



**U.S. Department of Housing and Urban Development  
Office of Public and Indian Housing**

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**SPECIAL ATTENTION OF:**

Regional Directors; State and Area  
Coordinators; Public Housing Hub  
Directors; Program Center Coordinators;  
Troubled Agency Recovery Center Directors;  
Special Applications Center Director;  
Administrators; Offices of Native American  
Programs; Public Housing Agencies; Public  
Housing; Housing Choice Voucher/Section 8;  
Tribally Designated Housing Entities;  
Indian Tribes; Resident Management  
Corporations

NOTICE: PIH-2011-22

Issued: April 26, 2011

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Cross Reference:

24 CFR 903.7(e) (2)

24 CFR 990.165

7 U.S.C. 136r-1 Integrated Pest  
Management

**This Notice Supersedes**

PIH Notice 2009-15, PIH Notice  
2008-24, PIH Notice 2007-12

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**Subject:** Promotion of Integrated Pest Management (IPM) as an environmentally-sound, economical and effective means to address a major resident concern.

1. **Purpose.** The purpose of this Notice is to promote and encourage the use of IPM by Public Housing Authorities (PHAs), Indian tribes, Tribal Designated Housing Entities (TDHEs), and owner/agents providing assistance through the HCV program. This notice provides guidance to Public Housing Authorities (PHAs) on the benefits of IPM, additional technical assistance and training opportunities for PHAs. Pest management is integral to the provision of safe and sanitary housing. In accordance with 24 CFR 903.7 (e) (2), PHAs must include in their PHA plans a description of any measures necessary for the prevention or eradication of pest infestations. IPM is an ecological approach using an array of methods to prevent and control pests with reduced reliance on pesticides. Procedures contained within this notice remain in effect until superseded by subsequent HUD Directive or guidance.
2. **Applicability.** This notice applies to PHAs administering the public housing and project based Section 8 program, and may be of interest to Indian tribes/TDHEs as well as owners/agents providing assisted housing through the Housing Choice Voucher (HCV) Program. The decision to use IPM techniques in their ongoing pest control effort is under PHA, Indian tribes/TDHE discretion. 24 CFR 990.165(a) covers cost associated with Project Expense Level (PEL) such as maintenance expenses. IPM is a maintenance expense.
3. **Background.** The goal of IPM as defined by the Environmental Protection Agency (EPA) is to control pests by the most economical long term means, and with the least possible hazard to people, property, and the environment. To undertake IPM, project managers should be committed to ongoing or continuous monitoring and record keeping, educational outreach to residents and staff as well as implementing good communication strategies between residents and building managers. IPM methods include: restricted pest access to

food/water; vigilant sanitation and waste management; mechanical control; physical barriers; structural maintenance; and, where necessary, the judicious use of pesticides.

4. **Fundamentals of IPM.** IPM efforts must involve PHA staff, contractors, residents, and include:
  - a. Communicating the PHA’s IPM policies and procedures to be provided in the appropriate format to meet the needs of all residents including persons with limited English proficiency and in formats that may be needed for persons who are visually or hearing impaired. This applies to administrative staff, maintenance personnel, and contractors as well.
  - b. Identifying the environmental conditions that lead to pests and educating residents.
  - c. Identifying pests and immediately reporting the presence of pests.
  - d. Establishing an ongoing monitoring and record keeping system for regular sampling and assessment of pests, surveillance techniques, and remedial actions taken, include establishing the assessment criteria for program effectiveness. This is a highly effective preventative measure that can help reduce the possibility of a pest infestation outbreak.
  - e. Determining, with the involvement of residents, the pest population levels – by species – that will be tolerated, and setting thresholds at which pest populations warrant action.
  - f. Improving waste management and pest management methods.
  - g. Selecting the appropriate pesticides and insecticides to use. Some residents may suffer from Multiple Chemical Sensitivity or other Environmental Illnesses.
  - h. Ongoing efforts to monitor and maintain structures and grounds (e.g., sealing cracks, eliminating moisture intrusion/accumulation) and adding physical barriers to pest entry and movement.
  - i. Developing an outreach/educational program to ensure that leases reflect residents’ responsibilities for: (1) proper housekeeping, which includes sanitation upkeep and the reduction of clutter, trash removal and storage, (2) immediately reporting the presence of pests, leaks, and mold, (3) cooperating with PHA specific IPM requirements such as obtaining permission of PHA management before purchasing or applying any pesticides, and (4) avoiding introduction of bed bugs and other pests into buildings on used mattresses and other recycled furniture. See “Preventing and Getting Rid of Bed Bugs Safely,” New York City Department of Health and Mental Hygiene <http://www.nyc.gov/html/doh/downloads/pdf/vector/bed-bug-guide.pdf>
  - j. Check with local health department to determine if your state has laws for re-used furnishings.
  - k. The judicious use of pesticides when necessary, with preference for products that, while producing the desired level of effectiveness, pose the least harm to human health and the environment. Residents should notify PHA management before pesticides are applied.
  - l. Providing and posting “Pesticide Use Notification” signs or other warnings.
5. **Health Concerns.** Pests may adversely impact the health of residents and contribute to worsening some diseases, such as allergies and asthma. Cockroaches can cause asthma in children and can transfer disease-causing organisms to food and surfaces they contaminate. Rodents, such as mice and rats, carry disease, can trigger asthma attacks and even cause fires by gnawing through electrical wires. Although bed bugs are not known to transmit infectious diseases, their bites can lead to secondary infections. Bed bugs can cause

