurisdiction involved in a response.

Indiana RRT Written Framework

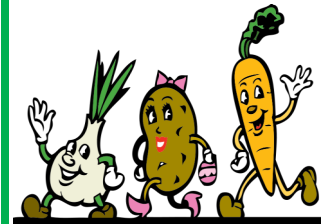
All local and state agencies are encouraged to develop an internal written framework for human and animal food emergency responses. The Indiana RRT has developed internal and joint procedures that comply with RRT and regulatory program standards. Written procedures should include all aspects of investigatory and mitigation activities.

Recent RRT Activities

The Indiana RRT's purpose is to coordinate and respond to larger multi-jurisdictional investigations. Here are a few examples of investigations that Indiana's RRT has responded to:

- Listeria Monocytogenes and Middle Eastern Style Soft Cheese
- Salmonella Newport and Alfalfa Sprouts
- E. coli 0157:H7 and Leafy Greens
- Statewide Hepatitis A Outbreak
- Listeria Monocytogenes in Surveillance Sample (ISDH Regulated Firm)
- Salmonella Newport and Watermelon
- Soynut Butter and e. coli 0157:H7 Recall Audit Check
- Hepatitis A and Imported Strawberry Recall Audit Check

By Laurie Kidwell
ISDH RRT Coordinator



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Indiana's New Produce Safety Rule

Senate Enrolled Act (SEA) 331 authorizes the state adoption of the FDA's Produce Safety Rule. This law was created under the Food Safety Modernization Act (FSMA) and adopted by Indiana. Adoption permits the state to control inspections and other activities mandated under FSMA. The other option was to allow the FDA to take over activities for the state.

SEA 331 overview

- Implements federal food safety regulations.
- Amends the definition of "federal act" in the title governing health to recognize the amendment to the federal Food, Drug, and Cosmetic Act by the FDA Food Safety Modernization Act (federal).
- Adds a definition of "produce farm" in the title governing health.
- Allows the state health commissioner or the commissioner's authorized representative to enter and inspect certain produce farms.
- Requires certain produce farms to comply with certain federal requirements.
- Provides that the department may suspend the requirement to comply with the federal act if the federal government does not provide sufficient funds for the department to administer and enforce the federal requirements.

The effective date was July 1, 2018. The code may be found online at: <https://iga.in.gov/legislative/2018/bills/senate/331#digest-heading>

The ISDH Food Protection Program (FPP) now has additional responsibilities concerning produce farms. Some of these responsibilities are already carried out by ISDH with federal grant money and the bill aligns with current practices. Under the bill, ISDH would suspend the program if there is not sufficient federal funds or if the federal govern-

ment enforces provisions concerning the Food Safety Modernization Act without help from the state. This would stop any expenditure that would be paid with state funds.

ISDH has a produce safety supervisor and two food safety farm consultants with plans to hire one additional staff member. In addition, ISDH FPP has agreements with Purdue University and the State Department of Agriculture. Each organization has specific roles to aid produce growers in complying with the Produce Safety Rule.

The ISDH Food Protection Program will oversee, implement, and manage all produce safety regulations, and will continue to conduct outreach to produce growers in the form of education and consultation on relevant food safety practices associated with fresh produce. ISDH staff will begin inspecting produce farms that are subject to this state law in 2019.

Local health departments may support produce safety in Indiana by being aware of the Produce Safety Rule and ensuring that local produce growers and food establishments are aware of these produce safety requirements. While conducting inspections of retail food establishments, local health department food safety inspection officers may inquire if Indiana produce is being served or sold. If so, local health departments should inquire about the ISDH registration status of the suppliers. Registration of fully covered and qualified exempt produce farms is required, and is recommended for produce farms excluded from Produce Safety Rule requirements, but are wholesaling produce that is typically consumed raw.

Specific questions should be referred to the ISDH Food Protection produce safety staff.

Learn more about the Produce Safety Program on page 3.

