THE OUTLOOK

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A Message from the President...

Privilege and Responsibility. Those are the words that come to mind as I take over the AZEHA reins from Steve Wille. It is a privilege to serve as president of such a great organization. With this privilege also comes responsibility. The responsibility to continue to grow and nurture AZEHA as we move to the future. Two main goals I would like to see AZEHA accomplish during my tenure are:

1. Recruit student members from universities, colleges and even high schools. These students are the future of AZEHA. Let’s show them what an environmental health specialist is and does. Let’s promote not just AZEHA, but promote environmental health as a career opportunity.

2. Form and maintain robust committees. Committee membership is a way for folks to participate a little or a lot. It is also a way to network with other sanitarians as well as industry representatives. AZEHA has seven (7) standing committees. A handful of AZEHA members cannot sustain all of these committees. We need to encourage others to assist with conferences, newsletters, websites, memberships, legislation and education.

Other goals the AZEHA members added were raising membership; encouraging industry involvement; promoting AZEHA as a networking opportunity; and encouraging participation from every county in Arizona. It was brought up that one does not have to be a registered sanitary to participate in AZEHA or on one of the AZEHA committees.

Achieving these goals takes time and commitment. In order to make the best use of time, I have arranged for AZEHA Board Meetings to be made available via Go-To-Meeting call-in or via computer login. This will allow folks who cannot attend in person to remotely “attend” the meeting. In addition, the AZEHA Board set the second (2nd) Thursday of January, April, July and October aside for the quarterly board meetings. Time is from 13:00-15:00 (1:00 pm-3:00 pm). Please plan on attending either in person at 1001 N Central Avenue, Phoenix, or via webinar.

Last, but by no means least, I would like to thank all of the past AZEHA board members for the support you have given me as I move into this new position. I know with your continued assistance as well as the awesome new members I have met, we-AZEHA-can and will grow and flourish beyond our wildest dreams. A journey of a thousand miles begins with a single step (Lao Tzu). Welcome to the journey.
It was an honor for me to attend the NEHA 2018 Annual Educational Conference (AEC) in Anaheim, California as a representative of the Arizona Environmental Health Association. There were hundreds of interesting educational sessions to choose from, and it was often difficult to choose between programs that were presented concurrently.

One of the interesting programs I attended was entitled Disaster Relief Efforts-Responding to Emergencies. The speaker mentioned the history of Incident Command Systems; they actually were started in the 1960’s and evolved into what we would recognize now during the 1970 wildfires in California. In 13 days, 773 individual wildfires swept across Southern California and burned almost 580,000 acres. Because of the number of different firefighting agencies, forestry services, and law enforcement agencies, involved, it was recognized that a coordinated effort through a centralized organization was needed. Today we have the National Interagency Incident Management System (NIMS), Federal Emergency Response Agency (FEMA), and the CDC Emergency Operations Center (OEC) to respond to large scale disasters.

Another interesting session was “Pubic vs. Private-Where do I fit in the Environmental Health World”, which featured a panel discussion with professionals from private industry and from governmental agencies. The pros and cons for working for public and private agencies was discussed. All of the panel members had worked for both public agencies and private companies, so they could relate experiences from both the public and private sectors. One good tip given by a person working for private industry was to ask the prospective employer what type of support you would receive from the company. If you don’t have buy in from upper levels of management to make changes required, then it could make your job much more difficult. An official from NEHA mentioned that their newest credential, Certified in Comprehensive Food Safety (CCFS), would allow a professional to do international auditing.

I also attended a presentation on the 2017 FDA Food Code which highlighted some of the new changes in the Code. The 2017 edition reflects the input of regulatory officials, industry, academia, and consumers that participated in the 2016 meeting of the Conference for Food Protection (CFP). The new code is available to download at www.fda.gov/foodcode.
Rodent 101 was an interesting presentation that addressed effective control of rodent populations, why there has been an increase in populations over the last few years (decreased municipal budgets and increase in human population), and some of the more effective control procedures.

Cannabis and Food Safety focused on NEHA’s increased involvement in this area, which includes a new guidance documents on their web site.

One of the programs I was most exited to attend featured our own president-elect, David Morales. David actually presented an Active Managerial Control class to restaurant operators from Orange County, where the Conference was taking place. Attendees watched as David interacted with the operators to encourage them to share how they could actually train their staff on policies they had developed, and how to verify that their policies are actually working.

