

Northeastern
IPM
Center

Managing Pests in Housing

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STOP
Pests
in housing

www.StopPests.org stoppests@cornell.edu @StopPests facebook.com/StopPests youtube.com/user/StopPests



Making homes healthy

- IPM is part of a nationwide Healthy Homes movement to reduce housing-based health hazards
- A healthy home is:
 - Dry
 - Clean
 - Ventilated
 - Safe
 - Contaminant-free
 - Maintained
 - **Pest-free**

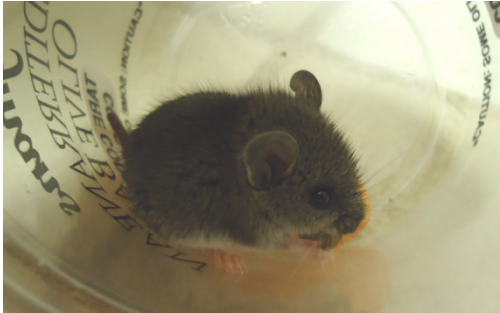
The Surgeon General's Call to Action to Promote Healthy Homes
2009

U.S. Department of Health and Human Services

<http://tribalhealthyhomes.org/>

Tribal Healthy Homes Assessment
Training & Technical Assistance Support Center
Report of Activities and Outcomes: 2009-2012

You are a mouse

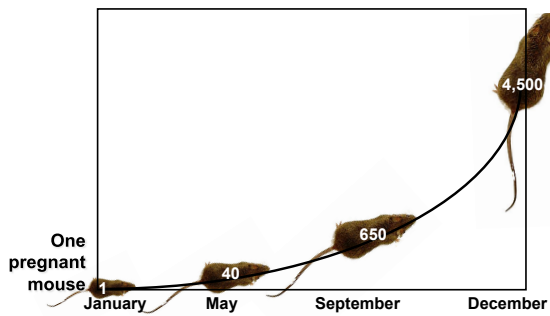


5



6

One mouse, one year...



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Integrated Pest Management

1. Inspect and monitor
2. Identify
3. Determine the scale of response
4. Respond
 - Biological control
 - Non-chemical control
 - Changing people's behavior
 - Chemical control
5. Evaluate effectiveness



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www.cdc.gov/rodents/cleaning/

Cleaning up after rodents

Urine and droppings
 Take precautions before and during clean up of rodent-infested areas. Before cleaning, trap the rodents and seal up any entryways to ensure that no rodents can get in. Continue trapping for a week. If no rodents are captured, the active infestation has been eliminated and enough time has passed so that any infectious virus in the rodents' urine/droppings or nesting material is no longer infectious.

Before starting clean up of the space, ventilate the space by opening the doors and windows for at least 30 minutes to allow fresh air to enter the area. Use cross-ventilation and leave the area during the airing-out period.


First, clean up any urine and droppings

When you begin cleaning, it is important that you **do not** stir up dust by sweeping or vacuuming up droppings, urine, or nesting materials.

- Wear rubber, latex, or vinyl gloves when cleaning urine and droppings.
- Spray the urine and droppings with a disinfectant or a mixture of bleach and water and let soak 5 minutes. The recommended concentration of bleach solution is 1 part bleach to 10 parts water. When using a commercial disinfectant, following the manufacturer's instructions on the label for dilution and disinfection time.
- Use a paper towel to pick up the urine and droppings, and dispose of the waste in the garbage.
- After the rodent droppings and urine have been removed, disinfect items that might have been contaminated by rodents or their urine and droppings.

