

- **Format:** Abstract

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## **A broad-based evaluation of pesticide-exposed children.**

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### **Abstract**

Research tends to center on the individual exposed to endocrine disruptors, frequently using a disease centered medical model for evaluative purposes. Pesticides, like many other contaminants, disrupt the endocrine system. A normative growth and developmental model was used to evaluate four- and five-year-old Mexican children living in agricultural areas relying on the use of pesticides and compared the children to those living in a non-agricultural community. The purpose was to determine if the children of any given community were at risk from exposure, in contrast to identifying specific children with multiple deficits. Anthropological methods were adapted to provide a rapid community assessment approach. Living conditions, social and cultural conditions and genetics were similar in all groups studied. Growth, in terms of height and weight were alike for children in both areas. Differences existed in developmental skills, as measured through play behaviors. Neuro-muscular deficits, in terms of coordination and stamina, were found with the children in the agricultural communities. The heavier exposed children also exhibited neuro-mental deficits, as measured through the use of drawing and memory problems. No child excelled or performed poorly on all activities. One important outcome of the study was that behavior standards designed for American children did not always apply to these children due to different expectations placed on the child. Future research needs to examine if other endocrine disrupting compounds create similar developmental deficits.

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