State of Montana ***Health Alert Network***

DPHHS HAN ADVISORY

Cover Sheet

DATE: November 28, 2012

SUBJECT: Health Concerns about Misuse of Pesticides

INSTRUCTIONS:
REDISTRIBUTE AT YOUR DISCRETION. Share this information with relevant SMEs or contacts (internal and external) as you see fit. **Remove this cover sheet before redistributing and replace it with your own.**

For LOCAL HEALTH DEPARTMENT reference only

DPHHS Subject Matter Resource for more information regarding this HAN, contact:

DPHHS CDCP
Epidemiology Section
1-406-444-0273

DPHHS Health Alert Hotline:
1-800-701-5769

DPHHS HAN Website:
www.han.mt.gov

Remove this cover sheet before redistributing and replace it with your own.

Please ensure that DPHHS is included on your HAN distribution list.

Categories of Health Alert Messages:

Health Alert: conveys the highest level of importance; warrants immediate action or attention.
Health Advisory: provides important information for a specific incident or situation; may not require immediate action.
Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.

Please call DPHHS to update contact information at 444-0919

State of Montana ***Health Alert Network***

DPHHS HAN

Information Sheet

Date: November 29, 2012

Subject: Subject: Health Concerns about Misuse of Pesticides

Information: Please see the attached CDC Health Advisory regarding treatment of bed bug infestations and proper use of pesticides.

The Agency for Toxic Substances and Disease Registry (ATSDR) and the Centers for Disease Control and Prevention (CDC) are alerting the public to an emerging national concern regarding misuse of pesticides to treat infestations of bed bugs and other insects indoors. Some pesticides are being applied indoors even though they are approved only for outdoor use. Even pesticides that are approved for indoor use can cause harm if over applied or not used as instructed on the product label.

Important Points:

ATSDR warns that outdoor pesticides should not be used indoors under any circumstances. Homeowners and applicators should always carefully read the product label to make sure that:

- It has an EPA registration number
- It is intended for indoor use
- It is effective against bed bugs (the label should say it is meant to be used to treat your home for bed bugs) and
- You know how to properly mix the product (if a concentrate) and where and how to apply it safely within the home.

We do not recommend that you forward this to health care providers. However, sharing the information with your local extension agent and/or using the attached press release for sharing information with the general public is advised.

NEWS

FOR IMMEDIATE RELEASE
November 29, 2012
Contact:

Misuse of Pesticides a Growing Health Concern

Public health officials are alerting consumers of growing concerns regarding misuse of pesticides to treat insect infestations indoors. The Centers for Disease Control and Prevention (CDC) report incidents of people, in attempts to rid their homes of bugs, are using pesticides indoors that are approved for outdoor use only. The CDC notes that even pesticides that are approved for indoor use can cause harm if not used as instructed on the product label.

Nationwide reports have shown that misused pesticides in homes were found at levels that harmed or could have harmed people's health. Montana Poison Control receives approximately 200 calls per year regarding pesticide poisoning.

Pesticides are poisons that kill insects, but can harm humans and cause cause neurological symptoms such as headaches, dizziness, nausea, visual changes, numbness in the face and limbs, and muscle tremors. Other symptoms could include abdominal pain, vomiting, diarrhea, and chest pain.

Consumers and commercial services that use pesticides can protect themselves by carefully reading product labels to make sure that

- There is a listed Environmental Protection Agency (EPA) registration number
- It is intended for indoor use
- And instructions for where and how to safely apply the pesticide

People who believe that they have been over exposed to pesticides and show symptoms should call Montana Poison Control center at 1-800-222-1222 or visit their local hospital emergency room.

###

This is an official

CDC Health Advisory

Distributed via Health Alert Network
November 27, 2012, 21:05 ET (9:05 PM ET)
CDC HAN-0336-2012-11-27-ADV-N

Health Concerns about Misuse of Pesticides for Bed Bug Control

Public Health Issues

The Agency for Toxic Substances and Disease Registry (ATSDR) and the Centers for Disease Control and Prevention (CDC) are alerting the public to an emerging national concern regarding misuse of pesticides to treat infestations of bed bugs and other insects indoors. Some pesticides are being applied indoors even though they are approved only for outdoor use. Even pesticides that are approved for indoor use can cause harm if over applied or not used as instructed on the product label.

There has been a dramatic increase in the number of bed bug-related inquiries received by the National Pesticide Information Center (NPIC) over the past several years, with many involving incidents of pesticide exposure, spills, or misapplications.[1] From January 2006-December 2010, NPIC reported 169 calls to their hotline where residents, homeowners, or pesticide applicators sprayed pesticides indoors to treat bedbugs. These cases involved pesticides that were misapplied, not intended for indoor use, or legally banned from use. Of those, 129 resulted in mild or serious health effects (including one death) for persons living in affected residences.[2]

ATSDR warns that outdoor pesticides should not be used indoors under any circumstances. Homeowners and applicators should always carefully read the product label to make sure that:

- **it has an EPA registration number**
- **it is intended for indoor use**
- **it is effective against bed bugs (the label should say it is meant to be used to treat your home for bed bugs) and**
- **you know how to properly mix the product (if a concentrate) and where and how to apply it safely within the home.**

Consumers should also be aware of recent cases where licensed and unlicensed pest control applicators illegally sprayed outdoor pesticides indoors to control bed bugs. In some cases, these

[1] Buhl, K., Stone D, and Power, L. Bed bug-related pesticide incidents reported to the National Pesticide Information Center. Poster presented at the 2010 Annual meeting of the American Public Health Association (APHA), Denver, Colorado (http://npic.orst.edu/NPICbedbugposter101510.pdf)
[2] NPIC database provided to ATSDR in 2011 by Dr. Dave Stone, Dept. of Environmental and Molecular Toxicology, Oregon State University.

pesticides were found at levels that harmed or could have harmed people's health. In some cases, residents were relocated until their homes could be decontaminated.