Welcome, Bill Tuley



William "Bill" Tuley, pictured above, joined the Produce Farm Safety team of Joanna Beck and Jennifer Coleman as a food safety farm consultant. Bill comes to ISDH from the Gibson County Health Department where for 7-1/2 years he was a Food Sanitarian. Bill states that his duties included serving as animal quarantine officer, general complaint investigator, and he sat on numerous boards. He was the primary investigator for Gibson County during the salmonella outbreak in 2012 that was ultimately traced to locally grown cantaloupe. Impressed after seeing the number of people affected by this, including the farmers, he wanted to prevent this from happening again.

Prior to joining the health department, Bill retired in 2008 after 38 years as a conductor for CSX Railroad. On Feb. 2, 2018, Bill and his wife celebrated 50 years of marriage, and they have four children. Bill can be reached at 317-419-1073 or at btuley@isdh.in.gov.

*By JoAnna Beck
Produce Safety Supervisor, ISDH*

Produce Safety Resources

Continued from page 2

Produce Growers and other interested persons may visit:

SafeProduceIN.com

ISDH Food Protection Program Farm Consultant Areas



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Welcome, Diane Allen



Diane Allen, pictured above, joined the Indiana State Department of Health Food Protection Program (ISDH FPP) under the Manufactured Food Regulatory Program Standards (MFRPS) initiative. Diane serves as the manufactured food regulatory standards program specialist. Diane graduated in the fall 2016 with her MBA in healthcare administration from Indiana Wesleyan University, and this is her first time working in public health. She also holds a bachelor of science degree in management and prior to joining ISDH, Diane held positions in the Indianapolis business community, primarily in executive administration and human resource management.

Some of the tasks Diane will support are wholesale business registrations, submission of scheduled inspections for the U.S. Food and Drug Administration at the district level in Detroit, and maintaining and supporting the status of standard operation for the Manufactured Food Regulatory Standards Program in Indiana.

Diane and her 18-year-old son have lived on the south side of Indianapolis for the past 11 years where he is now a high school senior. Originally from North Dakota, Diane is a long-term resident of Indiana. Diane can be reached at 317-233-7678 or at dallen@isdh.in.gov.

Contributors are Joanna Beck, and staff at ISDH FPP

News from ISDH Wholesale

The process to update the Wholesale Food Establishment Sanitation requirements 410 IAC 7-21 has begun. The rule, which was last updated, was effective on April 26, 2002. At the May 2018 Food Safety and Defense Task Force meeting, members were invited to assist with drafting updates to the Wholesale Rule. Comments are being compiled for additional review. If you have a recommendation that pertains to the rule, please feel free to respond to George Jones, Deputy Director and Wholesale Supervisor, email gjones@isdh.in.gov.

There are on average 1,200 wholesale food establishments in Indiana. Of these, 90 are inspected annually on contract with the FDA. The Code of Federal Regulations, the regulatory basis for these inspections, have been changed due to the Food Safety Modernization Act (FSMA).

The term used for the new inspections is "Modernized or Current GMP/PC" or "Limited Scope" inspections.

These inspections focus on updated good manufacturing practices and limited scope of preventive controls requirements. All six of the ISDH FPP Wholesale field inspectors are being trained in the new inspection procedures, and will be prepared to provide guidance on sanitary procedure and practice in any food processing plant to prevent contamination and foodborne illness. Indiana has not yet adopted the FSMA Preventive Controls for Human Food, but plan to incorporate many of these changes to GMPs and requirements for shellfish firms into the next revision of the wholesale food establishment sanitation requirements.

History of National and Indiana Wholesale Requirements

1906: The Pure Food and Drugs Act is passed, prohibiting interstate commerce in misbranded and adulterated foods, beverages, and drugs.

1907: First Indiana Food and Drug Commissioner appointed.

1927: The Food Drug and Insecticide Administration was formed, to be renamed in **1930** as the Food and Drug Administration.

1938: The Food Drug and Cosmetic Act (FD&C) is passed, providing identity and quality standards for food.

1969: GMP regulations finalized.

1986: GMP regulations revised (21 CFR 110).

1996: Indiana 42-1-6 Registration of manufacturer, processor, repackager, or wholesale distributor; maintaining place of business in state.