On this Page

- Urine and droppings
- Dead rodents or nests
- Cabins, sheds, barns, or other outbuildings
- Attics, basements, crawlspaces, and other storage areas
- Heavy rodent infestation
- Air ducts (heating and cooling ventilation systems)




Pest Prevention by Design

Authoritative guidelines for designing pests out of structures

SF Environment
 No harm. No risk. No excuses.
 A Department of the Public Works, City of San Francisco

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California Bans Controversial d-CON Products as EPA Stalled by Manufacturer

25 Mar

(Beyond Pesticides, March 25, 2014) Highly toxic rodenticides linked to the poisoning of pets, wildlife and young children will no longer be allowed on store shelves in California starting July 1 of this year. According to rules adopted last week by California's Department of Pesticide Regulation (CDPR), "second generation anticoagulant rodenticides," including the chemicals brodifacoum, bromadiolone, difenacoum, and difethialone found in d-CON brand products, will be classified as California-restricted materials, and only allowed to be used by certified pesticide applicators. Attempts by the U.S. Environmental Agency (EPA) to remove these products from store shelves nationwide stalled last year after the manufacturer of d-CON rodenticides, Reckitt Benckiser, sued the agency to delay implementation of the cancellation process.

In July of 2011, the California Department of Fish and Wildlife requested CDPR restrict the use of anticoagulant rodenticides due to numerous incidents involving direct and indirect poisoning of wildlife. Anticoagulants impair blood clotting and eventually cause internal bleeding in target animals. However, rodents can feed on poisoned bait multiple times before death (some are even resistant to the chemicals now), and as a result their carcasses may contain residues that are many times the lethal dose.

Poisoning can occur to nontarget species when predators or scavengers feed on these poisoned rodents. Reports show that federally listed threatened and endangered species, such as the San Joaquin kit fox and Northern spotted owl, have been adversely affected by these chemicals.



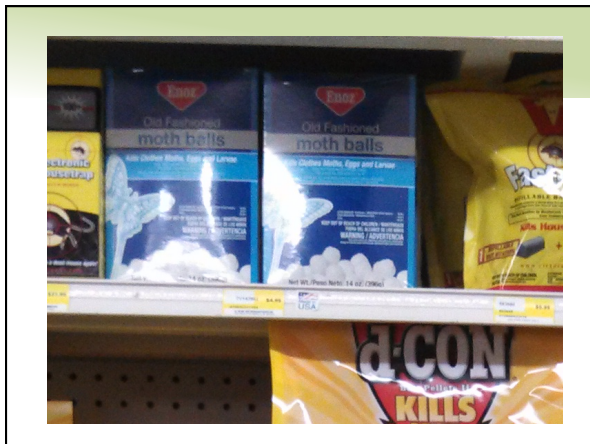
EPA's cancellation order addresses this issue, requiring manufacturers to pull "toxic bait" anticoagulant rodenticides from the consumer market. All manufacturers except Reckitt Benckiser, maker of d-CON brand products, complied with EPA's order. Reckitt Benckiser's decision to sue EPA allows stores such as Walmart and Home Depot to continue selling these dangerous products to consumers (except in California beginning July 1).

Beyond Pesticides responded to the irresponsible actions of Reckitt Benckiser by launching the Care About Kids campaign to urge major retailers to stop selling dangerous d-CON rodenticides. In lieu of federal action, Beyond Pesticides argues that retailers have an obligation to stop selling products that EPA has determined are too dangerous to children, pets, and wildlife.

For more information about Beyond Pesticides' "Care About Kids" campaign, see our Rodenticides program page, where you can learn more about the harmful effects of these chemicals and find effective alternatives to their use.

All unattributed positions and opinions in this piece are those of Beyond Pesticides.
 Source: California Department of Pesticide Regulation, P. Bragg Advocate-News
 Image Source: P. Bragg Advocate-News





Educating people about pests

- Policy & paperwork
- Group training
- One-on-one

Educating kids—school IPM

- Juliann Barta
- Rob Koethe
- Eugene Benoit
- Jessica Hing

Adult education 101

- Acknowledge experience
- Build new information on past knowledge & experience
- Use relevant content—if they can't use it in the next week, it won't sink in
- Involve in the learning process—a mix of independent and collaborative exercises that are both physically and psychologically comfortable
- Proceed from most important to least important content topics
- Teach less difficult to most difficult within each topic

