

**INDIAN HEALTH SERVICE
2020 ENVIRONMENTAL HEALTH SPECIALIST OF THE YEAR
LT GEORGE CHUNG**



Introduction

LT George Chung, REHS, MPH, was nominated by the Phoenix Area Indian Health Service (IHS), Office of Environmental Health and Engineering (OEHE), Division of Environmental Health Services (DEHS) for the 2020 Environmental Health Specialist of the Year. Since August 2018, he has served as the Environmental Health Officer for the Keams Canyon Service Unit (KCSU) in the Area's Eastern Arizona District. In this capacity, he provides comprehensive environmental health services for two geographically remote Native American (AI/AN) tribes, the Hopi and Kaibab Paiute, with a combined service population of approximately 7,500. This isolated hardship position covers a vast area of over 1.5 million acres in northeast Arizona. LT Chung consistently demonstrates outstanding leadership, professionalism, and commitment to the mission of the IHS. He is a highly valued resource to the Eastern Arizona District and the Phoenix Area.

Professionalism

Advanced Credentials: LT Chung holds a B.A. in Environmental Analysis and Policy and a Master's in Public Health from the Boston University in Boston, MA. He maintains several professional credentials, including RS/REHS (NEHA), Child Passenger Safety Technician (Safe Kids World Wide), Certified Food Safety Manager Instructor/Proctor (ServSafe), and Certified Pool Operator (National Swimming Pool Foundation). This year, he successfully completed the Indian Health Service Injury Prevention Epidemiology Fellowship.

Leadership: LT Chung guided the Hopi through two successful funding applications in an attempt to develop their capacity in injury prevention. The two funded programs, totaling \$15K, are aimed at reducing the risks contributing to childhood injuries. Additionally, he assumed several leadership roles including: a member of the Hopi Animal Control Advisory Board, lead Personal Protective Equipment (PPE) fit-tester for the KCSU COVID-19 response team, and Co-Chair for the EHOPAC Applicant Assistance and Placement Workgroup. He has enthusiastically taken on collateral duties by providing coverage for other vacant EHS positions in the Phoenix Area. This year, he assumed management responsibilities for the administrative assistant along with the role of KCSU-OEHE office manager.

Special Accomplishments

Injury Prevention: In Arizona, AI/ANs represent 5.3% of the population, yet account for approximately 18% of all motor vehicle crash-related (MVC) fatalities. According to the Centers for Disease Control and Prevention, MVC fatalities were the leading cause of unintentional death for AI/AN in Arizona, accounting for 29.7% of total AI/AN unintentional deaths from 2011-2016 for all ages. The traffic safety data collection system in place at Hopi did not adequately identify local MVC trends and patterns. Using the public health approach to address this issue, LT Chung conducted an assessment of the Hopi Tribe's MVC data collection and reporting system. The purpose of his project was identify areas for improvement and make the appropriate recommendations. LT Chung spent multiple weeks evaluating the current system, including reporting and data collection methods. He reviewed best practice literature that has been implemented nationwide. He developed an innovative assessment tool to evaluate: 1) the crash data collection system; 2) the state-tribal crash data sharing system; and 3) the use of crash data for roadway safety improvements. He conducted key informant interviews among tribal police, emergency responders, and other local and federal stakeholders involved with the collection and reporting of tribal MVC data. After months of work, he analyzed and interpreted both qualitative and quantitative data from

the responses. This resulted in six significant evidence-based recommendations to improve the Tribe's MVC system. The information evaluated throughout this project has led to the Tribe strengthening their MVC data system. The MVC surveillance information describes personal factors (e.g. texting) and environmental factors (e.g. roadway conditions), which contributed to the cause of crashes. Understanding the extent of the MVC problem will allow the Tribe to develop projects and programs to better address crash risk factors. This work has not only led to significant changes in how MVC data is collected and captured for the Hopi Tribe but the process can be replicated by other tribes to evaluate and improve their MVC data systems. This work was presented at the 2019-2020 IHS Injury Prevention Symposium, and publication is pending.

COVID-19 Response: Throughout the pandemic, LT Chung has been providing outreach and technical assistance to facilities serving at-risk populations, including facility risk assessments, reopening plan reviews, development of fact sheets and PSAs, and organizing virtual trainings. He assisted facilities with the application of CDC guidelines during outbreaks among their staff. In addition to these activities, in May 2020, the Hopi Health Care Center (HHCC) lost its only qualified PPE fit-tester. In response to the increased needs due to the COVID-19 pandemic, LT Chung, without hesitation assumed the lead responsibility for the fit-testing program. This task became more involved as changes in CDC guidance developed. Most of the N95 respirators in use at the facility were deemed not acceptable because the masks contained exhalation valves. This resulted in the need to re-fit-test all staff for new N95s. LT Chung systematically worked with the Quality Management Department to prioritize departments. As of December 31, 2020, a total of 256 fit-tests have been completed. Additionally, to build capacity within the HHCC, he recently trained two staff members to conduct fit-testing, which has resulted in an additional 18 tested and will assure continuity of services. In addition to the consultative services provided to the hospital, LT Chung also provided significant support to the Tribal leadership. He served as a technical advisor to the Tribe's Government Office Re-opening Workgroup. As a part of this workgroup, they identified and prioritized what government offices needed to remain open and determined what phase to reopen the others. LT Chung designed a re-opening planning tool to help tribal departments assess their COVID-19 risks and better apply health and safety recommendations while returning to work. This tool was utilized by all tribal departments and programs and was shared with three other tribes in the district to assist with their reopening.

Program and Staff Development: The staff in Eastern Arizona District's service area are relatively new, and some come from nontraditional EH backgrounds. The staff completed a questionnaire on their level of confidence for conducting various survey types. All reported the lowest level of confidence in the areas of sewer and solid waste. There are 43 wastewater facilities ranging from community septic, lagoon (aerobic and anaerobic), lagoon/wetlands, and package treatment plants in the district, some with National Pollutant Discharge Elimination System (NPDES) Permits, but there is no training course for new staff on the codes to refer to during surveys, how to apply them, and how to interpret and complete the IHS e-survey tool. To address this gap in training, LT Chung has developed a district-wide training course with multiple modules that describes how these systems work and how to interpret the e-survey form when applying the codes while conducting surveys. This training course will be utilized to train new staff in the district and will soon be evaluated to determine suitability for broader use.

Summary

LT Chung demonstrates the highest degree of innovation, excellence, and personal commitment to the mission of IHS in all areas of his work. However, his leadership and contributions to the healthcare center, district, and the Tribe had a significant positive impact on the lives, health, and well-being of the thousands he serves. His performance and willingness to go the extra mile have allowed him to strengthen relationships with tribal partners and has enhanced the quality of environmental health services provided.