Integrated Pest Management in Affordable Housing Case Studies

NCHH has developed six case studies to highlight essential information on IPM in affordable housing.

Case Studies on Latest Research

<u>Bait Aversion</u>: Cincy Cockroach Reminds of Dangers of Poor Pest Control - Baits are essential to effective cockroach control. In housing, they have generally replaced fogs and sprays. However, cockroaches are adapting to avoid the baits – reducing the baits' effectiveness. Property managers need to adopt an integrated pest management (IPM) program that includes housekeeping, maintenance, and targeted monitoring, to reduce the need for chemical controls, including baits.

Pest Conditions: Pests Persist in Federally Subsidized Housing - Cockroaches and rodents are persistent problems in some federally subsidized housing. The problem is not uniform. Some public housing authorities have few problems. Others have serious problems. Public housing authorities need an integrated pest management program to reduce pests and keep pest problems away.

• Cost Comparison: Comparison of Cost and Effectiveness for Cockroach Control - Two leading researchers on pest control in public housing studied the effectiveness and costs of implementing progressive pest control interventions based on integrated pest management (IPM). The studies show that vacuums and baits are much more effective at controlling cockroaches than traditional baseboard, and crack and crevice treatments. They also show that the more elements of IPM used, the more effective it will be. The studies indicate IPM costs more initially but, over time, can actually lower monthly pest management costs. However, this analysis did not include the benefits to residents (e.g., reduced asthma or stress) from effective pest control and reduced burden on staff and management in responding to pest complaints. Property managers and pest management professionals need to use the latest methods to effectively control cockroaches.

Case Studies Highlighting Special Efforts

Boston Public Housing: Partnerships & Policy Advances - Traditional pest control in low-income multifamily housing, with initial flush out and periodic spray, has failed to eliminate pests long-term. As a consequence, residents take pest control into their own hands, using over-the-counter, restricted and illegal pesticides. A series of integrated pest management (IPM)-based initiatives at Boston Housing Authority serves as a model for other public housing authorities. The model uses peer educators and increasingly standardized approaches to IPM training, contracts, data collection, and teams. Public housing authorities can adapt the lessons learned to their situation.

• CHAMACOS - Salinas California: A Community-University Partnership - Pesticide exposures are a key concern in many agricultural communities. Residents who live in these communities may be exposed to pesticide spray drift from nearby applications or volatilization from chemicals that evaporate into the air. Additional exposures to farmworkers and their families can occur when pesticide residues from work are inadvertently transported into their homes on the workers' clothing and skin. As a result, children could be exposed to pesticides brought into their homes. Many agricultural communities are composed of low income families who often live in substandard and overcrowded housing. These living conditions promote pest infestations and potentially expose residents to additional pesticide use in their homes. Public health, education, farming, and housing professionals need to integrate the lessons learned from this research into programs promoting farmworker health and safety.

Cuyahoga Metro. Housing Authority: In Cleveland, Collaboration Makes a Difference - Through integrated pest management (IPM) conducted in a collaborative approach that includes residents, property management, and the pest control operator, previously intractable roach infestations may be virtually eliminated. The success of a Cleveland, Ohio IPM pilot described in this case study was the result of an ongoing, labor-intensive, aggressive, and precision-targeted IPM strategy sustained over several months. The heat-gun approach to flushing cockroaches was

effective and avoided exposure to chemical flushing agents. A person did not need a pest control license to use it. (Baiting was done by a licensed pest control contractor.) The labor-intensive approach, combined with the high degree of cooperation from the team and the residents, cannot be achieved or replicated overnight. However, it demonstrates that there is a viable alternative to traditional pest control methods that may reduce resident exposure to pesticides. Property managers and public housing authorities need to consider IPM to more effectively control cockroaches.

Other Studies

Effectiveness of Commercial Pest Control for Cockroach Infestations