

Pesticides Linked To Stillbirths

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NEW YORK, July 09 (Reuters) -- Maternal exposure to workplace or household pesticides in early pregnancy increases the risk for stillbirths, according to a study in the medical journal *Occupational and Environmental Medicine*.

"Occupational exposure to pesticides, especially during early pregnancy, had a clear positive association with stillbirths," according to researchers from the University of North Carolina at Chapel Hill, and the University of California in Davis.

They evaluated data collected on 630 California mothers who delivered stillborn babies during the year 1984. A stillbirth was defined in the study as death of the fetus or infant between 20 weeks of gestation and within 24 hours after delivery, since "many deaths that occur within minutes or hours after birth share (similarities) with those (fetuses) born dead." The researchers focused on two common causes for stillbirth -- congenital defects or complications of the placenta, cord, or membranes.

All 630 women were contacted and questioned regarding possible home or workplace pesticide exposures during their pregnancies. Another set of 642 women who gave birth to healthy infants were similarly questioned, to establish a comparison (control) group.

The study authors discovered that one month of maternal exposure to workplace pesticides during the first two months of pregnancy resulted in a 2.4 times increased risk for stillbirth due to congenital defects, compared with mothers with no such exposure. Pregnant women with one-month workplace pesticide exposures during their first trimester (three months) also faced a 70% raised risk for stillbirths due to placental, cord, and membrane complications, they said.

Lengthening the time of maternal exposure to pesticides appeared to increase the risk to the fetus. "Exposure over the entire trimester... was associated with about five times the risk" for placental, cord and membrane-based stillbirths, the study authors conclude.

Home exposure seemed to pose lesser -- but still significant -- risks. Women exposed during early pregnancy to chemicals such as cockroach and ant insecticides for one month in the home environment were found to have a 70% raised risk for stillbirths due to congenital defects, the researchers conclude.

And home exposure was by far the most common site for maternal pesticide exposure, the experts say. The second most frequent means of exposure was close proximity (within 1/4 to 1 mile) to commercial cropland. "In general," researchers say, "occupational exposures were less common than the residential exposures."

They point out that stillbirth is a relatively rare occurrence in American delivery rooms -- just 7.5 stillbirths are recorded for every 1,000 live births. And the California researchers admit their sample size was too small to draw firm conclusions: "many of these results should be considered to generate hypotheses, rather than be definitive and conclusive on their own," they say.

Still, they believe their findings reflect those of previous studies and "deserve serious attention."