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## **Autism Risk Higher Near Pesticide-Treated Fields**

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BY LINDSEY KONKEL & ENVIRONMENTAL HEALTH NEWS

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The study of 970 children, born in farm-rich areas of Northern California, is part of the largest project to date that is exploring links between autism and environmental exposures.

The University of California, Davis research – which used women's addresses to determine their proximity to insecticide-treated fields – is the third project to link prenatal pesticide exposures to autism and related disorders.

"The weight of evidence is beginning to suggest that mothers' exposures during pregnancy may play a role in the development of autism spectrum disorders," said Kim Harley, an environmental health researcher at the University of California, Berkeley who was not involved in the new study.

One in every 68 U.S. children has been identified with an autism spectrum disorder—a group of neurodevelopmental disorders characterized by difficulties with social interactions, according to the Centers for Disease Control and Prevention.

"This study does not show that pesticides are likely to cause autism, though it suggests that exposure to farming chemicals during pregnancy is probably not a good thing," said Dr. Bennett Leventhal, a child psychiatrist at University of California, San Francisco who studies autistic children. He did not participate in the new study.

The biggest known contributor to autism risk is having a family member with it. Siblings of a child with autism are 35 times more likely to develop it than those without an autistic brother or sister, according to the <a href="National">National</a> <a href="Institutes">Institutes</a> of Health.

By comparison, in the new study, children with mothers who lived less than one mile from fields treated with organophosphate pesticides during pregnancy were about 60 percent more likely to have autism than children whose mothers did not live close to treated fields. Most of the women lived in the Sacramento Valley.

When women in the second trimester lived near fields treated with chlorpyrifos – the most commonly applied organophosphate pesticide – their children were 3.3 times more likely to have autism, according to the study, published in the journal Environmental Health Perspectives.

Chlorpyrifos, once widely used to kill insects in homes and gardens, was banned for residential use in 2001 after it was linked to neurological effects in children. It is still widely used on crops, including nut trees, alfalfa, vegetables and fruits.

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