# NAFIUpdate

## Roaches and Rodents and Mice: Oh, My!

BY REBECCA MORLEY

ockroaches, mice, rats and other pests are a major problem for many affordable housing managers, especially in urban areas. Getting rid of them takes considerable time and resources and may seem like a never-ending battle.

Plus, pests are more than just a nuisance. Cockroaches and mice dander, for example, can worsen asthma—a disease that affects an estimated 17 million Americans, including 4.8 million children. Asthma is the leading cause of school absenteeism and the second greatest cause of home confinement for adults.

### TRADITIONAL PEST CONTROL

Traditionally, most pests have been managed by periodic spraying or fogging with pesticides. These practices can result in potentially significant pesticide exposure. Used incorrectly, pesticides can cause skin rashes. headaches, dizziness, nausea and vomiting, and difficulty breathing. Chronic effects may include the development of cancer, damage to reproductive organs, and the weakening of the central nervous system. One study found that 74 percent of pregnant women

reported using pesticides in their homes during pregnancy.

#### A NEW APPROACH: INTEGRATED PEST MANAGEMENT

Many of these chemicals are unnecessary if preventive steps are taken to reduce access to food and water sources that attract pests. Some housing providers have adopted Integrated Pest Management (IPM) and found it to be more effective at getting rid of pests and less toxic to residents.

The basic components of IPM are:

1. Identifying and monitoring pest infestations: Tools

like glue traps help monitor cockroach populations, identify where they are concentrated and help evaluate progress.

- 2. Educating and involving residents: One of the best models of IPM includes training residents as "IPM educators." IPM educators communicate with other residents about keeping pests out of the house, reducing available hiding places, and making sure pests do not have access to food and water.
- **3. Blocking access points** and hiding places: The maintenance staff also plays a critical role in changing the surrounding landscape, blocking pest

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entries and passages (with caulk, screens or wire mesh) and cleaning up clutter to reduce hiding places.

- **4.** Reducing food availability: Properly storing food and waste, and regularly washing and degreasing all hard surfaces decreases the risk of infestation.
- **5.** Using low-toxicity methods to get rid of existing pests: In combination with the steps above, baits, traps, gels and low-toxicity pesticides can also decrease the

IPM is significantly more effective than traditional pest control in reducing pest populations and keeping them low.

#### **IPM IN PRACTICE**

In several cities, the implementation of IPM has reduced pest populations and decreased the severity of asthma for residents. For example, in Boston, the Healthy Public Housing Initiative found that intense cleaning and IPM led authority to make necessary repairs to their units. This strategy resulted in a 95 percent reduction in the roach population in all but one unit.

Similarly, in New York City, The Mount Sinai Children's Environmental Health and Disease Prevention Research Center tested IPM in East Harlem. It found that households receiving individually tailored IPM education, repairs, least-toxic pest control application, and supplies experienced an almost 50 percent decline in cockroaches after six months.

Pests really need to be dealt with effectively, and IPM is an approach that can help you and your residents be rid of them while also keeping yourselves healthy.

#### TRADITIONAL METHOD **IPM Approach** Reactive **Proactive** Infestation is identified and Preventive maintenance treated with chemicals. processes reduce the frequency of pest problems. **Role of Residents** Univolved Critical The main responsibility falls on Residents contribute to the exterminator with little or no decreasing infestation through involvement from residents. training and monitoring. Frequency of Routine Rare Pesticide Use Pesticides continually applied Pesticides applied only after regardless of pest presence. evidence of an infestation and non-chemical methods have proven unsuccessful. **Use of Pesticides Broad** Limited Toxic pesticides applied Pesticides restricted to specific liberally, using methods like and small areas, like cracks and baseboard spraying and crevices.

length and severity of infestations.

As you can see in the chart above, IPM differs substantially from traditional attempts at pest control. The main differences are summarized in the chart.

#### **HOW ABOUT COST?**

room fogging.

More research is needed to compare IPM costs with the costs of traditional methods. One study (Wang 2006) showed that IPM is initially more expensive but evens out over the longer-term because it is more effective than traditional methods. The studies are exceptionally clear on effectiveness—

to improvements in the health of children in several housing developments. Following treatment, the percent of children slowing down or stopping play due to asthma dropped from 64 to 26 percent and the percent of children waking up at night due to asthma dropped from 64 to 30 percent.

In Cleveland, Environmental Health Watch teamed with the Department of Housing and Urban Development to study the effectiveness of IPM in an affordable housing development. Residents worked with pest control contractors, enabling the housing

#### FOR MORE INFORMATION

For more information, contact Susan Aceti at the National Center for Healthy Housing at 443-539-4153. **NU** 

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