

## Using CBPR to Explore Backyard Gardening Practices and Soil Lead Concentrations in Urban Neighborhoods

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### What Is the Purpose of This Study?

- The Growing Healthy Soil for Healthy Communities project seeks to explore the relationship between urban backyard gardening and lead exposure risk in children and families.
- The project partners are committed to a long-term goal of promoting safe backyard gardening as a transformational community development strategy.

### What Is the Problem?

- Lead exposure is a serious health threat for children.
- Soil is an important exposure pathway, primarily because hand-to-mouth activity results in swallowing lead contaminated soil, and also because small particles of contaminated soil are inhaled.
- Urban agriculture is increasing.
- Potential environmental health risks associated residential gardening may not be well-known to community residents.

### What Are the Findings?

- Concern about lead exposure from backyard gardening varied between adults in two urban neighborhoods.
- Children under age 6 years old were actively involved in backyard gardening.
- Certain areas of the yard (e.g., dripline) had higher levels of lead concentration than other areas (e.g., lawn).
- Native soil had higher lead concentration than soil and compost purchased from stores.

### Who Should Care Most?

- Urban backyard gardeners may consider testing soil before gardening to minimize lead exposure risk for children.
- Community-based organizations may consider implementing programs that include safe gardening education, providing access to soil testing resources and encouraging neighbors' engagement in policy discussions related to urban agriculture.

### Recommendations for Action

- Soil test reports should begin to include specific information regarding minimizing contaminant exposure.
- Testing of landscape interventions that will reduce soil lead concentration in urban neighborhoods should be undertaken.