Fall Conference in September

Conference chair Patty Nocek says planning is nearly complete for the 2016 Annual Fall Educational Conference. Conference dates are September 26 to 28, with pre-conference activities on Sunday, September 25.

What you should know

Q: How soon can I register?
A: You can register now, either by mailing your registration form or through the IEHA website.

Q: What is the registration fee?
A: The registration fee remains a top value at $205 IEHA member price. The fee is $150 for retired members. Costs are higher for non-IEHA members. The registration fee includes three breakfasts, two dinners, entertainment, plus value-added pre-conference activities on Sunday.

“My goal is to exceed all expectations of educational value and have a little fun along the way, too. The Blue Chip Stardust Event Center is a remarkable space with first class accommodations.”

- Patty Nocek

(Continued on page 3)
From the IEHA President

The theme of this year’s National Environmental Health Association (NEHA) Annual Educational Conference was “The State of Big Ideas: Moving Environmental Health Outside the Box.” What a marvelous theme or catch phrase to describe our profession ever since its inception.

Environmental health is evolving

at such a fast pace that there is simply no time for boundaries. I know we all face public criticism, political pressures, and budget constraints, which is why we must follow the IEHA Mission Statement and “encourage a spirit of cooperation” to advance this crucial work. We must be creative and work together in generating these “Big Ideas” related to our challenges by thinking outside the box. While at NEHA I attended a session related to the drinking water issues in Flint, Michigan, and what I learned is a county health official who is truly determined and dedicated to the health and wellbeing of the population he/she serves can make an immeasurable difference in the lives of so many. The initiative by one person has impacted generations to come in Flint – that can be you!

I look forward to seeing each of you at our upcoming Annual Fall Educational Conference at the Blue Chip in Michigan City. The theme “Ignite the Future” wonderfully describes the purpose of this conference. Patty Nocek, Fall Conference Chair, has literally been working night and day to provide you with a unique and valuable educational experience. I am pumped about what she is putting together - it is lining up to be the BEST IEHA CONFERENCE EVER!

Mike

From the Ed Desk

Here’s the summer edition of the Journal that I hope you will enjoy. The highlights from the Spring Conference are intended to show you a bit of what you missed, if you didn’t attend. And the Fall Conference article can’t do justice to what is in store. You can’t put on paper the value of mingling with other members or the high quality speakers scheduled.

IEHA continues to set a high standard for conference value. Our conferences could easily cost double elsewhere and still be a good deal. So attend!

And here’s my usual reminder that if you have chapter or member news, send it! Editors edit, so just send ideas if you don’t feel like writing. Contact info is on the back page.

Ed
Fall Conference (continued from page 1)

Q. How about the room rates for lodging?
A. The newly-renovated Blue Chip Tower is $89 per night. The Spa Tower nightly rate is $109. You'll need your government ID or suitable letter to be exempt from taxes and to receive the lower rates. The Spa Tower is slightly closer to the events.

Q. How do I make reservations?
A. Call Blue Chip reservations at 888.879.7711 and press “3”. The Group Code is GEH0918. Say you’re attending the IEHA Fall Conference and how many nights you want to reserve. You’ll need a credit card.

Q. What are some of the extra activities?
A. Besides the golf outing, there will be the Bicentennial Beach Walk along Lake Michigan on Sunday, plus Perry Hammock, Executive Director of the Indiana Bicentennial Commission, will speak Sunday evening at around 6:30. A second speaker is planned for 7:30.

Q. What’s planned for Tuesday night?
A. Patty says to expect a “70’s Disco Dance Party” at the conference following dinner at the North Pointe Pavilion on the Lake Michigan shoreline.

Special Added Event
An additional event has been added to Sunday’s agenda for registered attendees at no additional cost. Bed Bug Training will be offered from 12:30 PM to 5:00 PM sponsored by the University of Minnesota. This is being handled by the university, so signup will be done via the school, not on the conference form. See more information on the IEHA website www.iehaind.org.
Spring Conference a success

Around 145 registrants to this year’s IEHA Spring Conference enjoyed a wide range of speakers handling topics from the current state of Public Health to an assessment of the effects of climate change on Indiana. The conference was held on the IUPUI campus in downtown Indianapolis.