emotional distress and sleep deprivation for residents as well. Bed bug infestations can spread quickly and must be treated aggressively. All pest control methods are targeted to protecting the health of residents and staff. Although applying pesticides may be effective in eliminating pest populations, many of these chemicals are associated with health and/or environmental risks, and their use should be minimized if alternative methods exist. This is especially important in buildings housing vulnerable age groups such as children or the elderly and in buildings housing residents with compromised immune systems or who may suffer from Multiple Chemical Sensitivity and other environmental illnesses. Therefore, IPM offers the potential to ensure efficacy of pest elimination while protecting the health of residents, staff and the environment.

6. **Building.** Most of the effective methods of pest elimination, including ongoing repairs, erection of barriers, and monitoring, will extend the useful life of a building and as a result generate significant savings that could offset the costs of the pest control. Many of these non-application methods, including structural maintenance, and inspecting for and repairing leaking pipes and cracks in roofs, walls, and windows are effective in preventing moisture intrusion and accumulation. Additionally, IPM-conscious PHAs assess the need to install physical barriers to both pest entry and pest movement within every structure thereby reducing the spread of pest infestations.
7. **Implementation.** HUD promotes IPM as a pest control method. IPM effectively eliminates pests in safer and long term cost-effective ways than traditional pesticide treatments. IPM frequently has proven to be more effective in reducing pest populations than relying solely on broadcast pesticides. The Boston Housing Authority (BHA) experienced approximately one-third reduction in pest related work orders over multiple years in multiple sites. BHA has maintained this reduction and now uses IPM in all its BHA maintained properties. Continuation of the IPM program after initial development cost is considered preventative maintenance expense and is an eligible program activity under the Public Housing Operating Subsidy as codified at 24 CFR 990.165. Successful IPM requires resident participation through proper housekeeping, reporting of pest infestations, and trash removal. Residents can monitor pest populations and assist in identifying how to eliminate access to food and water for pests. Resident organizations must be prepared to assist residents who need help to follow the IPM policy. HUD encourages PHAs to partner with local pest management organizations.
8. **Procurement of IPM Services.** If a PHA uses an outside contractor for pest control, the PHA's pest control/IPM policies and procedures should be incorporated into the specifications or statement of work for the pest management contract. PHAs using an outside contractor are encouraged to use companies that are trained and certified to provide IPM services either through Green Shield certified (<http://www.greenshieldcertified.org/>) or Green Pro (<http://www.npmagreenpro.org/>). The PHA should also consider training for maintenance staff, residents, Resident Councils as well as PHA administrative staff who oversee housing developments or administer occupancy and rental duties such as unit housekeeping inspections.
9. **PHA Maintenance Staff.** If a PHA uses its own maintenance staff for pest management, proper training in the PHA's IPM procedures is essential. It is especially critical to be trained in the proper treatments methods PHAs can use when treating for bed bugs. The contract administrator for any pest management contract should be trained as well. Successful results rely upon proper implementation; training is therefore of critical

importance. IPM training is available at: <http://www.stoppests.org/> and <http://www.healthyhomestraining.org/ipm/training.htm>.

