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ABSTRACT BOOK

Poster W3Bp Human Activity Patterns**Abstract W3B-06p****Insecticide Exposures After Residential Fogging: Biomonitoring Cypermethrin Metabolites**

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Indoor post-application insecticide exposure data are important for residential pesticide regulation and should serve as foundation for public assurances of safe pesticide use. Products used indoors may result in oral, inhalation, and dermal exposures; skin is both an important barrier and the portal of entry of most significance. We have conducted a series of longitudinal studies of family cypermethrin exposure following residential fogging in Riverside, CA, Boise, ID, Everett, WA, Covington, GA, and Laie, HI. Family members provided more than 500 total control and post-application urine specimens (usually 2/day) during an 8-day study period. Analytes included 3-phenoxybenzoic acid and cis/trans -3 -(2, 2-dichlorovinyl) -2.2 -dimethylcyclopropane carboxylic acid. Urine volumes were adjusted for children 4-12 years of age by assigning 0.08 g creatinine/year of age-day. Exposures were always less than the LOAEL and NOAEL (mg/kg-day). The isomeric ratio of DCCA was evaluated to examine whether oral/inhalation exposure and dermal exposure could be used to clarify route. Factors most clearly associated with lower dosages included contact time and participant age. Analytically significant measurements of substrates such as house dust and carpet backing from residences are unlikely to be significant contributors to daily exposure due to mass and availability considerations.