2002: CFSAN (FDA Center for Food Safety and Applied Nutrition) initiates CGMP modernization.

2011: FSMA update (21 CFR 117).

2015: Human and animal food PC regulations are finalized.

Welcome, Wholesale Inspector Magan Meade Lee

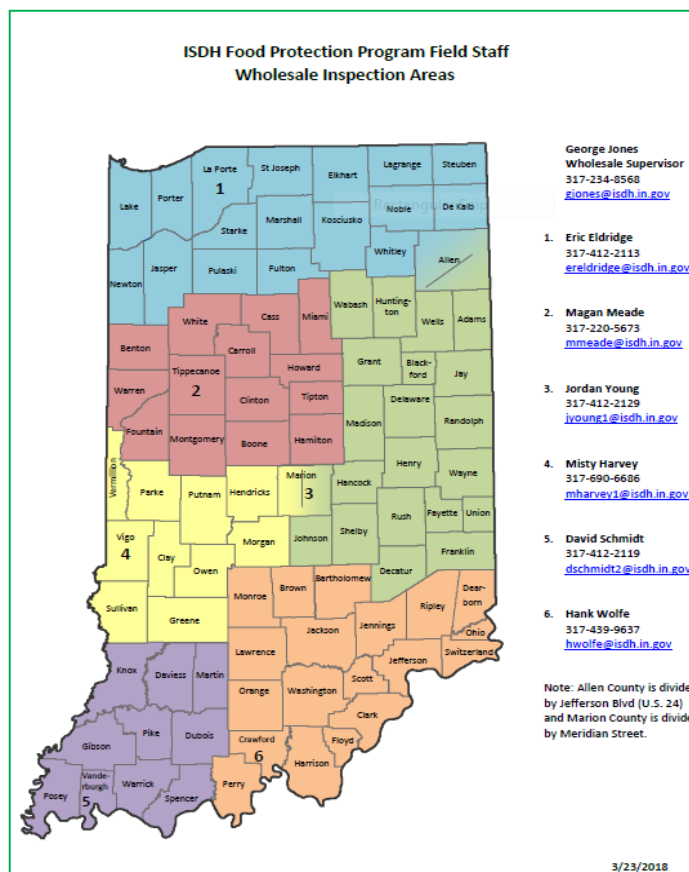


Magan Meade Lee joined ISDH FPP on Feb. 12, 2018.

Magan has been employed by ISDH since April 2014 and also has previous experience with the Kentucky Department of Public Health and with the Lexington-Fayette County Health Department. Magan has worked most recently as an environmental epidemiologist in Environmental Public Health (EPH). She brings a wealth of previous experience to our Program, and we look forward to having her as a valued team member. Magan will be stationed in the Lafayette area and will initially be covering wholesale establishments in Benton, White, Cass, Miami, Fountain, Warren, Tippecanoe, Carroll, Howard, Clinton, Tipton, Montgomery, Boone and Hamilton counties. Magan can be reached at 237-220-5673 or emailed at mmeade@isdh.in.gov.

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*By George Jones
Deputy Director Wholesale Division
Indiana Food Protection Program*



From the Director's Desk



Krista Click

Director, ISDH Food Protection

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Indiana Food Protection Seminars

ISDH FPP is offering trainings on a regional basis. Topics include retail rule training/updates and other food protection updates led by ISDH Food Protection staff. Available seats will be limited, but your food safety inspection officers may attend at one of the following locations: Rochester, at the Fulton County 4H Building on Oct. 30, 2018; Danville, IN at the Hendricks County Fairgrounds on Nov. 8, 2018; Jasper, at the Memorial Hospital South Side Office on Nov. 14, 2018.

FDA Model Food Code Training

On Nov. 27-28, 2018, ISDH will be hosting the FD112 FDA Model Food Code Course in Indianapolis. This course will be led by FDA representatives, and available seats will be limited.

Farmers Market/Home Based Vendors PowerPoint and speaker opportunity

The ISDH Food Protection team has updated presentation slides to address common farmers market and home-based vendor questions. Please reference the link "Farmers Markets" located at: <https://www.in.gov/isdh/27353.htm>.

