Whenever trees start to “green up”, it’s time begin planning to attend the annual WVAS Mid-Year Conference. This year we are especially glad we will be able to enjoy Mid-Year at Cedar Lakes Conference Center once again. Last Fall, the State Board of Education spoke of having to cut funding to Cedar Lakes in order to meet a 7.5% funding cut expected for 2015. Luckily, a plan was developed to transfer the ownership and the operation of Cedar Lakes to the Cedar Lakes Foundation from the West Virginia Board of Education. Mid-Year dates are April 29-May 1, 2014. Mid-Year will again kick off with the Environmental Health updates followed by the outrageously good annual picnic (as always, thanks to Kroger and TJ Witten for supporting WV Sanitarians and to Bill “Flay” and Jeff “Fieiri” for cooking our dinner). Everything you want to know about Mid-Year (but were afraid to ask) can be found at http://www.wvdhhr.org/wvas/events/index.asp

Any photos, stories, or any good news? Share in the August, 2014 issue of Sanitarians’ News

Please contact Jessica Douglas (Jessica.L.Douglas@wv.gov).

Sanitarian Training
AUG 11 - DEC 12, 2014

Week One
August 11-15, Charleston Public Health 101, Epidemiology, Microbiology, OLS Lab Tour

Week Two
August 25-29, Morgantown On-Site Sewage

Week Three
September 8-12, Morgantown On-Site Sewage, Insects, IMW, Rodents, Clean Indoor Air, Cross Connections

Week Four
September 22-26, Charleston RTIA, Asbestos, Meth Lab Remediation, Radiation, Rabies, Milk Threat Prep, Child Care, Bottled Water, Manufactured Housing Communities

Week Five
October 6-10, Charleston Environmental Engineering, Public Water, Water Wells, Indoor Air, Solid Waste, Occupational Health, Waterborne Diseases

Week Six
October 20-24, Morgantown General Sanitation, Tattoo/Body Piercing, Conflict Management, Home Loans, Complaints, Food

Week Seven
November 17-21, Charleston Food

Week Eight
December 8-12, Morgantown Recreational Water Facilities www.wvdhhr.org/phs/training/

Nominate!
Know anyone that deserves recognition for their contributions to environmental health? Nominate them by August 2014 for the Steve Bayer, Recognition, Citizen, or Bubba Award. Info is found at http://www.wvdhhr.org/wvas/awards.asp or contact Awards Committee Chair, Jaclyn Johnson (Jaclyn.M.Johnson@wv.gov).

Run!
If you would like to run for WVAS Vice-President or 2-Year Board Member, please contact Nomination Committee Chair, Bill Nestor (Bill.E.Nestor@wv.gov). Ballots must be mailed to members at least 30 days before the annual meeting.

Election results and awards will be announced at the WVAS business meeting that will be held September 19, 2013, at Snowshoe Resort as part of the WVPHA Annual Conference.
West Virginia Public Health has lost a very valuable resource and a lot of Sanitarians have lost a good friend and advocate. On March 22, 2014, Fred Barley passed way at his home.

Fred started his career in public health in 1986, when he attended Sanitarian Training class. He began work for West Virginia at the local level and worked at for the Raleigh County Health Department, the Mid-Ohio Valley Health Department, and Wayne County as a Sanitarian. After gaining experience at the local Health Departments, Fred moved to the State of West Virginia’s Office of Environmental Health Services. His work at OEHS included positions as Transitions Coordinator, with Radiation Toxics and Indoor Air Division, and Public Health Sanitation Division.

Many of us got to know Fred when he was with PHS. He worked as District Sanitarian for the St. Albans District, as General Sanitation Program Manager, and Assistant Director of PHS. Fred taught a lot of us. He was always willing to speak at In-Services, and of course, he taught General Sanitation in Sanitarian Training.

Another of the hats Fred wore was his involvement with HealthSpace’s Environmental Health and Electronic Reporting Program. Some have been brought kicking and screaming into the 21st century with his help. Fred brought his love of gardening and music to work with him. People attending the WVPHA and Mid-Year conferences always looked forward to his “afterhours” concerts and everybody with PHS will miss his fresh garden vegetables and homemade food.

I know we will all miss Fred’s music, fresh vegetables, and sanitary expertise. We will all miss him more.

SOME FACTS ABOUT E-CIGS AND NICOTINE

1. E-cigs don’t produce secondhand smoke, they produce secondhand vapor. Manufacturers say that it’s water vapor and harmless, regulatory agencies (FDA) and health experts say more research is needed to prove this.
2. They can be expensive (starter kits range between $60.00-150.00, refill cartridges (equal to 1 pack are around $2.00)
3. The majority of E-Cigs are manufactured in China-where they were first invented.
4. Testing indicates amount of nicotine claimed on label may not be actual amount.
5. Nicotine is very addictive, thought to promote cancer growth and pregnant women may experience higher rates of birth defects

BOTTOM LINE: More testing needed.

