

Dedicated to the promotion of high standards in environmental health for the general welfare of the public

# NEBRASKA

## Environmental Health Association

### NEHA News

#### PRESIDENTIAL UPDATE

Greetings NEHA membership,

I hope everyone has had a great beginning to the year! The NEHA board has already held a number of meetings and we are planning our annual conference in October. The NEHA Board always welcomes any comments and ideas from its members to make the association stronger and further its mission. Please feel free to contact a Board member or myself at [allen.brown@douglascounty-ne.gov](mailto:allen.brown@douglascounty-ne.gov). All of you are NEHA, your concerns and participation are very much appreciated. I look forward to working with the board members and am grateful for their help, and hope that everyone has a wonderful year.

*Allen*

#### MEMBERSHIP

It's not too late to renew your 2015 NEHA Membership! NEHA membership is included with attendance to the Fall Educational Conference, but if you were unable to attend our October 2014 conference, don't forget to renew. The renewal fee is \$10 payable to NEHA. Send checks to: Nate Hartman, Treasurer-NEHA, 3140 N. Street, Lincoln, NE 68510. If you have any questions, please call a member of the board. NEHA currently has 77 members.

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#### 2014-2015 BOARD

<b>President</b>	Allen Brown, DCHD
<b>Vice-President</b>	Ericka Sanders, NDA
<b>Secretary</b>	Lilian Turcios, LLCHD
<b>Treasurer</b>	Nate Hartman, LLCHD
<b>At Large</b>	Larry W. Figgs, DCHD
<b>At Large</b>	Mandy Kearney, DHHS
<b>Past-President</b>	Kathy King, LLCHD
<b>President-Elect</b>	Sarah Pistillo, DHHS

#### SAVE THE DATES!

Nebraska EHA Educational Conference will be held October 21, 2015 at SAC Museum in Ashland, NE.

NEHA Region 4 Educational Conference will be held October 7-8, 2015 at the Sullivan Brothers Conference Center in Waterloo, Iowa.

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## NEBRASKA EHA WEBSITE

We encourage our members to visit the NEHA Website. We have been working diligently to make the website a place to go for up-to-date information. To make us successful in this endeavor we need our members help. When you see something you feel should be made available to our members inform a board member. Also, if you feel the website should include another topic that is not currently addressed we want to know. If it is feasible we would happily add new pages to make the website

more useful.

For the last six months we have averaged between 20 and 30 views/month. Considering our membership is down to 77 people that number isn't too disappointing, but we want more member involvement.

We could also add links to YouTube videos or other multimedia items that you or your department want to share with the REHS community. Just let a member of the Board know and we will get the information added to our website.

*“Environmental pollution is an incurable disease. It can only be prevented.” Barry Commoner*

### POSTER SESSION AT NEHA FEC

The NEHA Board is considering hosting a poster session at our FEC. We are planning to have the poster session begin around lunch and hopefully include 3-6 posters presented by local college or high school students. The poster must relate to public health. Conference fees will be covered by NEHA for students that participate. If you know of students that may want to participate please contact a board member.

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## NEHA REGION 4 CONFERENCE CALL FOR ABSTRACTS

The Iowa Environmental Health Association (IEHA) is pleased to announce that the call for abstracts for the 2015 NEHA Region 4 conference is open now through June 1, 2015. The conference is October 7-8, 2015 at the Sullivan Brothers Conference Center in Waterloo, Iowa.

In addition to food safety, on-site sewage and water well abstracts, the conference is also interested a number of other public health topics.

Please play a role in shaping the content for the 2015 NEHA Region 4 conference to assure that it continues to evolve to meet the needs of the region's environmental health professionals.

To submit an abstract, please review the submission guidelines and utilize the abstract submission forms found on IEHA's website.



## NEW BOARD MEMBERS

The board had 3 first time representatives this year. In case you haven't meet them before, here is a little about our new NEHA Board members.