Wild Mushroom Identification Expert Recognition

Applications are being accepted and applicants have the option of being listed

on the Food Protection webpage at <http://www.in.gov/isdh/27316.htm>.

There are two types of Identification experts: "Morel only" and "Morel and other wild mushrooms." Implemented with the new approval process are labeling and record retention policies. These recommendations are incorporated in the proposed new retail rule. The advantage for registration is that retail restaurants can buy from an approved source as is required by the retail rule. Wholesale distribution centers are also required to purchase from an approved source.

Implementation of USA Food Safety

ISDH has contracted with Computer Aid, Inc. to implement the USA Food Safety system.

- All users previously using CodePal have been transitioned to USA Food Safety.
- Additional local health departments will soon be added using a three phase implementation process.
- Both connected and disconnected versions of the system are available.
- Ability to submit food sample information electronically is coming soon.
- Public search of inspection reports is delayed until the system is cleaned and populated.

Indiana State Food Protection

Indiana's food safety system involves collaboration of consumers, industry, academia, and regulatory partner agencies. Agencies work to educate and enforce food protection requirements. Partnering agencies include local health departments, the Indiana State Department of Health, and other agencies. Food in interstate commerce or multi-state foodborne illness outbreaks require coordination of efforts with the federal agencies, including the U.S. Food and Drug Administration (FDA) and U.S. Department of Agriculture (USDA).

Local Health Departments oversee

- Majority of retail food inspections

- Farmers markets and answering question of home-based vendors
- Investigation of food-related complaints and reports of foodborne illness or injury
- Coordinating education and outreach to minimize impact of food-related illness or injury

ISDH Food Protection responsibilities

- Produce Safety Rule compliance
- Retail food inspections on state property
- Wholesale food (manufactured food) firms and distributors
- Rapid Response Team
- Certification of mushroom identifiers
- Variances to state food rule
- Provide guidance and interpretation for many food protection requirements in state statute and rule.

Integrated Food Safety System

The FDA Food Safety Modernization Act (FSMA) is transforming the nation's food safety system by shifting the focus from responding to foodborne illness to preventing it. Congress enacted FSMA in response to dramatic changes in the global food system and in our understanding of foodborne illness and its consequences, including the realization that preventable foodborne illness is both a significant public health problem and a threat to the economic well-being of the food system.

<https://www.fda.gov/Food/GuidanceRegulation/FSMA/default.htm>

Key themes of the FDA's Food Safety Modernization Act

- A unified food safety system, which leverages the participation, expertise, resources, and authorities of partner agencies with food safety responsibilities to ensure a safe food system in the United States.
- Accomplished by focusing on prevention, strengthening surveillance and enforcement, and improving response and recovery.

What you need to know about Service and Emotional Support Animals

The ADA requires “reasonable modification to policies and practices.”

Ed Norris, ISDH VNRFRPS Project Specialist and current IEHA member, provided a great overview in the Indiana Environmental Health Association (IEHA) Food Committee FPC Newsletter Volume 1, Issue 4, Winter 2015. It is quoted here for reference. Please note reasonable modifications must be made to permit the use of trained miniature horses as well.



service animal, (dogs do not have to wear any identifying harnesses or patches) only two questions may be asked.

Questions that can be asked
1- Is the dog required because of a disability?
2- What task has the dog been trained

One may not ask for “proof,” such as asking the dog to perform any tasks, or ask about the person’s disability. Finally remember, in the case of service animals federal law takes precedence over state and local laws.

The FDA Food Code has special rules for service animals. To learn about service dogs and restaurant employees go to: **How to comply with the Americans with Disabilities Act: A Guide for Restaurant and Other Food Service Employees** https://www.eeoc.gov/facts/restaurant_guide_summary.html

So what about emotional support animals?

Emotional support animals may be specifically addressed by state and local laws, but no such laws are known to exist in Indiana. While these animals are important to their handlers, they are not covered under ADA unless they meet the requirements of a service dog. An emotional support animal is **not** specifically trained to perform tasks for a person who suffers from a disability.