TRAINING OPPORTUNITIES

April – May
4/29-30/14 through May 1
WVAS Mid-Year Conference
Cedar Lakes Conference Center
Ripley, WV
http://www.wvdhhr.org/wvas/Events/index.asp
5/12-15/14
FDA Central Region Milk Seminar - Oglebay Resort
Wheeling, WV
www.wvdhhr.org/phs/milk/2014

May Continued
5/28/14
Tri-State Environmental Health Meeting - Monroe Co. Health Department, Belmont County, Ohio
www.wvdhhr.org/phs/inservice/Agenda/Tri-State

July
July 16-18
Interstate Environmental Health Seminar
Savannah, GA
www.wvdhhr.org/wvas/iehs/

September
September 17-19
90th Annual WV Public Health Conference
http://www.wvdhhr.org/
On June 29, 2012, a lot of us in West Virginia were looking to beat the heat by staying inside. Around 6:30 pm, the Derecho hit and left almost 672,000 West Virginians without electricity to suffer through a heat wave. It took almost 2 weeks for some to get their electricity back. At least some of us could still use our water.

On October 29-31, 2013, we were unfortunate enough to be visited by Hurricane Sandy, which left behind up to 3 feet of snow and knocked power out to about 500,000 people. Of snow and knocked power out to about 500,000 people. At least we weren’t in the middle of a heat wave.

On January 9, 2014, there was a chemical spill on the Elk River contaminating the public water for about 300,000 people. This meant no drinking, cooking, cleaning, or bathing for those directly affected. The do not use order was finally lifted January 18th. Well, at least we had electricity!

All of the abovementioned situations placed the West Virginia public at risk. Many folks were limited on resources readily available to them.

During each of these public health emergencies, West Virginia sanitarians, along with a whole host of other public and private entities, stepped up to provide needed assistance and aid to our citizens.

All three of the emergencies made me stop and think about my level of preparedness. It is not good, although I did finally let my husband buy a generator (he’s wanted to for 15 years).

Are you prepared? Check out the Center for Threat Preparedness website to see.

http://www.dhhr.wv.gov/healthprep/

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### 68th Annual Interstate Environmental

Hold the dates July 16-18, 2014. Savannah, Georgia is the host city for the Interstate Environmental Health Seminar. IEHS will take place at the Hyatt Regency Savannah and there will be lots of new things to learn, good people to meet, fun things to do, and delicious food to eat (who’s had a Low Country Boil before?). If you can, take this opportunity to network and learn with other sanitarians (aka environmental health specialists) from Georgia, Kentucky, Alabama, Tennessee, South Carolina, Maryland, North Carolina, and last but certainly not least, West Virginia. West Virginia presentations will include a review of the 2013 Boy Scout Jamboree, the West Virginia Rapid Response Team’s role in the aftermath of Elk River Chemical Spill, and methamphetamine contamination in a WV school. Some of the other states’ presentations will address bedbugs, raw milk, seafood illnesses, body art, hoarding and holding tanks — in other words, something for everyone! For more information, go to www.wvdhhr.org/wvas/iehs/

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### Quiz Time: NEHA RS Study Guide Edition

1. Which of the following have little penetration power and are normally a hazard to health only in the form of internal radiation received through ingestion, inhalation, or open wounds?
   A. X-Rays
   B. Alpha particles
   C. Beta particles
   D. Gamma rays

2. What is the PRIMARY requirement in designing a food service facility?
   A. durability
   B. cleanability
   C. appearance
   D. convenience

3. Performance of an authorized act in an unauthorized manner is called:
   A. nonfeasance
   B. misfeasance
   C. malfeasance
   D. dumb – or disfeasance

4. Aerobic bacteria require all of the following nutrients EXCEPT:
   A. carbon
   B. magnesium
   C. phosphorus
   D. nitrogen

5. To raise the pH add:
   A. chlorine
   B. muriatic acid
   C. sodium carbonate
   D. sulfuric acid

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### GO KITS

- List of Emergency Contacts, Three-day supply of medications, & copies of your prescriptions
- List of personal medical information & medications, including any drug/food allergies
- Bottles of water
- Food, snacks, etc.
- Assistive items needed for eating or drinking
- Flashlight & glow-sticks
- Extra batteries
- First Aid Kit
- Whistle, horn, or beeper
- Photocopy of personal identification
- List of model/serial numbers of any personal assistance equipment
- Waterproof matches or lighter
- Pictures of your family/friends to have with you if you must be away from home
- Personal memento/comfort item (stuffed animal, book, etc.), pillow, & blankets
- Extra pair of glasses or contact lenses
- Small battery-powered radio with extra batteries
- Dust mask
- Protective goggles
- Small amount of cash, including coins for payphones
- Extra set of keys to house, car, etc.
- Personal hygiene & toiletry products,
- Moist towelettes & assorted sizes of re-sealable plastic zipper bags
- Change of clothing
- Pet food, water, meds, & other pet supplies
- Vehicle fuel tanks pre-filled
- Pocketknife or multi-tool
- Rope, duct tape, & other fasteners
- Cell phone & charge cord
Congratulations
ON YOUR NEW JOB
Dona Hall
HHR Specialist working with FDA Manufactured Food Program
Central Office
October 1, 2013