The 2018 National Environmental Health Association 2018 Annual Education Conference was very educational, informative, and provided great networking opportunities to meet environmental health specialists from all over the country and all over the world!

Steve Wille, Past President
Maricopa County Environmental Services
SWille@mail.maricopa.gov
The 2018 Food and Drug Administration (FDA) Pacific Region Retail Food Seminar was held in Boise, Idaho from September 11-13, 2018. Arizona had great representation, with participants from Maricopa County, Pima County, and the Arizona Department of Health Services (ADHS).

FDA regional food protection seminars are held annually, and provide an opportunity for participants to learn about changes to regulations, policies, and recommendations that impact retail food safety; regulatory initiatives to enhance retail food safety; available funding opportunities; and more. They are a great opportunity for state and local retail food programs to get together and share best practices, innovations, and regulatory roadblocks. Participants include food safety professionals from regulatory agencies, industry, and academia.

AZEHA has been asked to consider hosting the 2019 FDA Pacific Region Retail Food Seminar here in Phoenix. If you are interested in assisting, please contact Cheri Dale to be placed on a contact list.

Want to Volunteer?
Contact Cheri Dale.
Cheri.Dale@Maricopa.gov
July 2018—The U.S. Environmental Protection Agency (EPA) assesses progress in improving air quality since the Clean Air Act was signed into law in 1970. In its annual report, EPA shares that combined emissions of the six “criteria pollutants” have declined by 73% in the past 47 years, while the U.S. economy has more than tripled. Even so, 111 million people still live in areas of the nation where air quality does not meet the health-based national standards for at least one criteria pollutant. Accordingly, says EPA, the agency “continues to work with states, local governments, tribes and citizens to further improve air quality across the entire country.” Explore the report here.

August 2018—The National Bureau of Economic Research (NBER) published a working paper written by three economists at Arizona State University correlating prolonged exposure to air pollution to higher probabilities of receiving a dementia diagnosis. The researchers linked Medicare records to the EPA air quality surveillance data, and “tracked the evolution of individuals’ health, onset of dementia, financial decisions, and cumulative residential exposure to fine-particulate air pollution (PM2.5),” concluding that the cost of air pollution and the benefits of regulation are greater than previously known, due to the negative impact of dementia on financial decision making.

September 2018—A study presented at the European Respiratory Society International Congress examined the placentas of five pregnant women in the United Kingdom. All of the women were non-smokers with an uncomplicated pregnancy, and gave birth a healthy baby. The placentas were provided the Queen Mary University of London after delivery, and the scientists found sooty particles in placental macrophages. Though research has shown the impact of air pollution on fetal development for a while, this was the first piece of evidence that inhaled particles can get into the bloodstream from the lungs, and further on into the placenta.
July 2018—A new U.S. Department of Agriculture observational study, in collaboration with North Carolina State University, and RTI International, found that consumers fail to properly wash their hands before meals 97% of the time. In fact, they only attempted to wash their hands about 33% of the time when required. As a result, cross-contamination was observed, with meat juices spread to spice containers (48%) and salad (5%). The study also tested the impact of watching a food safety video about using food thermometers, and found that participants were twice as likely to use a thermometer to check the doneness of burgers if they saw the video, compared to the control group.

August 2018—This Food Safety Magazine article talks about how increased costs and margin squeeze have increased the incentive for producers to commit food fraud (the deliberate and intentional substitution, addition, tampering, or misrepresentation of food, food ingredients, or food packaging; or false or misleading statements made about a product, for economic gain.) Reasons for this can include tax avoidance on specific food items, as well as a desire for suppliers to meet the desires of the consumers to provide organic foods, from countries of origin that consumers prefer, and more. To prevent fraud, a relationship with a supply base is needed. Opportunities to reduce costs should be examined through communication with suppliers to identify their challenges in order to reduce the victimization of consumers.