Additional information can be found on the Information and Technical Assistance on the Americans with Disabilities Act (ADA) website: https://www.ada.gov/regs2010/service_animal_qa.html.

If you have any additional questions, email Indiana Disability Rights, the Protection & Advocacy System for Indiana, at Info@IndianaDisabilityRights.org or call 1-800-622-4845.

If you would like to request a presentation on this topic, complete the online form on Indiana Disability Rights’ website: <https://www.in.gov/idr/2536.htm>.

Food Manager Certification in the News

The National Restaurant Association (ServSafe) announced on Feb. 10, 2018 the acquisition of the National Registry of Food Safety Professionals (NRFSP). According to a ServSafe spokesperson, ServSafe and NRFSP will continue to operate as separate brands. ServSafe has issued more than 6 million certifications. ServSafe’s four areas of focus are the:

- ServSafe Food Protection Manager (meets 410 IAC 7-22 requirements);
- ServSafe Food Handler;
- ServSafe Alcohol; and
- ServSafe Allergens.



ServSafe supplied ISDH with a copy of its new certificate. It is QR code scannable or the verification can be done at ServSafe using the number of the certificate.

NRFSP has focused on The Food Safety Manager Certification (both domestic and international), HACCP Manager Certification, and the Food Handler Training Certificate.

Both ServSafe and NRFSP are accredited by the American National Standards Institute (ANSI).

In total, there are **five** ANSI –CFP Accredited organizations:

- National Registry for Food Safety Professionals
- Prometric
- 360 Training.com
- Above Training/StateFoodSafety
- ServSafe

*By Sharon Farrell
ISDH FPP*

When is a service animal not a service animal?

Answer: When it’s not a properly trained dog.

A service dog may only be excluded from a food establishment if it’s out of control or not house broken. Although service animals are allowed in restaurants, they should stay with their handlers on the floor. Dogs should not sit at the table or be fed.

Peter Berg, project coordinator to Technical Assistance, Great Lakes ADA Center, spoke to attendees at a Food Protection concurrent session at the November 2015 IEHA Educational Conference. He said there is a misconception as to what is a service animal. Just because someone claims to have a service animal, doesn’t make it so. Tasks performed by a trained dog must be directly related to the person’s disability. The 1990 Americans with Disabilities Act (ADA) requires agencies, businesses, and schools make “reasonable modification” to policies, practices, and procedures for people with a disability. This means a dog might be in a food service establishment where he otherwise wouldn’t be allowed. Service dogs need to be trained by owners but are not required to provide proof of any specific training. Dogs “in training” are not considered trained. But there are limits. If it is not obvious that the dog is a

Norovirus Resources and Research News

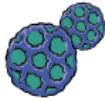
Norovirus Resources: New Resources are available at <https://norocore.ncsu.edu/resources/factsheets-infographics>. The cleaning handout is especially useful to healthcare and health departments because it includes a shopping list. According to the webpage, the infographics on this page have a Creative Commons license, Attribution Non-Derivative 4.0 International. Groups may use this document freely but due to its technical nature, adaptations are not permitted.

Other graphics available from Noro Core are: **Berry Industry**, on the management of risks by the produce industry and how to reduce them. **Recreational Boaters** on the risks of norovirus-related vomiting and dumping fecal waste overboard and **Marinas** to inform on how to prevent overboard waste disposal by recreational boaters.

Cleaning a Home When Someone has Norovirus

Shopping List:

- Paper towels
- Toilet paper
- Trash bags
- Disposable gloves
- Plastic bucket
- Laundry detergent
- Bottle of household bleach
- Soap
- Sponges
- New, empty spray bottle
- Mop
- Toothbrushes



Note: While convenient, the majority of disinfecting wipes on the market are not completely effective at killing norovirus, or at least have not been proven to be effective. This is also true for the majority of alcohol-based hand sanitizers, which should not be used instead of washing hands with soap and water, but may be used in addition to handwashing.



