

## **SOCIAL AND ECOLOGICAL HEALTH EFFECTS FROM LIVING IN A DIOXIN CONTAMINATED NEIGHBORHOOD**

*Julia (Ky) Gress, University of Florida, USA*

**Background:** The Cabot-Koppers wood treatment facility was in operation for nearly 100 years and is located in a densely populated low-income neighborhood with over 4,000 residents in Gainesville, Florida. For decades, residents have been expressing concern about adverse effects associated with exposure to chemicals from Koppers. In 2009, the USEPA confirmed the presence of elevated levels of dioxins in residents' yards. Recent indoor house dust sampling in the area has detected dioxin concentrations up to 700 times above background levels. The goal of this research project was to assess how the social and ecological health indices of this large neighborhood are changing as the nature and extent of dioxin contamination is becoming characterized.

**Methods:** In July 2009, a door-to-door survey on perceptions of risk associated with living near the Cabot-Koppers Superfund site was administered to 94 residents living within .5 mile of the site. Information about ways in which residents interact with their environment was also collected. Twenty in-depth interviews are currently being conducted with a subset of this original sample to better understand how residents interpret the demographic, social and environmental changes occurring in their neighborhood and how these changes influence their perceptions of risk.

**Results:** Preliminary analysis of survey data shows that residents' perceptions of risk are not correlated with how knowledgeable they feel about the nature and extent of the dioxin contamination of their yards and homes. Instead, perceptions of risk are correlated with awareness of specific changes occurring in the neighborhood environment that they attribute to the dioxin contamination.

**Conclusion:** Public knowledge of the contamination of residential properties with dioxin is resulting in changes in the way residents' experience their home environment and neighborhood. Residents' perceptions of risk associated with living in a dioxin contaminated neighborhood are complex and interwoven with concerns about the overall decline in the social and ecological health of their neighborhood.