### VICE PRESIDENT

	<b>Name:</b> Ericka Sanders, REHS	<b>Job Title:</b> Sanitarian II
	<b>Employer:</b> Nebraska Department of Agriculture, Food Safety & Consumer Protection	<b>Address:</b> P.O. Box 94757, Lincoln, NE 68509
	<b>Work Description:</b> Conducting sanitation and compliance inspections and licensing of food facilities in accordance to the Nebraska Sate Food Code. These activities are done in facilities preparing, serving, selling, and storing food items.	
	<b>Favorite part of the job:</b> Traveling and variability of sites inspections.	
	<b>Location:</b> Holt, Antelope, Knox, Boyd, Pierce, Rock, Keya Paha, Brown, & Cherry Counties	
	<b>Email:</b> ericka.sanders@nebraska.gov	<b>Member Since:</b> 2008

### SECRETARY

<b>Name:</b> Lilian R. Turcios	<b>Job Title:</b> Environmental Health Specialist
<b>Employer:</b> LLCHD	<b>Address:</b> 3140 N Street, Lincoln NE 68510
<b>Work Description:</b> Conduct outdoor/indoor air complaint investigations and source inspections.	
<b>Location:</b> Lincoln/Lancaster County	
<b>Favorite part of job:</b> Seeing the variety in industry, and meeting new people	
<b>Email:</b> LTurcios@Lincoln.Ne.Gov	<b>Member Since:</b> 2014

### MEMBER AT LARGE

	<b>Name:</b> Mandy Kearney	<b>Job Title:</b> Environmental Health Scientist
	<b>Employer:</b> State of Nebraska DHHS	<b>Address:</b> P.O. Box 95026, Lincoln, NE 68509
	<b>Work Description:</b> Inspect establishments for compliance with applicable State Public Health Regulations. Perform related inspections on pools, private water wells, mobile home parks, septic systems, day cares, and non-profit food establishments (schools/senior centers). Provide on-site consultation, training, and education to the community.	
	<b>Location:</b> Saunders, Dodge, Platte, Colfax, Washington, Burt, Douglas, Lancaster	
	<b>Favorite part of job:</b> Travel and the people I meet during inspections.	
	<b>Email:</b> mandy.kearney@nebraska.gov	<b>Member Since:</b> 2005

## LLCHD POOL WATER QUALITY TESTER

On January 1<sup>st</sup> 2015, the new Pool Water Quality Tester (PWQT) regulation came into effect for all public pools in the city of Lincoln. The regulation states: “water tests conducted for pH, disinfectant levels and water clarity must be completed by either a Lincoln Swimming Pool Operator or a Lincoln Pool Water Quality Tester.” To become a Lincoln PWQT, applicants must attend a thirty minute class where they are asked to test sample pool water. The class teaches the proper technique, ranges and steps to check the disinfectant level, pH, alkalinity, combined chlorine, cyanuric acid and common problems that may arise when testing. It is not meant to teach proper chemicals to add if problems are found, the Testers are taught to contact their Lincoln Pool Operator if any changes to the pool need to be made.

During the passing of the updated swimming pool code, the editorial board for the Lincoln Journal Star came out in support of the PWQT regulation, stating in an editorial: “the best justification for regulation is when the rules protect public health. That’s the case with this proposal that would cover more than 200 public pools in Lincoln. It deserves City Council approval.” The regulation also received support from local operators and the Board of Health.

The main reason the Lincoln-Lancaster County Health Department (LLCHD) wanted to implement the PWQT regulation was that over the last couple of years the closure rate



for public pools was around 25%. This means that one in every four pools inspected were immediately closed down. When looking at the reasons for the closures, LLCHD noticed that most were due to improper disinfection and pH levels. For most public pools, the pool operator only has to be available when the pool is in operation, which means that many of the required tests are being performed by staff that is not properly trained. By requiring training for any one that tests the pool water, LLCHD hopes to significantly reduce the closure rate and increase compliance with testing regulations, thus raising public health.

