Poster #1

A Comparison of Illness Rates Between Children Exposed to Agricultural Pesticides and Non-Agricultural Children in Sonora, Mexico

Elizabeth Guillette, Ph.D.

Department of Anthropology, University of Florida, Gainesville, Fl 32611

guillette@zoo.ufl.edu, Phone: 352-375-5929; fax: 352-392-6929

Pesticides have been used in the Yaqui Valley of Sonora Mexico for approximately fifty years. Children living in this area were compared to children in an area based on open ranching. Earlier studies demonstrated neuromental and neuromuscular deficits in the exposed children, ages 4 and 5 years, along with suggestions that illness occurred more frequently. Illness rates were studied in more detail with the same children and their age-cohorts two years later. Parents were asked to recall the number of times illness occurred in the past three months. Most of the lesser exposed children had no or one episode of illness compared to the mode of six to eight episodes for exposed valley children. Some of the illnesses in the valley children were associated with direct pesticide exposure, such as rashes and gastrointestinal problems. No cases of asthma were reported. Most striking was the high incidence of infectious disease among the exposed, usually involving the respiratory system.