### INDIAN HEALTH SERVICE 2017 ENVIRONMENTAL HEALTH SPECIALIST OF THE YEAR LT KATE PINK



### Introduction

LT Kathryn "Kate" Pink is proudly nominated by the Phoenix Area Indian Health Service Office of Environmental Health and Engineering for the 2017 Indian Health Service Environmental Health Specialist of the Year. LT Pink is an Environmental Health Officer (EHO) assigned to the Fort Yuma Service Unit (FYSU), one of three Service Units in the Western Arizona District. As the principal EHO for the FYSU (O-4 billet), LT Pink is responsible for developing and implementing a comprehensive environmental health program serving the Quechan Indian Nation and Cocopah Indian Tribe (combined pop. 3,500). She also provides services to the Sherman Indian High School in Riverside, CA and when called upon, provides cross-training or coverage to two other Service Units within the District. She joined the Indian Health Service (IHS) in 2016, reporting to Fort Yuma as a civilian and converting to the Commissioned Corps in late 2017. In just her first IHS assignment, LT Pink's efforts and contributions toward the advancement of environmental health to benefit the American Indians in the Fort Yuma Service Unit continue to increase, evolve and impress.

#### Professionalism

LT Pink has a Master of Science in Environmental Health from Eastern Carolina University (2014). Prior to joining IHS, she served over a year as an Environmental Health Specialist with the Durham County Health Department in North Carolina. She maintains the following professional credentials: Registered Sanitarian/Registered Environmental Health Specialist (North Carolina), Child Passenger Safety Technician (Safe Kids USA), *ServSafe* Certified Instructor and Proctor, Certified Pool Operator (NSPF), and Red Cross Lifeguard/First Aid/CPRO Instructor. She has used her extensive training and experience in food safety and aquatics facilities management to cross-train and mentor tribal pool operators and her peers in two Phoenix Area district offices. She serves as the secretary of the local Commissioned Officer Association (COA) branch.

# **Special Accomplishments**

*Recreational Water Safety:* Preventing recreational water illnesses (RWIs) is a high priority in the Phoenix Area and Western Arizona District with an estimated 60 public and semi-public swimming pools and spas operating within the District. Preventing RWIs requires active participation from competent pool staff, swimmers, and environmental health advisors. Poor maintenance can result in low disinfectant levels that can allow the spread of a variety of microorganisms that can cause gastrointestinal, skin, ear, respiratory, eye, neurologic and wound infections. Considered one of the Phoenix Area's subject matter experts in swimming pool inspections and plan reviews, LT Pink used the public health approach framework to improve the health and safety of swimmers in the Fort Yuma Service Unit. LT Pink assessed all pools in the Fort Yuma Service Unit (n=11; annual and follow-up assessments) to obtain a baseline of common and critical deficiencies. Her analysis revealed that risk factors contributing to poor pool conditions included absent or outdated swimming pool safety management policies and procedures; inconsistent trainings provided to pool operators; and limited funds to address priority physical facility deficiencies such as anti-entrapment pool drain covers. LT Pink addressed these risk factors by implementing the following strategic interventions:

- 1) Designing and implementing an internal cross-training program using CDC's *Model Aquatic Health Code* (MAHC) as a primary reference, training tool and survey instrument;
- 2) Timely follow-up assessments to verify recommended corrective actions were implemented;
- 3) Assisting pool operators with developing or revising standard operating procedures; and
- 4) Identifying aquatics operations and safety funding resources for tribes to pursue.

Noteworthy impacts resulting from these interventions include all pools in the Fort Yuma Service Unit complying with key MAHC recommendations (e.g., all pools equipped with anti-entrapment devices or systems that comply with the ASME/ANSI; proper disinfection levels); field Environmental Health Specialists/Officers from two Phoenix Area districts cross-trained in assessing pools and spas using the MAHC checklist; updated pool safety management SOPs for all Fort Yuma Service Unit pool operations; the Quechan Tribe receiving a \$5,000 grant to improve pool structures, purchase swim equipment and establish a swim program to tribal youth to increase safety and competency in the water; mentorship provided to JRCOSTEP in completing a pool inspection training module; and partnership with the Cocopah Tribe in producing an 8-minute video highlighting important pool safety elements to increase the technical capacity of tribal pool operators.