To view the entire Lincoln Journal Star Editorial:

[http://journalstar.com/news/opinion/editorial/editorial-protect-water-quality-in-pools/article\\_35c29988-0a32-55b0-9a26-9210b7a9d503.html](http://journalstar.com/news/opinion/editorial/editorial-protect-water-quality-in-pools/article_35c29988-0a32-55b0-9a26-9210b7a9d503.html)

By: Karl Dietrich, LLCHD

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*"If there is magic on the planet, it is contained in Water."  
- Loren Eiseley, The Immense Journey, 1957.*

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## NEBRASKA ONE HEALTH

Nebraska One Health. You are probably thinking, “What a strange name.” We all know what Nebraska is, a state in located in the center of the continental

United States. But what does One Health mean? One Health is an intellectual construct or model based on the fact that diseases transfer between wildlife, livestock, and humans. To care for just humans and ignore domestic animals and wildlife is often short sighted because diseases frequently jump from one type of organism to another. Consider the following information. Of the 1,709 known pathogens (organisms that cause disease) affecting humans, 832 are zoonotic meaning they originate in wildlife/domestic animals. Of the 156 diseases considered “emerging”, 114 are zoonotic (Friedman, M. 2006. Disease Emergence and Resurgence: The Wildlife-Human Connection).

Since healthy people need healthy environments (and vice versa), Nebraska One Health was established to help Nebraskans understand the human-environment connection and to improve communication about zoonotic issues confronting our state. As a grant-funded project Nebraska One Health plans on achieving this task by helping to collect and disseminate information, coordinate with interest groups, and encourage collaboration between public officials, private interests, and the general public.

[Our logo endeavors to visually represent the interrelatedness of human and animal health.]

Our initial goals include the development of a website ([NebraskaOneHealth.unl.edu](http://NebraskaOneHealth.unl.edu)) to organize evidence-based information for health officials and a Facebook Page (<https://www.facebook.com/NebraskaOneHealth>) to distribute that information to the public. In ad-

dition, we will use a monthly e-zine to improve communication between stakeholders. Third, we want to develop a Nebraska One Health Contact List. Too often, when health related issues arise, stakeholders are not aware of the resources and experts available to help resolve/prevent/advise a problem. The task is great but the benefits to the public, animals, and the environment make our efforts worth the effort.

You can help us accomplish our goals in a few simple ways.

- First, let us include you in our monthly posts via e-mail.
- Second, suggest other professionals and interested parties you think would benefit from improved networking.
- Third, suggest websites and other digital sources that should be included in our forthcoming website.
- Finally, visit us on Facebook.

Finally, I would like to introduce our Principal Investigators. Each of these researchers at the University of Nebraska-Lincoln brings a unique set of skills and experience to this project. Dr. Roberto Cortinas is a professor with Professional Program in Veterinary Medicine. He has a special interest in ticks. Dennis Ferraro is a herpetologist at the School of Natural Resources. He has an interest in human-wildlife conflicts as well as disease issues. Finally, Dr. Elizabeth Van Wormer is an Adjunct Professor that specializes in One Health topics.

Thank you for your interest in Nebraska One Health. Please send along your suggestions, comments, etc. on how we might be able to network with your efforts as we seek to protect the health of Nebraskans.

Stephen M. Vantassel, Program Coordinator  
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## CDC: SHIGELLA INFECTIONS BECOMING RESISTANT TO RECOMMENDED ANTIBIOTIC

Research conducted by the CDC suggests a greater proportion of Shigella infections in the US are now resistant to ciprofloxacin, a very important antibiotic.

Shigella causes an estimated 500,000 cases of diarrhea in the US annually. Diarrhea caused by Shigella sonnei typically resolves without treatment, patients with mild illness are often treated with antimicrobial medications to reduce the duration of symptoms and the shedding of shigellae in feces.

After PulseNet, detected a multistate cluster of S. sonnei infections in December 2014, CDC's NARMS laboratory determined that isolates from the cluster were resistant to ciprofloxacin.

Between May 2014 and February 2015, CDC identified 157 cases of ciprofloxacin-resistant S. sonnei infections.

Ciprofloxacin is the first-line treatment for adults with shigellosis because the bug's resistance to other antimicrobials is either common or increas-

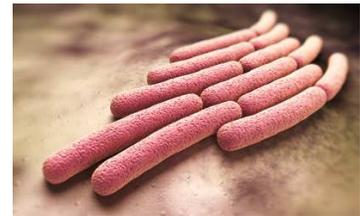
ing. Of 126 total isolates with antimicrobial sus-

ceptibility information, 87 percent were not susceptible to ciprofloxacin.