Dr. Paul Halverson
Dr. Halverson is the Dean of the Fairbanks School of Public Health in Indianapolis. He led the list of nine speakers and told listeners that many people have no idea the extent public health has affected their lives. A point he stressed was that public health is connected to everything to do with our lives. An example, he said, is if more money is invested in public health, less is spent on medical care. He quoted figures from America’s Health Rankings that show Indiana ranks 41 out of 50 states in public health.

Dr. Jo Anna Shimek
Dr. Shimek with the IU School of Public Health in Bloomington discussed the history of environmental disasters in Indiana, from floods to TB to oil spills. She said such disasters were the beginning of our recognizing public health is important.

Alan Dunn
Alan, recently retired from the Environmental Public Health Division at ISDH, gave an overview of the history of Indiana’s onsite wastewater systems. He said that over 27 percent of the state’s households are not connected to a sanitary sewer. That translates to over a million homes and businesses.

Keylee Wright
Keylee is director of the Cancer Control Section at ISDH. She said cancer is more common than many think, striking 2 in 5 people. She says there are many known carcinogens but just being exposed doesn’t necessarily mean getting cancer. She defined a “cancer cluster” as a greater number cases than expected within a group or geographic area over a given period of time. She said there were no recorded clusters in Indiana

Melissa Widhalm
Melissa, from the Purdue Climate Change Research Center is heading an Indiana Climate Change Impacts Assessment. She wants to help officials understand what are the risks associated with the expected climate change.

She says Indiana has gotten warmer and wetter over the past century with more precipitation coming in fewer events. Melissa adds that we will see 9 less frost days per year and a longer growing season. She says this trend will increase.

Katy Ellis Hilts
Katy from the Marion Co. Public Health Dept. shared facts about tobacco-related illnesses, not just to users but from second hand smoke, which she says affects everybody. She said smoking is the top cause of fatal residential fires.

Katy said “e-cigarettes” are not safe, and not federally regulated, adding that ads targeting youths tempt them by offering up to 7,000 unique flavors displayed in colorful packages.
"Many people have no idea how public health has affected their lives." - Paul Halverson, Dean, Fairbanks School of Public Health.

"If you come down with listeriosis, there’s a high likelihood of going to the hospital." - Mickey Parrish, PhD, Senior Science Advisor, FDA.

"Up to 40% of people may get cancer, but the precise cause of many cancers is unknown." - Keyleel Wright, Director of the Cancer Control Section of ISDH.

"There are 7,000 chemicals in second hand tobacco smoke with 70 linked to cancer. Second hand smoke affects everybody." - Katy Ellis Hilts, Marion Co. Public Health Department.

"Indiana has gotten warmer and wetter over the past century with more precipitation coming in fewer events." - Melissa Widhalm, Purdue University Climate Change Research Center.

"Local health departments are the gatekeepers. If you think it’s a public health issue, we’ll test it." - Mary Hagerman, ISDH Laboratory Supervisor.

More from Spring Conference

Dr. Mickey Parrish

Dr. Parrish, Senior Science Advisor with the US Food and Drug Administration, was on hand to discuss FDA’s science and policy concerning Listeria monocytogenes. He also gave a strong endorsement for the International Association of Food Protection (IAFP). He is an officer in the organization.

Dr. Parrish said FDA is establishing 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. He said Listeria monocytogenes is just one type of Listeria and the only strain that is pathogenic. But contracting listeriosis will almost always lead to a trip to the hospital. He added FDA wants to see a “zero tolerance” for Listeria in ready-to-eat foods, and less than 100 cells per gram in foods that do not support Listeria growth. Dr. Parrish added that many foods are contaminated but at below detected limits or too low to cause illness.