10. **Area of High Concern, Bed bugs.** As the number of bed bug infestations rise throughout the country, HUD is in the process of developing protocols to address this growing problem. HUD is addressing the unit inspection process as well as developing the tools necessary for PHAs to identify, treat and monitor the effectiveness of bed bug treatments in its portfolio. Identifying, reporting, treating and monitoring pest infestations are all critical components of IPM and are effective in addressing the bed bug problem.
11. **Reference Materials for Implementing IPM.** The below list of IPM practices does not constitute a HUD endorsement of any specific practice, but provides IPM ideas and practices that have been used to improve pest management while reducing unnecessary dependence on pesticides. HUD encourages PHAs, Indian tribes/TDHEs to share their policies, procedures, resident leases, and written case studies so that these may be published on the HUD website for others to read.
  - a. National Center for Healthy Housing: <http://www.healthyhomestraining.org/ipm>
  - b. Bed Bugs: “What’s Working for Bed Bug Control in Multi-family Housing”  
[http://www.healthyhomestraining.org/ipm/NCHH\\_Bed\\_Bug\\_Control\\_2-12-10.pdf](http://www.healthyhomestraining.org/ipm/NCHH_Bed_Bug_Control_2-12-10.pdf)  
<http://pestworld.org/pest-world-blog/the-bed-bug-hub-one-stop-shop-for-bed-bug-information>
  - c. National Pesticide Information Center: <http://www.npic.orst.edu/>
  - d. Integrated Pest Management (IPM), A Guide for Managers and Owners of Affordable Housing, Boston Public Health Commission:  
[http://http://asthmaregionalcouncil.org/uploads/IPM/asthma\\_ipm\\_guide.pdf](http://http://asthmaregionalcouncil.org/uploads/IPM/asthma_ipm_guide.pdf).
  - e. U.S. Environmental Protection Agency:
    - i. General IPM information <http://www.epa.gov/opp00001/contolling/index.htm>  
housing): <http://www.epa.gov/pesticides/ipm>
    - ii. EPA staff contacts: <http://www.epa.gov/pesticides/about/contacts.htm#ipm>
    - iii. List of EPA IPM publications and instructions for ordering documents:  
<http://www.epa.gov/oppfead1/Publications/catalog/subpage3.htm>
  - f. Massachusetts Department Agriculture Resources – Building Managers and Landlords:  
[http://www.mass.gov/agr/pesticides/docs/CIB\\_Building\\_Managers.pdf](http://www.mass.gov/agr/pesticides/docs/CIB_Building_Managers.pdf)
  - g. HUD funded “Healthy Public Housing Project” conducted by the Harvard School of Public Health In Boston Public Housing, <HTTP://www.hsph.harvard.edu/hphi/>
  - h. Bed Bug Fact Sheets in English and Spanish produced by Dr. Dini Miller,  
<http://www.vdacs.virginia.gov/pesticides/bedbugs-facts.shtml>
12. **PHA Case Studies On IPM Application.**
  - i. Cuyahoga Housing Authority:  
[http://www.healthyhomestraining.org/ipm/Case\\_Study\\_Cuyahoga\\_10-20-07.pdf](http://www.healthyhomestraining.org/ipm/Case_Study_Cuyahoga_10-20-07.pdf)
  - ii. Boston Housing Authority:  
[http://www.healthyhomestraining.org/ipm/casestudy\\_holgate.pdf](http://www.healthyhomestraining.org/ipm/casestudy_holgate.pdf)
  - iii. New York City Department of Health, Columbia University and the New York City Housing Authority: <http://www.beyondpesticides.org/dailynewsblog/?p=1604>

13. For further information contact Leroy Ferguson at (202) 402-2411 or email at [Leroy.Ferguson@hud.gov](mailto:Leroy.Ferguson@hud.gov) or you can contact the nearest HUD Field Office of Public Housing

within your state. Indian tribes and TDHEs should contact the nearest HUD Office of Native American Programs. Locations of these offices are available on HUD's website at <http://www.hud.gov>.

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/s/

Sandra B. Henriquez, Assistant Secretary for  
Public and Indian Housing