There were 95 cases of ciprofloxacin-resistant Shigella infections in residents of, or travelers to, San Francisco in late 2014. About half of the 157 ciprofloxacin-resistant Shigella cases PulseNet detected were associated with international travel. No common airline or airport exposures were identified.

"Although this Shigella strain is strongly associated with international travel, it is now circulating domestically," CDC added. If introduced to certain populations, Shigella can spread rapidly and cause large, protracted outbreaks, as occurred in San Francisco.

Source: <http://www.foodsafetynews.com/2015/04/shigella-infections-resistant-to-recommended-antibiotic-increasing-in-the-us/#.VSftWWVoxaR>



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### CARBON MONOXIDE BILL PASSED

The Legislature passed LB34 on March 12, 2015 and the Governor approved the bill on March 18.

LB34's was written to help prevent carbon monoxide poisoning in Nebraska homes. It requires that carbon monoxide detectors be installed when homes are sold, rented or significantly renovated after January 1, 2017.

### MICROBEADS

Colorado, Illinois, New York and New Jersey have all put regulations in place to phase out the use of and/or banned tiny plastic particles from soaps and cosmetic products. These microbeads turn up in face scrubs, acne treatments and toothpaste. The beads, intended to scrub and brighten, are made of polyethylene or polypropylene. The particles are too fine to be caught in wastewater treatment plants, and the plastic bits can pollute lakes and rivers. The microbeads are about the size of a pencil tip, or fish eggs, and can be swallowed by aquatic life. Scientists have found evidence of the beads or their molecular components in Great Lakes fish and other aquatic life, a base of the food chain. Whole, they may harm digestive tracts, and their decaying components may bond to other stray molecules to form toxic compounds.

Source: <http://www.npr.org/2014/05/21/313157701/why-those-tiny-microbeads-in-soap-may-pose-problem-for-great-lakes>

## STUDY: KITCHEN TOWELS HARBOR PLENTY OF BACTERIA

A recent study of contamination on kitchen towels by researchers at the University of Arizona found that 89 percent contained detectable levels of coliform bacteria and 25.6 percent had detectable levels of E. coli.

In their article published in the September/October issue of Food Protection Trends, the researchers conclude that, “The common occurrence of enteric bacteria in kitchen sponges and dishcloths suggests that they can play a role in the cross-contamination of foods, fomites and hands by foodborne pathogens.”



The study was conducted this year on 82 used kitchen towels collected from random households in five major cities: Chicago, IL; Tucson, AZ; New Orleans, LA; Orlando, FL, and Toronto, Canada. The cities were chosen for their differing weather, ranging from cold to hot and dry to humid.

Besides coliform bacteria and E. coli, the towels were also found to contain Enterobacter cloacae, Klebsiella pneumonia and K. oxytoca.

“If you are using a dirty kitchen rag, you may actually be introducing hundreds of thousands of bacteria,” said Kelly Reynolds, a researcher with the University of Arizona’s Zuckerman College of Public Health in Tucson.

What can a person do to reduce the contamination on their kitchen towels? Frequently wash and replace them and/or decontaminate them by soaking in a bleach solution for two minutes to reduce the bacterial load. But even that won’t do the trick if you don’t thoroughly dry them.

“Detergent washing and drying of kitchen cloths in the kitchen only slightly reduced microbial contamination, and regrowth occurred within 24 hours, since the towels remained damp,” the researchers wrote.

Ideally, kitchen towels should be laundered after each use, they advise. If that’s not possible, dip them in a diluted bleach solution (two teaspoons per gallon of water) between uses and let them dry. Then, wash them in a washing machine at least once per week, preferably on the sanitizing or antibacterial cycle.

Source: <http://www.foodsafetynews.com/2014/10/study-kitchen-towels-harbor-plenty-of-bacteria/#.VSRIjWVoxaQ>

## BIRD FLU HAS HIT AN EIGHTH MINNESOTA TURKEY FARM

Bird flu has hit an eighth Minnesota turkey farm, the second such occurrence in Kandiyohi County.