Rich Lucas
District Sanitarian
Wheeling District
October 1, 2013

Penny Mangold
District Sanitarian
Fairmont District
February 15, 2014

Karol Wallingford
Northern Area Asbestos Inspector
December, 2013

And to the families with
NEW BABIES
February 26, 2014
**Zoe Michelle Melton**
(Rodney Melton)
April 18, 2014
**Joseph Lee Douglas**
(Jessica Douglas)

And
NEW GRANDPARENTS
April 19, 2014
**Jace Tyler Adkins**
(Judy Vallandingham)

And
TRANSITIONS

**Linda Whaley**
Retired November 30, 2013

**Anita Ray**
Retired February 28, 2014

And to the newest
REGISTERED SANITARIANS
**Joseph Huff**
Lincoln County Health Department

**Brian Carter**
Morgan County Health Department

**Wayne Powell**
Kanawha-Charleston Health Department

**Britney Hervey**
Brooke County Health Department

**George Clutter**
Webster County Health Department

**Alicia Page**
Kanawha-Charleston Health Department
Only Half of Drugs Removed by Sewage Treatment

Nov 22, 2013 | By Brian Blenkowski and Environmental Health News

Only about half of the prescription drugs and other newly emerging contaminants in sewage are removed by treatment plants.

That’s the finding of a new report by the International Joint Commission, a consortium of officials from the United States and Canada who study the Great Lakes.

The impact of most of these “chemicals of emerging concern” on the health of people and aquatic life remains unclear. Nevertheless, the commission report concludes that better water treatment is needed.

“The compounds show up in low levels – parts per billion or parts per trillion – but aquatic life and humans aren’t exposed to just one at a time, but a whole mix,” said Antonette Arvai, physical scientist at the International Joint Commission and the lead author of the study. “We need to find which of these chemicals might hurt us.”

More than 1,400 wastewater treatment plants in the United States and Canada discharge 4.8 billion gallons of treated effluent into the Great Lakes basin every day, according to the study. The scientists reviewed 10 years of data from wastewater treatment plants worldwide to see how well they removed 42 compounds that are increasingly showing up in the Great Lakes.

Six chemicals were detected frequently and had a low rate of removal in treated effluent: an herbicide, an anti-seizure drug, two antibiotic drugs, an antibacterial drug and an anti-inflammatory drug. Caffeine, acetaminophen and estriol (a natural estrogen) also were frequently detected in sewage but had high removal rates.

The wastewater plants had a low removal rate (less than 25 percent chance of removing 75 percent or more) for 11 of the 42 chemicals.

“The weight of evidence suggests that at least half of the 42 substances examined in the present study are likely to be removed in municipal wastewater treatment plants,” the authors wrote.

Previous research has linked other drugs in fish to slower reaction times to predators, altered eating habits and anxiety. Triclosan, an antibacterial and antifungal compound found in some soaps, toothpastes and other consumer products, has proven acutely toxic to algae and can act as a hormone disruptor in fish. Triclosan was found frequently, according to the new report and plants had “medium removal efficiency.” Also, the anti-inflammatory drug diclofenac bioaccumulates in fish, but its impact is unclear, said Diana Aga, a chemistry professor and researcher at the University of Buffalo who studies emerging chemicals in the Great Lakes.

Aga said even without knowing exact impacts, consistently seeing antibiotics show up in effluent is concerning. “Even at low levels you don’t want to have people ingest antibiotics regularly because it will promote resistance,” she said.

Chemicals’ showing up in wastewater effluent doesn’t necessarily mean they will be found in drinking water. But some studies have found prescription drugs in drinking water at parts-per-trillion levels. A federal study of 74 waterways used for drinking water in 25 states found 53 had traces of one or more pharmaceuticals.

There are currently no federal regulations of pharmaceuticals in waste or drinking water. However, 12 pharmaceuticals are currently on the Environmental Protection Agency’s list of chemicals under consideration for drinking water standards.

Most researchers expected that the large lakes would dilute pharmaceuticals quickly, but a study this summer found the drugs contaminating Lake Michigan two miles from Milwaukee sewage outfalls.

It’s important to not place blame squarely on wastewater treatment plants, said Michael Murray, a scientist with the National Wildlife Federation’s Great Lakes Regional Center who is on the IJC’s board. They weren’t designed to handle these types of chemicals,” Murray said. “And most municipalities in the Great Lakes are under tight budgets and they’re just doing what they can to meet requirements.”

Most plants use activated sludge treatment, which uses bacteria to break down solids that come in from the wastewater. Since the chemicals come into the plants at such low levels, many of them readily break down, said Allison Fore, a spokesperson for the Metropolitan Water Reclamation District of Greater Chicago.

Other newer technologies, such as ozonation or carbon filters, also are effective at removing pharmaceuticals and other new chemicals but are expensive, Arvai said.

This article originally ran at Environmental Health News, a news source published by Environmental Health Sciences, a nonprofit media company.