

# SOCIO-ECONOMIC PREDICTORS OF IPM TRAINING PARTICIPATION AND IMPLEMENTATION IN ILLINOIS CHILDCARE CENTERS

## Background and Aims

A comprehensive program for childcare providers and supervisors to reduce pesticide use and promote integrated pest management (IPM) in Illinois childcares is analyzed, in order to determine its impact on different populations. Since populations are non-uniform in their perception and response to environmental challenges, researchers are looking for criteria to identify at-risk populations and opportunities for promoting environmental behavior.

Infants and young children are particularly vulnerable to pesticide impacts because of their physiology, metabolism and behavior. Critical neurodevelopment processes are especially at risk from toxins. The majority of childcares report using pesticides, where approximately 53 million US children spend up to ten hours daily.

While regulated school IPM programs have proliferated, childcares are more difficult to influence as they vary in location, size, and government oversight; while socio-economic factors help explain access.

## Method

A listing of licensed trained and untrained childcares from the post-survey was analyzed for pest incidences, IPM training participation and implementation and the results compared to census 2000 socio-economic data.

## Results

Childcares in underprivileged populations were significantly more likely to participate in training than middle socio-economic populations; and mostly large centers participated. Understanding IPM benefits correlated positively with lower socio-economic and negatively with middle to high status, while IPM actions only coordinated with spending a high percentage of income on rental. Training resulted in selective adoption of IPM practices, especially pest prevention.

## Conclusions

The training program raised awareness leading to IPM implementation in large licensed childcare centers in underprivileged, but not higher socio-economic populations; homes or license exempt childcares where children may be at even greater risk. This may reflect the formal organization and resources of government subsidized centers serving weaker populations and the strong motivation of childcare providers to protect children.