

**ENS Jorge Rivera-Gonzalez
JRCOSTEP Summer 2024
University of Washington
Eastern Arizona District Office
Show Low, Arizona**

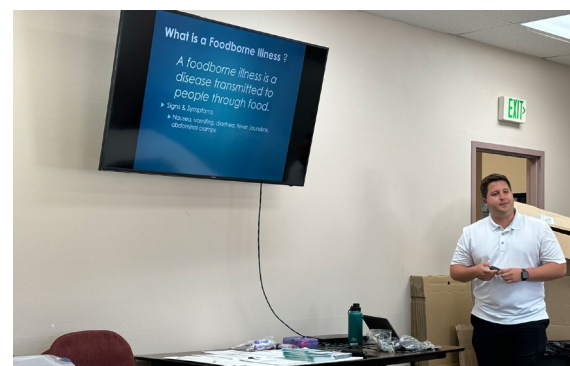
My name is Jorge Rivera-Gonzalez, and I am a PhD student at the University of Washington Department of Environmental and Occupational Health Sciences (DEOHS) in the School of Public Health. I will begin my third year in the fall and anticipate graduating in June 2026 with a PhD in Environmental Health Sciences focused on Industrial Hygiene and One Health. I obtained a BS in Biology and a BA in Spanish from Florida State University. I received my MPH in Animals, People, and Environment from the Colorado School of Public Health at Colorado State University. I heard about the Junior Commissioned Officer Student Training and Extern Program (JRCOSTEP) from CDR Chris Fish during an informational career panel session at my school. The work and mission of the Indian Health Service Division of Environmental Health Services (DEHS) inspired me. I was curious to learn more, so I applied for the JRCOSTEP. Throughout my studies, I have always sought new challenges and opportunities in hopes of becoming a well-rounded public health professional, allowing me to combine my background in Spanish, biology, environmental health, occupational epidemiology, and industrial hygiene.



Washing hands prior to conducting a food survey

In November 2023, I received a call from retired PHS officer CAPT David Cramer, Director, Division of Environmental Health Service, Phoenix Area, Indian Health Service (IHS), and was able to learn more about a work assignment at the Eastern Arizona District Office (EADO). I was searching for an opportunity that would allow me to continue learning and obtain more hands-on experience. I was honored to receive the opportunity to work with my preceptor, CDR Sarah Snyder, District Environmental Health Officer. Under her supervision, I learned how to lead by example and all of the responsibilities within the IHS Office of Environmental Health and Engineering. I spent the majority of my time working with her, Ms. Jennifer Corrigan, and the Whiteriver Service Unit. I also visited and worked in the San Carlos Service Unit and the Keams Canyon Service Unit.

During my time, I approached every day as a new learning opportunity. The days were long, but that was one of the best parts of the job. One never knew what each day brought. I participated in and led different surveys, including food, pool, institutional, septic system, and community liquid waste. I also assisted with the Rocky Mountain spotted fever (RMSF) prevention campaign on the San Carlos Apache Reservation, vector surveillance in the Kaibab-Paiute Reservation, and a rabies vaccination clinic on the Fort Apache



Teaching my first food handler training



Helping with the RMSF prevention campaign applying Top Spot to a puppy

Indian Reservation. I was able to lead animal bite investigations during a positive rabid bobcat incident encountered in town with suspected human and animal exposures. In addition, I participated in seat belt surveys and temporary food vendor surveys during powwow and rodeo events. I co-taught two Head Start trainings, a Certified Food Manager course, and a Food Handlers course. In addition, I sat for my Certified Food Manager Instructor examination and passed. The preparation leading to teaching the course allowed me to better understand the current community and facility needs in the areas we serve, eliciting clear communication and adaptations of the course content to ensure it could induce a positive learning environment for all.

My summer project was titled “Building a Framework to Understand Risk Factors in the Workplace.” The goal was to develop and test a framework for creating a “risk-based” model for institutional facility surveys utilizing 20 years of Occupational Safety and Health Administration (OSHA) data. Currently, IHS uses an institutional form to guide staff through inspections of 10 different facility types. The form is very heavy on fire protection, which accounts for less than 1% of all the injuries and deaths in these facilities. The framework that we developed was built on the work of Ms. Sherry Mitchell, which identified falls, violence, and exposure as major causes of injury and death rather than fire. Using a single facility type (hotels), I analyzed 20 years of fall and violence data to identify risk and protective factors that DEHS staff could incorporate into their inspection reports to help prevent future occurrences. The analysis led to recommendations to expand the survey’s emergency preparedness and facilities management sections. We suggested adding a new section, ladder safety, to include proper utilization of ladders in the workplace to prevent slips, trips, and falls. This framework can be further used on other injury and facility types to flush out risk and protective factors to improve the survey’s effectiveness.



Setting a mosquito trap as part of a vector surveillance program

I leave this opportunity motivated and determined to make a difference in my future profession. I am extremely grateful for this opportunity and will take with me what I learned. I hope to earn the Registered Environmental Health Specialist credential this year. After graduation, I intend to complement this certification by becoming a Certified Industrial Hygienist and a Certified Safety Professional. I am passionate about helping others, and this experience and community engagement reinforced my “why” and desire to continue learning. I look forward to pursuing a career as an Environmental Health Officer and protecting the health of American Indians and Alaska Natives from environmentally related disease and injury.