“Sanitation and environmental management,” he said, are keys to controlling Listeria, which is especially prevalent in dairy products, readily surviving in refrigeration conditions. He said we’re still not sure what a “safe” number is for Listeria.

Mary Hagerman

Mary is the Metals, Blood Lead, and Chemical Threat Laboratory Supervisor at ISDH. She outlined the kinds of test the state lab can perform. She said if something is suspected as a public health issue, they’ll try to test it.

A tour of the ISDH Laboratory was available at the end of the conference.
Graphene filter: safer water

Providing safe water for the one billion persons worldwide who don’t have it is an ongoing challenge. Now, researchers at MIT might have a low-cost solution to make safe water available at a lower cost and smaller energy footprint. Researchers feel that nanotechnology may have the potential to rid water of harmful pathogens and harmful contaminants.

Graphene sheets may be the answer

Graphene sheets, thinner than a piece of paper can be perforated with small holes, each with a diameter of 1 nanometer (a billionth of a meter). This lets water molecules through, but stops undesirable contaminants. Graphene is a one atom thick form of the element carbon. The sheets are also treated with other elements causing the tiny holes to react with water, either attracting or repelling it. Researchers at MIT’s Department of Materials Science and Engineering said they were “pleasantly surprised” by how well graphene performed in tests.

This is unlike other methods

Filtration systems, like reverse osmosis, use membrane filters to filter pollutants from water, but can require high water pressure to work, meaning more energy consumed, to force water through material that is a thousand times thicker than graphene, which requires very little pressure.

“Graphene-based systems,” researcher David Cohen-Tanugi says, “work hundreds of times faster than current techniques.

MIT researchers believe the size of the holes in the graphene sheet is key. Holes smaller than 1 nanometer would not allow water to pass, but the holes could be made slightly bigger if filtration of something other than

FPC Newsletter

Any member who is not already on the Food Protection Committee email list, and would like to receive the FPC Newsletter, should contact one of the committee co-chairs, Sharon Pattee or Jennifer Asbury. Or contact the Journal editor (info on the back page) and your email address will be forwarded. Newsletters are also available on the IEHA website.
NW Chapter members help with cleanup

Members of IEHA’s Northwest Chapter were among hundreds of participants from dozens of groups for the recent “Clean It Up” day sponsored by the LaPorte County Solid Waste District as reported by the Michigan City News-Dispatch.

The district reported that 38 different areas were targeted for cleanup throughout the county, with NW Chapter members helping in the LaPorte city area.

The cleanup day is organized in conjunction with Keep America Beautiful’s Great American Cleanup, and is the fifth year for the county event.

Are electric vehicles “green”?

The Union of Concerned Scientists (UCS) says yes, such cars are “green” or environmentally friendly.

After seeing news headlines that implied that electric vehicles might not be so environmentally friendly UCS sought real answers to these concerns. Is the energy savings from operating an electric vehicle offset by the costs of generating that electricity? What about the pollution from coal-fired electrical generating plants? UCS scientists say they’ve “crunched the numbers” and found that driving an electric vehicle anywhere in the United States produces fewer global warming emissions than driving an average new gas-powered vehicle. They also found that driving an electric vehicle surpasses even a hybrid.

Besides looking at the costs of generating electricity, UCS evaluated the energy needed to gather the materials and make the batteries that go into an electric vehicle. Although producing the lithium-ion batteries can lead to more emissions than those created during the manufacturer of a conventional car or truck battery, this is quickly offset by driving a mid-size electric vehicle less than 5,000 miles, or about six months. The payback is a bit longer with an large electric vehicle.

But relative gain is dependent upon how the electricity is generated. The comparison is greater when electricity is generated by coal than if the electricity comes from renewable sources, like wind or solar.

Conclusions reached from UCS research show that although energy gain varies with the region of the country one lives, driving an electric vehicle anywhere in the country will generate lower global warming emissions than the average new gas-powered car getting 29 miles per gallon. In many parts of the country, an all electric vehicle will produce lower emissions than even a hybrid that may achieve 50 MPG.

