

Editorials

Pesticides and autism

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Linked Research

Prenatal and infant exposure to ambient pesticides and autism spectrum disorder in children

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Prenatal and early life pesticide exposure linked to modest increases in risk of autism

Autism spectrum disorder is a neurodevelopmental disorder characterized by restricted interests, repetitive behaviors, and deficits in social communication and interaction. Although the condition was previously considered rare, recent prevalence estimates suggest that 1.7%¹ to 2.6%² of children in the developed world are currently affected by autism.

Autism spectrum disorder is a complex and heterogeneous condition and much uncertainty surrounds the cause. Twin³ and family based⁴ studies have shown that it is a highly heritable condition, with inherited⁵ and de novo⁶ genetic sources contributing considerably to risk. Genetic risk, however, does not entirely explain autism's aetiology, indicating that autism also has environmental origins. A growing body of scientific literature implicates exposure to ambient pesticides during pregnancy and early childhood as an environmental risk factor for autism spectrum disorder.^{7 8 9 10}

The linked study by von Ehrenstein and colleagues (doi:10.1136/bmj.l962)¹⁰ using population based data from California represents the largest epidemiologic effort to date investigating the relations among exposures to ambient pesticides during pregnancy and early childhood and risk