Mosquito Management

1. Brainstorm with the person next to you
 - P.1 Write tools/techniques/information you know
 - Blank page: Write down any questions you have
2. Ask me your questions
3. As a group we will share strategies
4. Complete you P.1

www.maine.gov/dhhs/mecdc/infectious-disease/epi/vector-borne/index.shtml

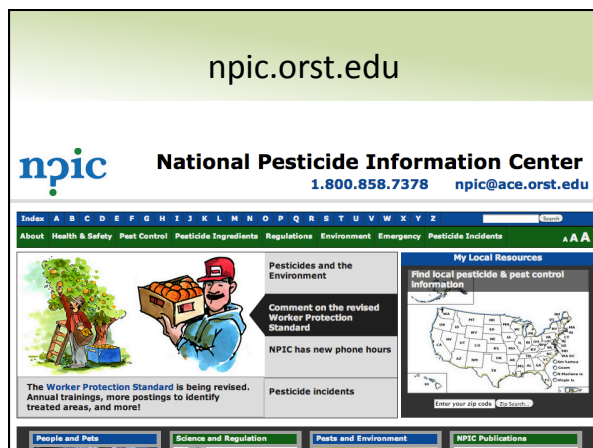
The screenshot shows the website for the Infectious Disease Epidemiology Program, specifically the Vector-borne Diseases section. The page includes a navigation menu on the left with links for EPI Information, A-Z Index of Infectious Diseases, Contact Us, Disease Reporting, Educational Materials, Mosquito Tracking Network, Lyme disease, Publications, Request for Data, and School Health. The main content area is titled 'Vector-borne Diseases' and features two columns of information. The left column is for 'Tick Borne Diseases' and lists:

- Anaplasmosis
- Babesiosis
- Ehrlichiosis
- Lyme
- Powassan, Encephalitis

 Below this is a 'Tick Resources' section with links for 'Tick-borne Diseases in Maine: A Physician's Reference Guide' and 'Lyme Disease: Symptoms, Month, Activities'. The right column is for 'Mosquito Borne Diseases' and lists:

- Dengue
- Eastern Equine Encephalitis
- Malaria
- West Nile Virus

 Below this is a 'Mosquito Resources' section with links for 'Maine Against Mosquitoes: General Mosquito Surveillance, Prevention, and Response Plan (2013 Update) (word)', 'Mosquito Abatement on Mosquitoes', and 'Mosquito Youth Education'. At the bottom, there are 'General Resources' and 'Surveillance Reports' sections with various links to reports and fact sheets.



Tick Management


1. Brainstorm with the person next to you
 - P.2 Write tools/techniques/information you know
 - Blank Page: Write down any questions you have
2. Ask me your questions
3. As a group we will share strategies
4. Complete you P.2

tickapp.tamu.edu

Promoting IPM in Affordable Housing

Goal

To improve pest control in affordable housing by teaching everyone who works, lives, and plays in housing how to use integrated pest management (IPM).



www.StopPests.org
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youtube.com/user/StopPests

StopPests in Housing Program

- Resources for all
 - Webinars
 - Social media: YouTube, Facebook, Twitter, blog
 - Website: pest solutions, training, IPM: A Guide for Affordable Housing
- Free consultation and training



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IPM in Multifamily Housing Training



Developed and sponsored by



Get StopPests to your community

- Background
 - IPM: A Guide for Affordable Housing*
 - www.stoppests.org/Guide
- Get buy-in from housing management
 - [www.youtube.com/user/StopPests](https://youtube.com/user/StopPests)
 - www.stoppests.org/success-stories/
- Be in touch!
 - www.stoppests.org/Request



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Was this useful and relevant?

What two actions are you going to take in the next week to practice IPM in/around your structures?

Good Luck!



Appreciation

Funders

- Rachel Riley, Government Technical Representative
- U.S. Department of Housing and Urban Development's Office of Healthy Homes and Lead Hazard Control
- U.S. Department of Agriculture's National Institute of Food and Agriculture

Employer

Promoting Integrated Pest Management in Affordable Housing: USDA Special 2012-04039



Organizers and attendees of this meeting ←YOU