(info from UCS Catalyst)

By the numbers:

CDC says in 2014 there were 13,246 illnesses, 864 outbreaks, 712 hospitalizations, and 21 deaths from foodborne illnesses.
Attendees positive on training

Responding to the interest in its first training session on on-site emerging technologies, members of the Wabash Valley Chapter followed up with a certification session to continue the discussion about sand lined systems.

Michael Market of Environmental Septic Solutions, Inc. was on hand to present details on the Presby Wastewater Treatment Systems, focusing on the Advanced Enviro-Septic design and how it can be installed under current Indiana regulations. Attendees, representing contractors and local health departments, learned about the Presby’s “10 stages of treatment,” the importance of proper ventilation, and how their systems should be installed to function correctly.

This system creates an ecosystem of aerobic and anaerobic bacteria that can digest up to 99% of contaminants in the wastewater, and do it in a smaller footprint than conventional systems, according to Market. Those in attendance wishing a certification will receive one, Market said.

More trainings planned

This training session was a continuation of the training and informational session hosted by Wabash Valley Chapter in February, 2015. Speakers from Infiltrator Water Technologies and GEO-flow explained their systems and offered certifications at the first class.

Wabash Valley Chapter is planning future trainings, next time likely on the topic of food safety.

Member Making News

JoAnn Xiong-Mercado, Environmental Health Specialist with the Marion Co. Public Health Dept. has been announced as one of 15 winners of a Accela/NEHA scholarship, chosen from over 170 applicants. Winners received free attendance at this year's NEHA 2016 AEC and HUD Healthy Homes Conference in San Antonio, Texas.

JoAnn noted that emerging trends in foods, like fermenting, and raw milk, are really not new, and she’ll be watching for these topics at the conference.

Accela is a cloud-based data management system designed for use by local governments.
Vaccine for Norovirus?

Norovirus is the most common cause of people suffering a gastrointestinal illness and it is often foodborne. Now Food Safety News is reporting that Takeda Pharmaceutical Co. Ltd. in Japan is ready to take a vaccine to human clinical trials, the first vaccine to do so.

The vice president and global norovirus program head for Takeda Vaccines, Ron Goodwin, said it’s likely “years” before a vaccine is available. He said the Phase 2b, double-blind, randomized, placebo-controlled trials will involve healthy adults from 18 to 49 years old. These trials will allow Takeda to evaluate how well the intramuscular administration of the vaccine works against Norovirus symptoms of gastroenteritis including watery diarrhea, vomiting, and nausea.

So. members visit Azalea Path

Southern Chapter members got back to nature recently with a visit to Azalea Path Arboretum and Botanical Gardens in Hazelton. A dozen members followed a guided tour by owner Bev Knight, who explained her efforts to preserve various azalea and tree varieties on the 60 acre property. She explained that there are over 300 different types of azaleas with a total of 2,000 bushes, making it the largest collection of azaleas in the Midwest. Besides the native trees and shrubs, like dogwoods, redbuds, rhododendron, and lilacs, trees and shrubs from Europe are planted on the property that includes two spring fed lakes and some manmade waterfalls and fountains.

Famous azalea hybridizer Dr. Henry Schroeder is well presented with 37 out of 38 hybrids planted, and there is a complete collection of Buddy Lee Encore Azaleas. After wind caused damage to several trees, a wood sculptor carved remaining tree stumps into art work that can be viewed along the paths.

(Contributed by Jennifer Heller Ruginstein)
IDEM seeks local HD help

Properties with land use restrictions may exist in your county

In 2009, the Indiana Department of Environmental Management (IDEM) was required by legislation to change its approach to contaminated properties. Instead of requiring site cleanups to a specific standard, property owners can use environmental restrictive covenants to document the remaining contamination and restrict property uses to eliminate exposure pathways. The landowner legally records the Environmental Restrictive Covenant (ERC) with the property deed in the County Recorder’s Office and sends a copy to IDEM. Environmental Restrictive Covenants are enforceable by IDEM.

