

ENS Ali Everhart
JRCOSTEP Summer 2017
University of Washington
Colorado River Service Unit
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Hi future JRCOSTEPS! My name is Ali Everhart and I'm a rising senior at the University of Washington studying Environmental and Global Health. I had the privilege of spending this past summer as a JRCOSTEP with the Indian Health Service in Parker, Arizona. I was looking for an externship that would give me valuable hands-on experience in the field to supplement everything I had learned in the classroom. The JRCOSTEP initially caught my eye due to the variety of agencies, communities, and locations you could potentially work in. I can surely say I have learned an indescribable amount about the field of environmental health from the ten short weeks I spent in Parker.



Setting a mosquito trap

For my JRCOSTEP I was stationed at the Colorado River Service Unit in western Arizona that serves five tribes located in Arizona, Nevada, and California. I worked predominantly with my preceptor, LTJG Zachary Hargis, and another Registered Environmental Health Specialist, Braden Hickey. I remember showing up to the office on my first day and within the first few minutes of my arrival, a coworker from the engineering department came in and brought up a potential *Cryptosporidium* outbreak. Everyone immediately began sharing information to try and determine the severity of the issue and what next steps needed to be taken. A few hours later, a public health nurse came in to discuss a case of a child with an elevated blood lead level. There was no time wasted from the moment I arrived in getting me up to speed, and I soon learned that my first day was going to set the pace for the rest of the summer.

Over the course of the summer I was able to experience a variety of the different areas of environmental health. A large part of the activities I participated in consisted of surveys. Along with LTJG Hargis and Ms. Hickey, I helped conduct surveys of food establishments, pools, and a variety of institutional facilities ranging from elder centers and Head Starts to hotels and detention centers. I learned about the multitude of different codes that apply to surveys and how to navigate them. Because the IHS is not a regulatory agency, it was interesting to see the way that inspections were carried out in a consultative nature. At times it was difficult to explain to people that we, as the health inspectors, were not trying to shut their facilities down, but rather we were trying to help them keep their facility as clean and functional as possible to keep people safe. Other tasks I had this summer included conducting seatbelt surveys, bloodborne pathogen trainings, food handler trainings, and arbovirus surveillance. For our routine arbovirus surveillance we would set up CO₂ and BG-Sentinel mosquito traps for three different tribes in the evening, collect them the following morning, and then take them back to the office to separate the different species present. We were looking for the various species that transmit West Nile virus, and if there were any present we would run a RAMP test on them that would give us a positive or negative result. Also of interest was our surveillance for the *Aedes aegypti* mosquito,

the species that transmits Zika Virus. It is prevalent in other regions in Arizona, but has not yet arrived in the western part of the state.

I was able to travel to the Fort Yuma Service Unit as well as the Western Arizona District Office to work with other Environmental Health Officers (EHOs) and learn about different tribes. One of the highlights of my summer was spending four days in Supai conducting annual surveys and trainings. Supai is located in the Grand Canyon and is only accessible by helicopter or by foot, via an eight mile long trail into the canyon. From a public health perspective, there are a lot of unique challenges that arise from being so remote, and it was eye opening to see the way the community has adapted to deal with issues other communities don't face.

My personal project for the summer was to create training for EHOs to use when conducting pool surveys. Because our District covers multiple states and counties, the guidelines we used for pool surveys previously consisted of a conglomeration of county and state regulations. In 2016, the CDC created the Model Aquatic Health Code (MAHC). Similar to the FDA's Food Code, the MAHC is a non-regulatory document that regulating agencies can choose to adopt. Our District has adopted the MAHC as our reference for surveys, and I was given the task of creating an informative and instructional PowerPoint that outlined all the steps in how to complete a comprehensive pool survey.

This externship offers a unique experience to get out in the field and interact with the communities you're serving. I can't imagine that there are other environmental health externships that will give you more hands-on experiential learning. I've learned an immense amount from both the tribes and all the EHOs I've had the privilege of working with. A huge thanks to LTJG Zachary Hargis and Braden Hickey for their utmost patience and knowledge. Thank you to the entire Western Arizona District for giving me the opportunity to learn from you all.



Conducting a pool survey with Braden Hickey



Visiting the falls in Supai