

**ENS Angela Brown**  
**JrCOSTEP Summer 2012**  
**Illinois State University**  
**Phoenix Area Office**  
**Phoenix, Arizona**



My name is Angela Brown, and I am a senior at Illinois State University earning a degree in Environmental Health and Safety. As a requirement to obtain that degree, a professional practice needs to be completed. I had heard about the U.S. Public Health Service JrCOSTEP program through my professor retired USPHS CAPT George Byrns. This opportunity immediately caught my attention because it offered everything I was searching for: a competitive edge, hands on experience, the ability to travel, and the chance to learn from experienced professionals. After applying, I found out that I was going to be spending my summer in Phoenix, Arizona at the Area Office in the Institutional Environmental Health Program. I couldn't have been more excited to get started.

This summer lived up to every expectation I had then more. My preceptor was CDR Dave Cramer, and I also worked closely with CDR Ricardo Murga and LCDR Amanda Parris. With their guidance, I was able to successfully work on projects that covered emergency preparedness, hazard surveillance, radiological health, noise sampling, office ergonomics, and food surveys. I am so pleased that I was able to apply my education to such a variety of environmental health and safety topics.



I had the chance this summer to travel to reservations throughout the Phoenix Area. My first trip was to the Hopi Reservation with LCDR Amanda Parris. She was the perfect guide seeing as she lived there for four years. Together, we facilitated patient decontamination training at the hospital. My responsibility was to present how to don and doff Level C personal protective equipment (PPE). Amanda and I had an enjoyable time practicing with each other and teaching the decon team. We then deployed the decon tent and ran through a practice of washing off contaminated patients. The enthusiasm of all involved shed light onto how strongly committed and helpful the Indian Health Service (IHS) employees are. LCDR Parris and I also conducted a food survey at one of the schools while we were at Hopi. It was a phenomenal way to start off my summer.

Another trip I made included a two day hazard analysis at the Whiteriver Service Unit (WRSU). I was sent out on my own for this which was both exciting and a bit anxiety filled. I worked with an outstanding group of Environmental Health Officers (EHO) and Engineers while I was there. Together we assessed a combination of sanitation facilities including water storage tanks, pump houses, lift stations and wet wells, manholes, sewer lagoons, and pressure reducing valves. This was an extraordinary way to gain hands on experience! Electrical and chemical hazards were also evaluated to bring to the attention of the staff any and all hazards that exist in these areas. This was truly a remarkable trip for me.

In addition to traveling to the reservations, I spent some time at the Phoenix Indian Medical Center (PIMC). There I worked with CAPT Greg Heck (ret) and their COSTEP Perry Fotopoulos in conducting a noise survey of the power plant. The first round of sampling entailed using a sound level meter to detect immediate noise levels coming from the machines. That was then supplemented by an individual worker wearing a noise

dosimeter for their 8-hour workday to gain a time weighted average (TWA) for noise exposure. Results were then retrieved and scrutinized to assure the Occupational Safety and Health Administration (OSHA) standards were being followed. Additional work I was able to partake in with Greg and Perry were the hazard surveillance rounds. We again went to the power plant, this time examining chemical storage techniques, electrical safety, and labeling among other things. The paint house, as well as two storage units, was also inspected.

Also at PIMC, I was able to assist CDR Murga in monitoring radiation emissions from a fluoroscopy machine used for x-rays. This was an excellent way to become familiar with the equipment used for this kind of testing. Additionally, CDR Murga and I performed an office ergonomic assessment. The staff member that we helped was so thankful that her working conditions were made more comfortable. It was a great feeling.

In terms of emergency preparedness, I completed a report that analyzed three Mass Notification Systems to determine which would best fit five hospitals and one clinic in the Phoenix Area. I was thrilled to work on something like this because I have always been interested in emergency preparedness. This project allowed me to talk with all six safety officers from the different hospitals and the clinic to gain insight on their emergency procedures. Emergency planning and training is such a crucial aspect to institutional health. I learned quite a bit in terms of management and preparing these types of procedures. In correlation to this project and emergency preparedness, I was able to attend a training session dealing with mass fatality incidences. The session was on "BioSeal" which is essentially a body bag used for fatalities. For me, the presentation was amazing. It was absolutely morbid but something I found fascinating.

In between reservation trips and visits to PIMC, I spent my time in the Area Office. Here is where the oversight of healthcare delivery to the entire Phoenix Area is conducted. The Phoenix Area consists of four states: Arizona, Nevada, Utah, and parts of Southern California. It works with approximately 40 tribes and serves 140,000 American Indians. Being able to observe the employees here and see their hard work make this part of IHS functional and effective is something that is truly unique. I was accepted into the office with nothing but smiles and was able to quickly build meaningful relationships with all employees. I learned a significant amount just by being in this office.



I can confidently say that my summer working as an Ensign for IHS is one that will never be matched. I was searching for something out of my element, and that is exactly what I experienced. The people that I have worked with taught me much more than I could ever explain, and for that I am very grateful. Because of IHS, I feel more comfortable and knowledgeable when it comes to working in the field and delivering presentations and reports. I highly encourage all students seeking an extraordinary and challenging internship to apply for the JrCOSTEP position without hesitation. The USPHS unfailingly provides a solid foundation in which a student can build their environmental health and safety career.