Common insecticide may hurt child IQ
Published: Feb. 12, 2011 at 5:10 PM

NEW YORK, Feb. 12 (UPI) -- An ingredient in a common insecticide may delay child development, researchers at the Columbia University's Mailman School of Public Health found.

Lead researcher Megan Horton of the Mailman School of Public Health says the study involved 725 black and Dominican pregnant women living in upper Manhattan and the South Bronx.

The insecticide permethrin was selected because it is one of the most common pyrethroid insecticides as well as the most commonly sold pesticide, Horton says. Piperonyl butoxide, known as PBO, is a common additive in pyrethroid formulations.

The study involved 342 women, who were studied for permethrin exposure in their indoor air during pregnancy; 272 for permethrin in matenal and umbilical cord plasma and 230 were evaluated for exposure to PBO.

To collect the air samples, mothers and newborns wore a small backpack holding a personal ambient air monitor for 48 hours during the third trimester.

The researchers controlled for gender, gestational age, ethnicity, maternal education and intelligence, quality of the home environment and prenatal exposure to environmental tobacco smoke and chlorpyrifos – an organophosphorus insecticide.

PBO was detected 75 percent of the air samples.

The study, published in the journal Pediatrics, found although a significant prenatal exposure to permethrin was not associated with lower performance scores at 36 months, children with higher exposures to PBO scored 3.9 points lower on the Mental Developmental Index than those with lower exposures.