How to make and use a bleach solution:

- 1 In a plastic bucket, mix 5 to 25 tablespoons of household bleach in a gallon of water.
- 2 This solution is great at killing norovirus, but becomes less potent if it is exposed to a lot of organic matter (such as vomit or stool). For this reason, clean up as much visible vomit or stool on surfaces as you can before applying the bleach solution.
- 3 Apply only to nonporous (hard) surfaces with a spray bottle, or with disposable items such as mops, sponges, or paper towels.
- 4 Let the solution sit on the surface for at least 5 minutes before wiping.



Things to consider while cleaning:

- 1 The virus may be aerosolized when someone vomits, meaning surfaces several feet from where someone vomited could be contaminated.
- 2 Wear disposable gloves whenever handling soiled material or cleaning soiled surfaces and throw them away immediately after use.
- 3 Give extra attention to disinfecting things that are commonly touched in the home, such as doorknobs, remote controls, and handles.
- 4 Throw away food that might be contaminated with the virus or was touched by a sick person.
- 5 Wash soiled laundry in hot water, with detergent at the longest cycle length and machine dry.



This handout was made by NoroCORE and is freely available under a Creative Commons License.

NoroCORE
Food Virology

The Centers for Disease Control and Prevention also has a helpful website for preventing norovirus at home: <https://www.cdc.gov/norovirus/preventing-infection.html>

Research: Dr. Mary Estes and her research team at Baylor College of Medicine has recently made a discovery that will hasten the development of a Norovirus Vaccine. This infographic includes new information on her ability to use pig bile to culture norovirus and thus a new era in research.

NOROVIRUS, CULTURED.

A 48 YEAR MYSTERY SOLVED

Dr. Mary Estes and her Lab at Baylor College of Medicine have successfully cultured human norovirus in intestinal cells. Scientists have been trying to culture the virus since the first norovirus outbreak was described in 1968. The lack of an in vitro culture system has long been considered the single greatest barrier to norovirus research.

HISTORY OF NOROVIRUS RESEARCH

1929
NAMED

Dr. John Zehring, a pediatrician, gives the name "winter vomiting disease" to a common childhood illness that causes vomiting, diarrhea, and a fever.

1972
VISUALIZED

The Norwalk virus is first seen by Dr. Albert Kapikian and his team at NIH using immune electron microscopy (IEM).

1992
CLONED

Empty shells of norovirus proteins (capsids) are artificially created by the Estes Lab. These virus-like particles are not infectious and enable studies of the capsid.

1968
DESCRIBED

An elementary school in Norwalk, OH experiences an outbreak of "winter vomiting disease". A virus is suspected.

1990
CLONED

The Norwalk virus genome is cloned, paving the way for an era of molecular studies.

2016
CULTURED

Human noroviruses are successfully cultured by Dr. Mary Estes and her team at Baylor College of Medicine.

READ THE ARTICLE

K. Ettayabi et al., *Science* 10.1126/science.125111 (2016).

WHAT IS NOROVIRUS?

- It is a tiny (27nm), spherical virus belonging to the Caliciviridae family.
- It is the most common cause of diarrhea in the world and the most common cause of foodborne illness in the United States.
- An estimated 1 in 15 Americans experience the virus each year, amounting to around 20 million cases.

HOW DOES THE CULTURE SYSTEM WORK?

Viruses need host cells to replicate. Human noroviruses replicate in the epithelial cells that line our gut. (This was confirmed by the fact that the culture system works.) Intestinal crypts, which contain stem cells, create these epithelial cells in our bodies every day, and are rapidly dividing.

- 1 The researchers followed new technology developed by Drs. Sato and Cavens in the Netherlands and made new epithelial cell cultures from crypts from adult human intestinal tissue (biopsy samples or samples from gastric bypass surgeries). These tissues were medical waste and would have been discarded.
- 2 Under the right conditions, the stem cells in the crypts multiply and form the surface (epithelial) layer of our gut, only in miniature and in a dish, to become Human Intestinal Enteroids (HIEs) or "minguts". They function like the tissue they came from, and can be used indefinitely.
- 3 These "minguts" were inoculated with human norovirus, and after 72 hours, the researchers were seeing far more viral genetic material than they initially added (a 1,000-fold increase), indicating the virus was infecting and multiplying in the cells.