Prevention and Control of Vector-Borne and Zoonotic Diseases: The Phoenix Area continues to place a high priority on preventing the transmission of vector-borne and zoonotic diseases to humans. LT Pink played an integral role in leading and coordinating efforts to reduce risks associated with diseases such as Rocky Mountain spotted fever (RMSF), rabies and West Nile virus. RMSF continues to become an urgent issue for American Indians in Arizona. To illustrate the severity of the epidemic, the CDC estimates that from 2002-2014, more than 300 cases of RMSF and 20 deaths occurred on Arizona Indian reservations. There is no vaccine available for RMSF, so disease prevention has focused on preventing tick bites and also controlling the animal population. Another zoonotic disease considered a high priority in IHS is rabies. Left untreated, rabies is 100% fatal in humans. Annually, an estimated 30 people are exposed to rabid animals in Arizona. People exposed must receive vaccine and anti-rabies serum treatment to prevent infection. In response to the risk brought on by these RMSF and rabies, LT Pink coordinated the first specialty clinic held in the Fort Yuma Service Unit. She linked the tribal animal control and public health preparedness programs with the Midwestern University College of Veterinary Medicine and the U.S. Army Veterinary Treatment Facility to provide mobile clinic services that included spay/neuter service to dogs and cats as well as vaccines, wellness and minor medical care. The combined services resulted in over 200 animals receiving rabies vaccinations and 36 pet surgeries at no cost to participants (estimated value of services if obtained from the private sector is \$18,000). In conjunction with the clinics and in response to rising concerns of tick-borne diseases in the southwest, LT Pink coordinated RMSF surveillance with the UC Davis Veterinary Medicine and Epidemiology program. The team collected and tested tick samples from pets brought into the clinic for RMSF. All ticks collected and tested negative for Rickettsia ricketsii. This activity had the added benefit of providing tribes educational materials, maps of tick density, results on whether ticks are carrying the RMSF bacteria, and protocols for how to deal with tick infestations. Finally, arbovirus disease surveillance continued to be a high priority in the Phoenix Area. In 2017, LT Pink partnered with the Yuma County Pest Abatement District and tribal environmental protection programs in conducting mosquito testing to monitor diseases such as West Nile, Zika, Dengue and Chikungunya. She gained proficiency in the use of carbon dioxide baited mosquito traps for West Nile surveillance and Gravid Aedes Traps (GAT) for Aedes aegypti surveillance. Recognizing the importance of helping build tribal capacity to perform these tasks, LT Pink provided tribal environmental protection program staff training on how to set these traps and collect specimens for lab submittal. LT Pink's efforts to build advocacy, raise awareness and increase capacity resulted in enhanced disease surveillance services for the Cocopah and Quechan Tribes and helped community members better understand how to reduce their exposures to disease vectors.

*Food Safety Training:* LT Pink has elevated EH services in Fort Yuma by increasing the frequency of food establishment assessments which has resulted in decreased Priority and Priority Foundation violations in high-risk establishments such as casinos, schools, and senior citizens' centers. As co-instructor of our advanced food safety course, she has helped increase the number of certified food protection managers in the Fort Yuma Service Unit and the Colorado River Service Unit. In 2017, she instructed over 20 basic and advanced food safety training

to nearly 400 food service workers. By incorporating the principles of adult learning in her trainings, she has provided participants an environment in which mistakes are safe, expected and a basis for continued learning.

# Summary

Public health practice cannot be delivered effectively without the leadership, innovation and dedication of passionate individuals and public health practitioners like LT Pink. She has consistently demonstrated high integrity and an exceptional ability to work with and gain the trust of tribal officials, community members, and IHS staff. LT Pink exemplifies the highest qualities of leadership and commitment to the mission of the Indian Health Service. Her extraordinary knowledge, expertise, creativity, and dedication have contributed to elevating the health status of American Indians. Without reservation, LT Pink is emphatically nominated by the Phoenix Area for the 2017 Indian Health Service Environmental Health Specialist of the Year.