

ENS Shannon Maloney
JRCOSTEP Summer 2017
Western Carolina University
Eastern Arizona District Office
Lakeside, Arizona

My name is Shannon Maloney. I was born in Santa Fe, NM but grew up in Snellville, GA about thirty minutes east of Atlanta. I am currently pursuing a Bachelor of Science in Environmental Health at Western Carolina University (Go Cats!). I will be graduating in December 2018. My major requires an externship before I graduate. Last year, I worked at a county health department. However, this year I wanted a new adventure. I had always been aware of the Indian Health Service and the JRCOSTEP given my dad worked with the IHS for a part of his career. However, I was excited to have my own experiences and explore new cultures and hands-on work.



ENS Maloney holding a vial of ticks collected from dogs

My duty station for the summer was a fantastic one. The Eastern Arizona District Office (EADO), Lakeside, AZ. Traveling over 1,500 miles was an experience on its own but the journey had just started. The EADO includes the Keams Canyon, Whiteriver, and San Carlos Service Units which provided services to Hopi, Kaibab Band of Paiute, White Mountain Apache and San Carlos Apache tribes. All four communities are very different and very unique. I really enjoyed learning about the different culture and lifestyles of the residents. LCDR Sarah Snyder was my incredible preceptor. She and I hit the ground running all summer and I am so appreciative of all that she has taught me.

The JRCOSTEP was a great way to finally practice everything I had been learning in school. Activities varied from teaching food handlers classes, to inspecting hotels and grocery stores, conducting seatbelt surveys, participating in Rocky Mountain spotted fever (RMSF) prevention campaigns, and attending meetings on food code adoption and vectorborne disease. I learned how to conduct all of these surveys as well as the Web-Based Environmental Health Reporting System (WebEHRS) and mobile WebEHRS to write the reports.

My favorite event was the rabies virus vaccination clinics I participated in at Hopi and San Carlos. It was my favorite because we were out in the community for five days, providing education and vaccinations to hundreds of pets. I learned how to collect ticks for RMSF testing and I placed tick collars and tick spray on affected dogs. I pulled ticks off dogs and placed them in vials, as well as prepared syringes with vaccine for Veterinarians and handled paperwork. This also gave me an opportunity to work with Community Health Representatives, Animal Control staff and many different organizations while learning about how each department works together to create a team.



Rabies virus vaccination clinic team; Hopi

One of my main responsibilities was my final project. The project was to assist the San Carlos Apache Tribe develop a RMSF database, which would help them track their progress with managing risk factors. After developing the database, I was asked to analyze the data to help the program better use their resources. As part of the analysis I looked at the total number of houses treated for ticks, the total number of dogs collared and the number of tick infested dogs. I looked for trends focusing on the number of free-roaming dogs versus dogs tied-up and the number of tick infested animals and dog population by different locations and their changes over time. In this project, I learned many helpful tools such as equations and graphing techniques in MS Excel. It was really fun working on the epidemiological side of things and figuring out the trends. I learned how RMSF is spread, treated, and the impact it has had on the communities. From this project, I gained a better understanding of how the different risk factors can affect the spread of RMSF.

Overall, I am very fortunate to have experienced such a rewarding, educational and unique internship. I have had the chance to learn about environmental health and public health but also the cultures of very unique tribes. Not only have I learned and gained knowledge, I spent a whole summer serving and providing assistance to these communities and for that, I am very lucky as well. I am so thankful for this experience and am excited to grow as I will remember this for the rest of my life.