A SECRET INGREDIENT

Through careful experimentation, the Estes team found a key addition to the media greatly increased virus yields: it was human bile. We produce bile in our livers and secrete it into our gut to help digest food. They found that some norovirus types, like GI.3, need bile to replicate, while it only enhances replication of other noroviruses, like GI.4. The bile is attaching to the cells, not the virus itself, and pig bile works as a substitute for human bile.

GENERAL VIROLOGY

We can dig deeper into how noroviruses work and what makes them so good at making us sick. This knowledge may shine light on other viruses.

FOOD AND ENVIRONMENTAL VIROLOGY

This is the first step towards directly testing inactivation methods against the human norovirus to know if they are effective. This could lead to better disinfectants, prevention strategies, and safer food and water.

A NEW ERA OF NOROVIRUS RESEARCH

CLINICAL MEDICINE

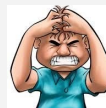
Being able to work with the actual virus will be a boon to vaccine research, and we will better understand what the virus does in the body, potentially leading to more targeted treatments.

EPIDEMIOLOGY

We can better understand how the virus evolves, spreads, and how it affects populations. This can lead to better risk management strategies that protect public health around the world.

Norovirus for Emetophobes

What is Emetophobia:? This is a phobia of vomiting. See <http://emetophobiarecovery.com/> for assistance in overcoming this fear.



Hepatitis A Outbreak 2017-2018

What is it?

The Indiana State Department of Health (ISDH) and several local health departments are investigating increasing hepatitis A activity in Indiana. As of Aug. 10, there were 364 cases and one death, with the potential for further spread. Visit <https://www.in.gov/isdh/27791.htm> for updates every Friday. For comparison, Indiana had an average of 20 cases per year previous to 2018.

Hepatitis A is a viral infection of the liver transmitted by the fecal-oral route. This is done either through person-to-person or through consumption of contaminated food, beverages or ice. Contamination can occur when infected persons do not wash their hands properly after using the restroom and then touch other objects or food items. Infected people may not know they are sick while infectious, so always practicing good hand hygiene is important in the prevention of illness.

How to prevent it

To prevent the spread of illness: A vaccine is available and effective, but food handlers should practice good hand-washing and hygiene, use utensils or gloves to prevent bare hand contact, and thoroughly clean and sanitize the facility and food areas. You may find it helpful to discuss these prevention strategies with your food facilities to ensure they understand the importance and effectiveness of these behaviors.

How to respond to it

If a facility experiences a hepatitis A event, like a vomit or feces spill, or an infected food handler, then frequently-touched surfaces should be cleaned and sanitized often. Some of these surfaces include: toilet room surfaces, light switch plates, highchairs, kitchen surfaces, phones, tables and chairs, door knobs, computer keyboards, remote

controls, recreation equipment, railings, and wheelchairs and walkers.

To clean and disinfect affected areas in the food facility, utilize a mix of a chlorine solution and water. Make a mix with a concentration of 5000 ppm chlorine solution. This can be done by using 1-2/3 cup bleach in one gallon of water. Allow one minute of contact time and then rinse with water. Use personal protective equipment if cleaning up a vomit or feces spill.

Ill Food Handlers

Employees are responsible for reporting to the person in charge if they have been diagnosed with hepatitis A or any other reportable condition. Employees should not work while experiencing gastrointestinal symptoms. You may want to discuss with your food facility's person in charge their employee illness policies. Ensure they understand exclusion and restriction policies. The Indiana State Department of Health Food Protection Program can provide guidance to provide to facility managers regarding these topics upon request.

Although not required, food employees are encouraged to seek information regarding a hepatitis A vaccine, which is safe and effective in preventing hepatitis A. Please share this information with your partners and food facilities in your jurisdiction. The ISDH appreciates your partnership in preventing hepatitis A infection. Please contact the ISDH Food Protection Program with questions regarding food facilities and hepatitis A at (317) 234-8569.

