Shedra Amy Snipes, Ph.D., M.A.

Some public health researchers spend their time in computer labs or organized health care settings. Amy Snipes has chosen a very different venue. She travels with farmworkers, sharing their living quarters and their backbreaking labor as they migrate from the Texas-Mexico border to multiple sites across the U.S.

Snipes’ background has a lot to do with her methods. While she grew up in Savannah, Georgia, some of her own African American family members picked cotton without awareness of the harmful health effects of pesticide exposure. From the beginning of her academic career, Snipes determined to make the safety and well being of migrant farmworkers her cause. “I selected biocultural anthropology as my field because it lets me examine the impact of cultural beliefs and behaviors on farmworkers’ vulnerability to pesticide exposure, as well as the physical effects of the labor itself,” she explains.

Snipes received her bachelors’ degree in anthropology and human biology from Emory University and her masters’ and doctorate from the University of Washington in Seattle, supported by several fellowships and awards. Among these was a dissertation grant supported by the National Science Foundation, a minority dissertation fellowship from the American Anthropological Association, and a minority cancer prevention fellowship awarded by the Association of Schools of Public Health and the federal Centers for Disease Control and Prevention. In 2006, Snipes expanded her work through a postgraduate fellowship with the Kellogg Health Scholars Program, moving to the Center for Research on Minority Health at the University of Texas’ M.D. Anderson Cancer Center. She currently holds a dual postdoctoral fellowship at the University of Texas Center for Health Promotion and Prevention Research and M.D. Anderson. Her research is continuing with support from the National Institute of Occupational Safety and Health and the National Cancer Institute.

Research and Results

In Snipes’ early work with Mexican-American migrant farmworkers in Washington’s Yakima Valley, she found that cultural beliefs and practices kept nearly everyone she interviewed from correctly identifying exposure to a whole class of pesticides -- those in powder form -- that can nonetheless have very dangerous effects. In turn, biologic testing revealed that the workers had symptoms of pesticide poisoning as well as increased cortisol levels. Cortisol is associated with heightened risk of diabetes and heart disease. Switching her base of operations to Texas allowed Snipes to track Mexican-American farmworkers from their major point of origin in the U.S. to multiple sites throughout the country. Working with community groups and migrant advocacy organizations, she identified new variables for her study as well as individuals who might participate in long-term exposure assessments. As she prepared to accompany a family to north Texas, where they would pick cotton, Snipes was cautioned despite the heat to wear protective clothing against the sharp
brambles of the cotton plants. “I was grateful for the advice,” she explains, “but I already knew what picking cotton was like from my own grandmother -- the uninterrupted hours of stooped labor and the open cuts and scratches on your skin that increase the danger of pesticide exposure.”

In her work thus far, Snipes has amassed data showing that the workers received little in the way of pesticide education, training or protection, including basic knowledge mandated by the federal Environmental Protection Agency (EPA). The workers lived in substandard temporary housing without protection from extremes of heat or cold, and often lacked access to health care services. She also tested the feasibility of collecting multiple biologic specimens from a highly mobile population, acquiring 100 percent compliance from 8 out of 10 farmworkers.

**Policy Implications**

Snipes’ research has significance for national and state policy. In particular, her findings can be used to inform regulatory activity of the EPA and the Occupational Safety and Health Administration. For example, she recommends that EPA’s worker protection standards be revised to mandate culturally appropriate pesticide training for all farmworkers before they enter the work field, and that the training take place yearly instead of every five years as at present. She also recommends improved risk assessment methods to identify illnesses associated with pesticide exposure.

More generally, Snipes urges that housing for migrant farmworkers, work conditions and access to medical care be improved: “Mexican American farmworkers are among the poorest of the working poor. Despite the hard work, long hours and dangers they face, the average family of 5.3 members earns just $5,500 -- less than half the federal poverty level. Only 23 percent of this population has employer-based health insurance, and even when they see doctors, symptoms of pesticide exposure often go unrecognized,” she says. “State and federal housing, agricultural, workforce and health programs can help address these issues if they focus on this very needy, and very deserving population.”

To learn more about Shedra Amy Snipes, Ph.D., and her work, contact her at asnipes@mdanderson.org and/or consult the following publications:


To learn more about the Kellogg Health Scholars Program, contact Barbara Krimgold of the Center for the Advancement of Health at bkrimgold@cfah.org or visit www.kellogghealthscholars.org.