Cross-training and sustainability in environmental health-based mosquito control programs

Rosmarie Kelly, PhD, MPH

Georgia Department of Public Health

Corresponding author: Rosmarie Kelly, PhD, MPH ● Georgia Department of Public Health ● 2 Peachtree St NW, Atlanta, GA 30303 ● 404-408-1207 ● Rosmarie.Kelly@dph.ga.gov

Background: In Georgia, only a few county environmental health programs still do mosquito surveillance and control. This is partly due to a lack of sustainability in these seasonal programs and a pressure to move personnel from mosquito control to programs that are mandated by the state. There is also a lack of training available for mosquito control workers.

Methods: Richmond County Mosquito Control (RCMC), a program within the Richmond County Environmental Health office, is one of the sustainable programs, and the RCMC program has dealt with these issues in some innovative ways. It is sustainable because it partners with other agencies to provide an integrated mosquito management (IMM) approach to local mosquito control. Because training and education are important components of an IMM program, RCMC provides annual training for all mosquito control personnel. Because mosquito control is largely a seasonal program in Georgia, Richmond County has hired retired people to do mosquito control work during the mosquito season. These employees are seasonal workers; one person is kept on full time to manage the program. Richmond County Mosquito Control collaborates with the Phinizy Center for Water Sciences to provide surveillance and mosquito identification.

Richmond County Mosquito Control approaches training in several ways. First, RCMC is active in the Georgia Mosquito Control Association. Second, by collaborating with the Phinizy Center for Water Sciences both students and mosquito control employees can learn from one another to the benefit of both programs. Finally, there is a yearly training for all employees with guest speakers providing information on various topics of interest, including: a review of the data that have been collected, information on new and existing treatments and practices, a review of the National Pollutant Discharge Elimination System (NPDES) pesticide discharge management plan procedures, and an overview of business decisions to improve the program and update procedures.

Results: Recently, the RCMC program has expanded to deal with the potential threat of Zika virus transmission in Georgia. In addition to its swimming pool remediation project and its goats in retention basin enclosure project, the special projects group has added another project, maintaining retention/detention ponds to help reduce local mosquito breeding. In order to train the mosquito control employees and Phinizy Center students to do this job, they are working with the county engineer to learn the inspection requirements for an MS-4 permit. Finished inspection forms are provided to the county and to the Environmental Protection Division of the Georgia Department of Natural Resources. In addition, employees are training at the Phinizy Center to learn mosquito identification and surveillance, and to look at the fate of stormwater after it exits the ponds.

Conclusions: This type of cross-training has helped the Richmond County Mosquito Control program to not only thrive, but to grow.

Key words: environmental health, cross-training, mosquito control

https://doi.org/10.21633/jgpha.7.119

© Rosmarie Kelly. Originally published in jGPHA (http://www.gapha.org/jgpha/) December 20, 2017. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial No-Derivatives License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work (“first published in the Journal of the Georgia Public Health Association…”) is properly cited with original URL and bibliographic citation information. The complete bibliographic information, a link to the original publication on http://www.gapha.jgpha.org/, as well as this copyright and license information must be included.