The use of ERCs has steadily increased

As of May 2016, approximately 1,600 properties with land use restrictions are on IDEM’s Institutional Controls Registry, which the agency updates on a monthly basis.

Legislation also permitted the use of locally enacted Environmental Restrictive Ordinances to restrict ground water use. Local authorities are required to notify IDEM if they enact, amend, or terminate Environmental Restrictive Ordinances, even though they are locally enforceable.

Local HDs play an important part

Limited resources make it difficult for IDEM to monitor all of these restricted properties, and local health departments can play an important role by:

1. Being aware of properties in your county that may have Environmental Restrictive Covenants by periodically checking the Institutional Controls Registry to see if new covenants have been recorded.

2. Keeping IDEM informed about the status of Environmental Restrictive Ordinances in your community.

3. Contacting IDEM if activities are occurring that may violate an Environmental Restrictive Covenant and/or Environmental Restrictive Ordinance restriction (e.g., prohibited well installations and property uses, disturbances of engineered soil covers, etc.).

Your valuable assistance in this matter helps us all protect current and future generations of Hoosiers.

Questions?

Please contact:

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Sustaining member websites

Sustaining members who have provided websites include:

- Crisis Cleaning, Inc. www.crisiscleaning.com
- ECC Horizon www.ecchorizon.com
- Indiana Restaurant and Lodging Association www.inrla.org
- Indiana Spill Response www.quicktransportsolutions.com
- Indiana Wesleyan University www.indwes.edu
- Infiltrator Water Technologies www.infiltratorwater.com
- Jet, Inc. www.jetincorp
- Meijer www.meijer.com
- SES Environmental www.SESadvantage.com
- Visit South Bend www.visitsouthbend.com

Visit these sites to show your appreciation.

**Sustaining members lift IEHA**

Source of E. coli 0121 a puzzle

General Mills has voluntarily recalled tons of its flour, marketed under brand names Gold Medal, Wondra and Signature, after a suspicion that it may contain a potentially deadly strain of E. coli O121. Although no traces of the bacteria have yet been found in the General Mills plant, nor in any of the flour stored at the plant, flour samples from two homes did test positive. The Centers for Disease Control and Prevention (CDC) had found that flour from this plant was a common element of the 42 illnesses across 21 states, including one case in Indiana. Half of the sick individuals reported making something with a type of General Mills flour and consuming the raw dough.

Liz Nordile, President of General Mills Baking Division, said in a press release that the flour was recalled “out of an abundance of caution” but she added this was an opportunity for the company to “remind consumers how to safely handle flour.”

Bacterial risk as flour is grown outdoors

Flour comes from wheat, but any bacteria present is rendered harmless when heat treated, as in baking. But this safety is offset if consumers consume raw batter or otherwise cross contaminate between surfaces.

51,700 - the number of public health department jobs lost between 2008 and 2014, a 20% reduction in staff.
Are fermented foods safer?

Yes, says Dr. Christian Butzke, Professor of Enology in Purdue’s Department of Food Science. At a recent Wabash Valley Chapter meeting, Dr. Butzke described the history of fermented food, focusing on wine making and its history. He said wine may be the most valuable agricultural product in the United States, He said it’s not really regulated, but it is taxed.

He described wine as the “original safe beverage”, keeping the Roman soldiers well when the water was not safe to drink. No pathogenic bacteria can survive in wine, but it’s unknown how well viruses are affected as research has not been done. He added that wine will have a pH of between 3 and 4.

Fermented foods tend to be safe foods

Professor Butzke said fermented foods have been around for “thousands of years” and that there are no known foodborne outbreaks associated with a fermented food. Fermented foods include kimchee, Parmigiana cheese, and balsamic vinegar. True foods in these categories can be quite expensive, and he distinguished them from imitations that may be sold with similar names.

