

Identifying Risk Factors for Cholinesterase Depression among Pesticide Handlers in Washington State

The goal of this study is to identify and characterize risk factors for cholinesterase (ChE) depression among agricultural pesticide handlers participating in the Washington State ChE monitoring program. We are evaluating potential sources of exposure to pesticides as well as paraoxonase (PON1) enzyme activity, which may affect an individual's ability to metabolize certain pesticides. A total of 125 pesticide handlers were enrolled in this study during the 2006 spray season (April-July). We have received a five-year award (\$805,000 total direct costs) from the National Institute for Occupational Safety and Health/Centers for Disease Control and Prevention through the competitive renewal of the Pacific Northwest Agricultural Safety and Health Center to continue work on this study (NIOSH/CDC Award # 2 U50 OH 07544). Data collected during the 2006 spray season will be analyzed as part of the dissertation research project of a graduate student in the University of Washington's Department of Epidemiology.