September 2018—New food safety requirements and metrics requirements for members of Arizona’s Leafy Greens Marketing Agreement (LGMA) are now in effect, with inspections set to begin in November (as the harvest season in Arizona begins in November, running through mid-March). The revised requirements in Arizona were spurred on by the April 2018 E. Coli outbreak linked to Yuma, AZ, and will involve daily cleaning of equipment; more extensive review of crop impact after weather events; mandatory traceability measures; and a 1,200-foot min buffer zone between growing fields and feed lots with 1,000+ animals. According to LGMA statistics, California and Arizona produce 90% of the leafy greens consumed in the United States, which is also why Arizona farmers are taking these steps so seriously. Similar requirements are expected to be finalized soon for members of the California LGMA.
July 2018—A new study published in the Annals of Allergy, Asthma, and Immunology found alpha-gal to be the most common known cause of anaphylaxis at the University of Tennessee Health Science Center. Alpha-gal is a complex sugar found in red meat (beef, pork, venison, etc.) that normally poses no problem for people. However, when a Lone Star tick bites a person, it transfers alpha-gal into their bloodstream, causing the person’s body to produce antibodies to fight the sugar. The next time that person eats red meat, their immune system responds to the alpha-gal in the meat, and they suffer an allergic reaction. In previous studies, researchers were often unable to identify the cause of anaphylaxis, but the increase in the Lone Star tick population since 2006 and the recognition that Lone Star ticks can cause alpha-gal allergies to red meat has meant significantly more cases of anaphylaxis being properly identified.

August 2018—Vector-borne diseases may be more affected by temperatures and climates than previously thought. This scientific study explores the relevance of climate data, drivers, and predictions for vector-borne disease control efforts in Africa. Pathogens transmitted to humans by insects and ticks spend part of their life cycle in a cold-blooded, secondary (non-human) host where they are effectively at the temperature of the local microclimate. At lower temperatures, the development rate of the pathogen will slow, increasing the probability that the insect/tick will not survive long enough for disease transmission. This study posits that understanding rainfall and temperature variations and trends are necessary steps into vector-borne disease controls and decision-making.

September 2018—Microplastics (MPs), with a diameter under 5mm, are known threats to the health of marine, freshwater, and terrestrial ecosystems as they enter the food web. MP pollution is ubiquitous in the environment, particularly in water, and small plastic pieces can be ingested accidentally, and transferred up through the food chain. A new publication in Biology Letters finds that MPs can be transmitted by means of ontogenic transference (between life stages that use different habitats). Specifically, they find that Culex mosquito larvae that grow up in contaminated water can accumulate MPs in their bodies, some of which remains even after the larvae emerge as adult flies. The mosquitoes may exacerbate the problem of plastic contamination when they are eaten by animals living on land, and spread the pollution into new environments.
July 2018—Wells serving more than 1/3 of Marana water utility’s households (nearly 2,800 customers) were reported to contain levels of two kinds of chemical pollutants that are higher than those recommended by the U.S. Environmental Protection Agency (EPA): 1,4-dioxane and PFAS. Neither breaks down easily, neither is regulated by the federal government, and both are considered likely carcinogens. The Marana Water Department has not said exactly when the wells will be cleaned up, and is waiting for EPA guidance as to how thoroughly the water needs to be cleaned. The Marana Town Council directed staff members to produce a report by early October detailing the estimated cost of the project.

August 2018—The U.S. Bureau of Reclamation releases an outlook report each month that projects the Colorado River’s supply for the next two years. The report released in August projects that the water levels at Lake Mead will fall to 1,070 by December 2019. The threshold for a water shortage is 1,075 feet above sea level, meaning that if this projection is correct, a Tier 1 water shortage will be declared in December 2019, which would mean cutbacks for water users. Arizona water managers say that they will work with federal officials to finalize a Colorado River drought-contingency plan in time for the state Legislature’s next session.

September 2018—The Cochise County Board of Supervisors has declared a state of local emergency in response to an ongoing leak of raw sewage from Naco, Sonora into Naco, Arizona, near the border point of entry. Cochise Environmental Health has been monitoring the HAZMAT situation since it began on September 9, 2018, building dirt berms to contain the spills and using chlorine tablets to treat the wastewater flowing north. Though flows of sewage across the border have occurred in the past, the current situation represents at 328% increase on previous incidents. Cochise County is talking with state, federal, and Mexican agencies in an effort to resolve the problem.
July 2018—The Associated Press-NORC Center for Public Affairs Research found that more than half (57%) of Hispanic adults have encountered a communication barrier in the health care system. The survey also finds that many Hispanics are concerned about the cultural accommodations long-term care services in their area may or may not make, particularly with regards to language barriers and differences in religious or spiritual beliefs. The survey also looked at perceptions of technology use in healthcare, and found that 81% of those aged 40 and older would be comfortable using some form of telemedicine for their care needs.