Highly pathogenic H5N2 bird flu has been found in a flock of 30,000 turkeys in Kandiyohi. Turkeys in one of the farm's three barns came down with the flu. As is common in such outbreaks, turkeys in the other two barns were killed as a precaution.

The farm has been quarantined, so birds can't be moved in or out. The dead birds will be composted on site for about four weeks.

The second Kandiyohi County outbreak occurred 3 to 4 miles from another farm struck by bird flu in the past few days.

The flu is believed to be spread by migratory birds who don't get sick themselves. The virus is transmitted through wild bird feces, and is somehow making its way into commercial turkey barns, which are enclosed from the elements.

With this new outbreak, 373,000 Minnesota turkeys will have died from the flu or been euthanized to prevent the disease's spread. Minnesota, the nation's largest turkey producer, churns out about 46 million turkeys a year.

Source: <http://www.startribune.com/lifestyle/health/298939551.html>

## NEBRASKA WATER LEADERS ACADEMY

In the spring of 2011, the Nebraska State Irrigation Association assembled the first class of participants in the Nebraska Water Leaders Academy. Designed to offer an educational experience for early to mid-career professionals, the Academy curriculum explores the increasingly complex matter of managing water in Nebraska. The curriculum draws upon experts from technical and social disciplines and includes a strong leadership development component.

The goal of the Academy is simple: "teach future water resources decision makers to work together to solve problems." For the past four years, the NSIA has selected academy participants from geographic locations across the state. Participants have come from occupations as varied as law, the legislature, farming, natural resources and engineering among others. However, too often classes lack representatives from rural areas, small business, entrepreneurs and others who lack organizational support.

The Academy offers participants six, 1 1/2 day sessions at locations across the state. Sessions include leadership training, field trips and discussions ranging from urban water systems that provide water, waste water and flood control works, to irrigation development, management and integrated operations used in crop production, to

## NEBRASKA WATER LEADERS ACADEMY



fish, wildlife, ecotourism and recreation activities.

Support from the School of Natural Resources at the University of Nebraska Lincoln has been critical in the initial planning as well as ongoing faculty support of the Academy. In addition, the Water Futures Partnership-Nebraska, a 501(c) (3) organization was formed in 2013 to accept grants and tax-deductible donations to extend support of the Academy.

The Nebraska Environmental Trust has been an active partner in this program to prepare tomorrow's leaders in Nebraska water and environmental policy decisions. As the Water Leaders Academy prepares to enroll its sixth year of participants, it is vital to expand our financial resources so that the program can continue to prepare informed leaders particularly those from rural areas.

**PLEASE NOTE:** While the Academy was developed and is supported through the efforts of the Nebraska State Irrigation Association, the Academy curriculum addresses in detail all aspects of water in the state including surface and ground water.

[www.waterleadersacademy.org](http://www.waterleadersacademy.org)



## CDC'S COMMUNITY HEALTH STATUS INDICATORS (CHSI)

CDC's Community Health Status Indicators (CHSI) 2015 is an interactive web application that produces health profiles for all 3,143 counties in the United States. Each profile includes key indicators of health outcomes, which describe the population health status of a county and factors that have the potential to influence health outcomes, such as health care access and quality, health behaviors, social factors (economic and social conditions that may directly or indirectly influence the health of people and communities) and the physical environment (the natural environment (air, water, and soil) and the built environment (safe and affordable housing, transportation, access to nutritious and affordable food.) The social factors and the physical environment are especially important because they represent the conditions in which people are born, live, work, and play. Key features include:

- Summary Comparison Report – an “at a glance” summary of how a county compares with peer counties on the full set of Primary Indicator.
- Indicator Description –info describing the significance of the indicator, source/years of data, methodology for creation, and any limitations.
- Indicator Downloads – indicator values for each group of peer counties can be downloaded for further examination and analysis.
- Populations – allows users to compare an indicator value for the entire population of a county with sub-populations defined by sex, age groups, and race/ethnicity, where data are available. This feature can be used to assist with identifying potential health disparities.
- Census Tract Maps –identify vulnerable populations and potential health disparities by examining the geographic distribution of select social factor indicators within a county (by census tract).
- Associated Indicators – these are indicators that are related to the primary indicator and may provide additional valuable information. For example, the primary indicator for educational attainment is on-time high school graduation rate. Associated Indicators include percent of adults without a high school diploma and percent of adults with an associate level degree or higher.

