

Pilot studies of indoor pyrethroid exposures of adults and their children using urine biomonitoring

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Pyrethroid exposure following use of total release foggers under normal use conditions was measured using cyfluthrin, pyrethrin, and cypermethrin. Pyrethroid biomarkers are rapidly excreted in the urine of adults and children and can be used to estimate absorbed dose. Metabolites were readily measurable in urine during the 7-day post-application period. Samples were taken in the a.m. and p.m. of study days (24 hour samples in some households). Concentrations were corrected for creatinine. Children excreted 7-day totals of 29.7 and 21.6 nmol/kg in a.m. and p.m. samples respectively, while adults excreted 2.3 and 4.3 nmol/kg. These data reveal significantly higher metabolite concentrations in subjects under the age of eighteen. Further studies will explore the availability of surface pyrethroid deposits and the influence of route of exposure on the nature of urinary metabolites of cypermethrin. These exposures are below known LOAELS and regulatory NOAELS for these insecticides.

[General Poster Session](#)

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