August 2018—The Kaiser Family Foundation and the Economist partnered to conduct a survey of adults in the United States, United Kingdom, and Japan to examine people’s perceptions of and experiences with loneliness and social isolation. The survey found that over 20% of adults in the US and the UK (and 10% of adults in Japan) say they often or always feel lonely. These people disproportionately report lower incomes, and having debilitating physical and mental health conditions. This study is part of growing body of literature on the effects of loneliness and social isolation on individuals’ wellbeing. Read the paper here, and The Economist’s story here.

September 2018—A study from the University of Nottingham and the Finnish National Institute and Health and Welfare published in BMC Infectious Diseases has identified the plastic security screening trays to pose the highest potential risk of respiratory illness transmission. The researchers took surface and air samples weekly at three different time points during the peak period of seasonal influenza in 2015-16 in Finland. The samples were tested for influenza A and B, respiratory syncytial virus, adenovirus, rhinovirus, and coronaviruses (229E, HKU1, NL63, and OC43). Nucleic acid of at least one respiratory virus was detected in 10% of surface samples and 25% of air samples.
Legislation

Arizona

The Arizona State Legislature adjourned on May 4, 2018. In total, 1206 bills were introduced, and 346 bills were signed into law by the governor. The laws went into effect on August 3, 2018. A summary of legislation from 2018 can be found here. The 2019 regular session of the Arizona State Legislature is set to convene on January 14, 2019.

United States

FORWARD Act of 2018: A bill “to support endemic orphan fungal disease research, incentivize Valley Fever vaccine development, discover new antifungal therapies and diagnostics, and for other purposes.” This bill seeks to provide both short-term and long-term benefits, promoting and prioritizing valley fever research, streamlining FDA approval processes, and encouraging the development of a valley fever vaccine. Valley fever numbers have been rising, and existing treatments vary in effectiveness. This bill is co-sponsored by Arizona Representatives Martha McSally, David Schweikert, and Krysten Sinema.

Opioid Crisis Response Act of 2018: A bill “to address the opioid crisis.” This package of 70 bills was approved by the Senate on September 17, 2018, and is meant to combat the nationwide opioid epidemic from all angles. It directs funding to federal agencies to establish or expand programs dealing with prevention, treatment, and recovery, and includes funding for stopping the flow of illegal opioids, developing new non-addictive painkillers, supporting behavioral and mental health providers, and more. 72,000 Americans died of drug overdose in 2017, according to the Centers for Disease Control and Prevention (CDC).

Pandemic and All-Hazards Preparedness and Advancing Innovation Act of 2018: A bill “to reauthorize certain programs under the Pandemic and All-Hazards Preparedness Reauthorization Act.” The original law was created to improve public health and medical preparedness and response capabilities for emergencies, whether deliberate, accidental or natural. This bill has moved out of committee, and for the first time, specifically mentions environmental health. Identical environmental health language has also been proposed as part of HR 6378. Both bills will now move to be voted on by the full Senate and House of Representatives.

Special Update: California

California passed AB-626, a new bill that allows people to sell foods out of their homes. The bill goes into effect on January 1, 2019.
NEHA Membership Types and Dues Change

The National Environmental Health Association Board of Directors has formally updated and streamlined NEHA’s membership categories and approved a new dues structure, effective on October 1, 2018. The changes will be reflected on future membership renewal notices and may require members to select new preferences. The new NEHA membership types and dues are:

- **Professional Member**: Open to anyone who is active in the field of environmental health. *Annual dues are $100*

- **Emerging Professional Member**: Students and those within the first 5 years of their career (including active duty military) are the targets of this inclusive category. Limited to a 5-year term. *Annual dues are $25.*

- **Retired Professional Member**: Open to anyone who has retired from the field of environmental health. *Annual dues are $25.*

- **International Member**: Environmental health professionals who reside outside of the U.S. are invited to join in this category. *Annual dues are $65.*

- **Life Member**: Anyone who wishes to pay a one-time fee to become a lifetime member. *Cost is $2,500.*

State of the Climate in 2017 Published

In this annual report, the American Meteorological Society, an international team led by scientists at the National Oceanic and Atmospheric Administration, summarizes a broad range of climate data to identify changes and trends in the Earth’s climate. The authors note *record levels of atmospheric greenhouse gases,* and near-record highs for the combined average global land and ocean temperature. They conclude that the global average surface temperature for 2017 was 0.38 to 0.48 degrees Celsius above the 1981-2010 average, making 2017 the second or third warmest year on record and the warmest ever without an El Niño event.