Can be found at: <http://wwwn.cdc.gov/communityhealth>

## EARTH DAY QUIZ

- 1) Which ancient civilization first introduced solar technology in their community?
  - A. The Greeks
  - B. The Egyptians
  - C. The French
  - D. The Byzantine Empire
- 2) Where is the largest solar power plant in the world?
  - A. New England
  - B. Germany
  - C. China
  - D. California
- 3) What American river caught fire in 1969, prompting multiple pollution control measures?
  - A. The Scioto River
  - B. The Cuyahoga River
  - C. The Fox River
  - D. The Calumet River
- 4) The Stockholm Convention of 2001 aimed to reduce what chemical substances that are known to bio-accumulate and pose a risk to human health?
  - A. Nuclear byproducts
  - B. Mercury compounds
  - C. Persistent organic pollutants (POPs)
  - D. Carbon dioxide derivatives
- 5) In the average household, which of the following wastes the MOST water per day?
  - A. Running the tap while washing dishes
  - B. Using a garbage disposal
  - C. A leaky toilet
  - D. Long showers



NEBRASKA ENVIRONMENTAL  
HEALTH ASSOCIATION

## EVENTS

### Wisconsin EHA Spring Education Conference

The WEHA SEC will be held at the Best Western Premier Waterfront Hotel & Convention Center in Oshkosh, WI on April 21, 2015. For more information go to: <http://www.weha.net/>

### Minnesota EHA Spring Education Conference

The MEHA spring education conference will be held May 14-15, 2015 at Arrowwood Resort Conference Center in Alexandria, MN. To view the agenda go to their website at: <http://www.mehaonline.org/>

### NEHA AEC July 13-15

NEHA is holding its 2015 AEC & Exhibition in Orlando, Florida on July 13-15, 2015. Website is: <http://www.neha2015aec.org>

### NEHA Region 4 Environmental Health Conference Oct. 7-8

The Iowa Environmental Health Association (IEHA) is hosting the 2015 NEHA Region 4 conference on October 7-8, 2015 at the Sullivan Brothers Conference Center in Waterloo, Iowa. Website: <http://www.ieha.net/>

### North Dakota EHA Fall Education Conference

The NDEHA FEC will be held on October 20-22 2015 in Jamestown, ND. More information can be found at: <http://ndeha.org/>

### NEHA FEC October 21, 2015

The Nebraska Environmental Health Association will be having our fall educational conference on October 21, 2015 at SAC Museum in Ashland, NE. See more information at our website: <http://www.nebraskaneha.com/home.html>

- 1) A. According to The Department of Energy, the Greeks and Romans used burning mirrors in the 7th century B.C. to light torches for religious purposes. (The Chinese also used this method in 20 A.D.)  
D. The largest solar power plant, located in San Luis Obispo County in California, has 9 million solar panels with about 550MW capacity.  
3) B. The Cuyahoga River fire helped spur an avalanche of water pollution control activities resulting in the Clean Water Act, Great Lakes Water Quality Agreement, and the creation of the federal Environmental Protection Agency and the Ohio Environmental Protection Agency.  
4) C. Following a 1995 call for global action to be taken on POPs, defined as "chemical substances that persist in the environment, bio-accumulate through the food web, and pose a risk of causing adverse effects to human health and the environment", the Stockholm Convention resulted in a ban of the 12 "dirty dozen" harmful POPs by 128 signatory countries.  
5) C. A leaky toilet can waste about 200 gallons of water every day! To tell if your toilet is leaking, place a drop of food coloring in the tank; if the color shows in the bowl without flushing, you have a leak.

EARTH DAY QUIZ ANSWERS