Dr. Butzke says Purdue offers classes in wine appreciation, and fermented foods, plus provides guidance to startup companies that can include on-site visits to advise operators. He concluded by telling the group that typical sanitizing methods using chemicals will harm the product so recommends using heat, possibly steam, to achieve sanitizing as required by the food rule.

Coordinating a food emergency response

Over two dozen attendees including state and local health department personnel paid close attention at the two-day seminar “A Coordinated Response to Food Emergencies: Practice and Execution” held recently in Fishers.

The course focused on providing those responding to food emergencies with tools needed to provide an effective response, and how to communicate with other agencies at the federal, state, and local levels. The emergencies could be the result of terrorism, or an accident or natural event.

The National Center for Biomedical Research and Training at Louisiana State University provided the training under the Department of Homeland Security. Presenters included Billy D. Dictson, Dr. Sharon Thomp-son, and Dr. John Dunn, all well respected in this area.

The training was sponsored by the IEHA Terrorism and All Hazards Preparedness Committee.
Pic library available to members

The General Environmental Health Services Committee wants to promote its image library. Committee chair, Ellie Hansotte noted that as agencies warn against using copyrighted pictures for use in pamphlets and other materials, the library provides a repository for members to legally use non-copyrighted photos.

“But for the library to be widely useful,” Ellie said, “we need your photos.”

To access photos, go to members portion of the IEHA website and look under Committee Resource Documents. To submit a photo, contact Ellie at gehsc.ieha@gmail.com and request a photo submission form. There are 13 sections covering different areas of environmental health.

Success of the image library is dependent upon member contributions.

IEHA to help Renewable Hope

The Executive Board of IEHA has decided to put an underutilized water purification unit to better use by donating it to a non-profit faith-based group that intends to put it into service in Nicaragua. IEHA President Mike Sutton, involved with creating Renewable Hope, said its mission includes providing safe water in other countries where it’s needed. Mike says this group is an outgrowth of SWiG - safe water in Guyana - that performed a mission to that country in 2013 to install a water purification system.

Group can put unit to good use now

Mike said Renewable Hope is planning the Nicaraguan trip in mid July to install three water purification systems, but at present has obtained only one. He added that what IEHA is not using could be put in service to help people in Nicaragua almost immediately.

The water purification system was originally obtained with surplus conference funds for the Indiana Environmental Health Response Team (INEHRT) but the system didn’t really fit those needs. Legal questions about its use, and relatively small capacity made it less suitable for use in the United States.

Jason LeMaster said, “Although the purchase of the water treatment unit was a good idea, after establishing the INEHRT team, observing deployments, and seeing the way a treatment system of this size works, it became apparent that this system can be put to better use by an organization that can use it on a daily basis to provide safe drinking water.”
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Vice President: Jason Ravenscroft
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IEHA is an Indiana not for profit organization in existence since 1951.

The Mission of the Indiana Environmental Health Association is 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.

More about IEHA
The Indiana Environmental Health Association (IEHA) was founded in 1951 as the Indiana Association of Sanitarians (IAS). There were 16 charter members. The name was officially changed to the Indiana Environmental Health Association in 1985.

IEHA is affiliated with the National Environmental Health Association (NEHA), and the International Association for Food Protection (IAFP).

IEHA is comprised of eight regional chapters. They are Central, East Central, Northeast, Northwest, Southeastern, Southern, Wabash Valley, and West Central.

There are four standing committees, which include Food Protection, General Environmental Health Services, Terrorism And All Hazards Preparedness, and Wastewater.

The operations of IEHA are governed by an Executive Board that meets monthly. The Board and various standing committees are made up of voting and non-voting members. Information plus meeting dates, times and locations for the chapters and standing committees may be found on the IEHA website listed on this page.

All meetings are open to any member or guest but voting privileges and active participation are limited to voting members.

Find us on the Internet!
www.iehaind.org