Fall Issue of “Affiliate View” Published

The International Association for Food Protection’s quarterly newsletter, [Affiliate View](#), is live! The new AZEHA Board members are listed on page 7.
**Webinars**

**October 2018**

**10/1 @ 2PM ET: Wildfire Smoke: Impacts on Public Health and Lived Experience**
Learn about the latest research on the various mental and physical health effects of wildfire smoke exposure. Register [here](#).

**10/11 @ 2PM ET: Putting Data to Work with the National Environmental Assessment Reporting System (NEARS)**
Hear more about current food safety issues with low moisture (low water activity) foods and the evolving regulatory requirements for these products in view of the Food Safety Modernization Act. Register [here](#).

**10/17 @ 1PM ET: Pre-conception Environmental Exposures and Children’s Health**
Review animal and epidemiological studies showing effects of pre-conception exposures on offspring health, as well as studies investigating potential mechanisms. Register [here](#).

**10/30 @ 2PM ET: Leadership Skills to Improve Health and Safety**
Explore different leadership skills that are important to a cultural transformation to improve health and safety. Register [here](#).

**November 2018**

**11/6 @ 1PM ET: Air Sampling Strategies and Analysis**
Develop a basic understanding of how OSHA and NIOSH methods (and others) can be used to develop efficient, cost-effective sampling strategies for air monitoring methods. Active and diffusive sampler user will be discussed. Register [here](#).
Upcoming Events

October 2018
10/3: AZ Public Health Association Conference—Integrating Care to Improve Health Outcomes
@ Desert Willow Conference Center (Phoenix, AZ). [Agenda] [Registration]

10/4-6: Public Health Law Conference—Empowering Public Health and Advancing Health Equity
@ Sheraton Grand at Wild Horse Pass (Chandler, AZ). [Agenda] [Registration]

10/9: In-Person Training: Pool Chemistry Certification—Residential (PCC—R)
@ Undetermined in Phoenix, AZ. [Registration]

10/11: AZ Health Equity Conference—Connecting Communities in Research, Practice, & Policy
@ Desert Willow Conference Center (Phoenix, AZ). [Registration]

10/16-17: National Environmental Health Association—Enhancing Safety in Private Drinking Water Systems
@ Home (virtual conference). [Registration]

November 2018
11/7-8: Arizona Sanitarians’ Conference
@ Arizona State Laboratory. (Phoenix, AZ) [Agenda]
Registration is now closed. Join the waitlist by emailing FoodSafety@azdhs.gov.

11/10-14: American Public Health Association Conference—Creating the Healthiest Nation
@ San Diego Convention Center (San Diego, CA). [Agenda] [Registration]

11/27-29: National Pest Management Association—Global Bedbug Summit
@ Sheraton Denver Downtown (Denver, CO). [Agenda] [Registration]

December 2018 and Beyond
@ Hyatt Centric French Quarter (New Orleans, LA). [Agenda] [Registration]

1/9-10: In-Person Training: Animal/Plant Health Joint Criminal-Epidemiological Investigations Course @ Palo Verde Energy Educational Center (Buckeye, AZ).
Training exercise that will help you better understand law enforcement and animal-plant health agency roles, responsibilities, and authorities during an outbreak of an unusual, suspicious, and/or high consequence animal or plant disease incident. Register [here].

1/10 @ 1PM: AZEHA Quarterly Meeting
@ 1001 N Central Ave (5th Floor Conference Room; Phoenix, AZ).
Arizona Job Opportunities

State of Arizona
Apache County
Cochise County
Coconino County
  • Environmental Health Specialist I—Page, AZ
Gila County
Graham County
Greenlee County
La Paz County
Maricopa County
  • Vector Control Specialist—Phoenix, AZ
  • Water Resources Specialist—Phoenix, AZ
Mohave County
  • Environmental Health Manager—Kingman, AZ
  • Environmental Health Specialist II—As assigned within Mohave County, AZ
Navajo County
Pima County
  • Environmental Specialist (Air Quality Compliance Inspector)—Tucson, AZ
Pinal County
Santa Cruz County
Yavapai County
  • Environmental Health Specialist II—Prescott/Cottonwood, AZ
Yuma County