Public Health interventions by Indiana food specialists and retail food establishment persons in charge.

It is recommended that 410 IAC 7-24 sections 120-127 be reviewed. The overall purpose of sections 120-127 of the food rule is to reduce the likelihood that

certain viral, protozoa and bacterial agents will be transmitted from infected food workers into food.

This point cannot be overemphasized: If there are ill food employees working in a retail food establishment (RFE), all of the other public health interventions provided in the food rule are rendered virtually useless. There is little value in cooking food thoroughly if an ill food worker is later contaminating the food by shedding norovirus or hepatitis A virus into it or onto surrounding food-contact surfaces.

Although the food rule does not specifically require a written policy, it is highly recommended that establishments with more than one or two employees have something in written form. An establishment with a more intimate work setting with just one or two employees can meet the recommendation with what might be called a "word-of-mouth" unwritten policy, but each person employed there must know all of the five diseases, symptoms and conditions, plus what to do about them from sections 121-123.

In summary, it is **IMPERATIVE** that food specialists spend time on each inspection reinforcing these sections of the food rule and properly document failures in compliance. Efforts to ensure these sections of the food rule are being followed by the food industry are paramount to protecting public health.

The Epidemiology Resource Center webpage: <http://www.in.gov/isdh/25478.htm> contains many resources including a poster and statistics about the current outbreak.

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Bits and Pieces

Kratom and Food Safety

Kratom or *Mitragyna speciosa* is an unregulated herbal supplement related to the coffee family from Southeast Asia, used to treat pain, anxiety, depression, and symptoms of opioid withdrawal. Small doses are used as a stimulant and higher doses for sedation. There is no FDA-approved use for kratom and no scientifically substantiated studies to support use in opioid treatment, and the FDA does not consider it safe, even when used under medical supervision.

FDA reported 36 deaths and a 10 fold increase between 2010 and 2015 in herb associated effects such as seizures, liver damage and depressed breathing.

Estimates are that 3-5 million people use it, based on statistics from the American Kratom Association (AKA). Indiana bans the herb as does Alabama, Arkansas, Tennessee, and Wisconsin. It can be purchased over the internet. The Drug Enforcement Agency (DEA) is considering whether kratom should be

regulated as a controlled substance due to its potential for abuse.

Earlier this year a nationwide recall was issued for products containing kratom because it is now linked to a national salmonella outbreak including cases in Indiana. FDA recommends that consumers not use any kratom products and dispose of any products in their possession.

This recall is the first FDA mandated recall and according to IN RRT, having FDA initiating a recall could have an effect in the future of how recall effectiveness checks are handled.

FDA Honor Award goes to Indiana

On April 27, 2018, key ISDH staff members, including Kris Gasperic, Krista Click, Eric Eldridge, George Jones, Laurie Kidwell, Madhura Sundararajan, Peter Krombach, Jamie Yeadon-Fagbohun, Melissa Hindenlang, James Hallagan, Timothy Hey, Megan Teachout, Ryan Gentry, Christina Moyo and James Kirkman, who had responded to this event, were presented

with the FDA Honor Award for the E. coli/Flour Lab and Prevention Success Group. From Dec. 2015 to Sept. 2016, 63 people in 24 states were reported with the outbreak strains of STEC 021 or STEC 026. Epidemiological, laboratory and trace-back evidence indicated that flour produced at a General Mills facility in Kansas City, Missouri, was the likely source of the outbreak. Indiana State Department of Health (ISDH) epidemiological, environmental and laboratory staff were, in part, responsible for the success of this investigation.

*By Laurie Kidwell
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From Conference for Food Protection

New research recently published in the Journal of Food Protection, shows that fruit flies can transfer E. coli, Salmonella, and Listeria to surfaces and relocate bacteria from a contaminated source to fresh, ready-to-eat food. **Article Citation** E.P. Black, G.J. Hinrichs, S.J. Barcay, and D.B. Gardner (2018) Fruit Flies as Potential Vectors of Foodborne Illness. *Journal of Food Protection: March 2018, Vol. 81, No. 3, pp. 509-514.*