Background

This issue first came to ATSDR's attention when a misapplication of a chemical to treat a bed bug infestation occurred in a residential building in Ohio. A pest control applicator hired by the building owner sprayed the interior of 2 occupied apartments with a pesticide intended only for outdoor use. These illegal applications were made five times over 72 hours and included spraying of ceilings, floors, and even beds and a crib mattress. The occupants included a family with small children, who displayed health symptoms typical of pesticide poisoning, including headache, nausea, vomiting, diarrhea, dizziness, and muscle tremors. The families were evaluated and treated at a local hospital. The homes were evacuated and families relocated. The families lost furniture, electronics, clothing, linens, toys, and other personal items that were grossly contaminated. A review of this case and other cases of acute illness related to exposure to insecticides used for bed bug control was recently published in Morbidity and Mortality Weekly Report[3].

Even pesticides that are approved for indoor use can cause harm if over applied or not used according to the label directions. Like the incident in Ohio, these situations can also result in the loss of personal items, the need to replace contaminated building materials, and expensive cleanups. For example, a mother with a young family contacted NPIC and reported a number of serious health effects her husband, her children, and she experienced from pesticide exposure. A pest control applicator hired by their landlord had applied multiple pesticides seven times over a five-month period. The infestation was later determined not to be bed bugs. Before moving out of the contaminated home, the family members (ranging in ages from 1-32 years) experienced neurological symptoms (such as headaches, dizziness, nausea, visual disturbances, numbness in the face and limbs, muscle tremors, etc.), abdominal pain, and cardiopulmonary symptoms (chest tightness, heart palpitations, and chest pain). Documented in another call was a mother who contacted NPIC describing her infant who developed vomiting and diarrhea after being placed on a mattress treated with an undiluted indoor insecticide. Other bed bug related calls to NPIC describe similar complaints where the caller or the caller's family members experienced headaches, dizziness, nausea, vomiting, tremors, etc., from indoor pesticides being misapplied (often over applied).

How might pesticide exposure affect children?

It is particularly dangerous to allow children to reoccupy a home that has had a recent pesticide treatment where surfaces are still wet, or where they can come in direct contact with pesticide dusts. Children can put objects that have pesticide residues on them in their mouths, and generally put their hands in their mouths and touch their faces more often than adults. They also breathe a greater volume of air per body weight than adults. Thus, the behavior and physical characteristics of children can lead to higher exposures than adults.

[3] http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6037a1.htm

Do pesticide products affect the health of animals?
Exposed animals may have the same health effects as people. **Illness in pets after a pest control application is sometimes a first warning that pesticides have been misused or over applied**. Because of their small body weights, exposed pets may show signs of pesticide poisoning quickly. Cats and dogs may be exposed to pesticides when they come in contact with contaminated surfaces such as floors.

Preventing Exposure to Pesticides

1. Make sure you are treating the right pest. Many pests look alike. Before using any pesticides, confirm that your infestation is actually from bed bugs. Some products are specific to an insect, and won't work if used on any other insect. Depending on the lifecycle stage in which they are found, bed bugs can resemble bat bugs, poultry bugs, carpet beetles, and barn swallow bugs. Ticks can also be mistaken for bed bugs. Bed bugs are small parasitic insects. Adult bed bugs are reddish-brown, have flat bodies, are the shape and size of an apple seed, and do not have wings. Signs of bed bugs in your home include bites on the skin resembling a rash, small spots of blood on bed sheets or clothing, brown fecal stains on linens or furniture, staining on ceilings or walls, and finding molts (cast off skins) in the home. For help making sure your pests are bed bugs, you can contact an entomologist (insect expert) at many county extension services. Follow the link below to find your local extension service: http://www.csrees.usda.gov/Extension/index.html

2. Do not use pesticides indoors if they are intended for outdoor use. The label on the product will tell you whether it can be used indoors. Using outdoor pesticides indoors can hurt your family's health, contaminate your home, result in the loss of your belongings if they become contaminated, and cost thousands of dollars to clean up your house to make it safe to reoccupy.

3. Use a pest control expert if you hire someone to treat your home for a pest problem.
Treating bed bugs is very challenging. If you choose to hire someone to treat your home, an experienced pest management professional can help you treat the infestation effectively. A pest management professional should thoroughly inspect your residence, and provide instructions for preparation and cleaning. They should use a combination of practices based on specific information about the pest's life cycle and habitat needs. This includes non-chemical methods along with limited and targeted pesticide use only as needed. In most cases, chemicals alone will not eliminate pests. When hiring a pest management professional, ask about the specific steps they take to treat infestations.

When you hire someone to control bed bugs or any other pest, make sure they are currently licensed and certified to apply pesticides. Ask to see the certification. Ask for the brand name of the pesticide and the name of the product's active ingredient in case you or a member of your family gets sick from exposure to the product. Read the label of the product the pest control applicator is planning to use to make sure it is for indoor use.

Check with your state pesticide agency to find out about certification and training requirements http://aspcro.org/?q=control-officials. They may also be able to help you find a certified pest

control applicator in your area.

4. If you buy over-the-counter pesticide products to apply yourself, be sure

- the product is in unopened, original pesticide containers
- the containers are labeled, and
- the containers have an EPA registration number.

If you feel you have been overexposed to a pesticide or feel sick after a pesticide has been used in your home, consult your doctor or a poison control center (1-800-222-1222) immediately.

5. ALWAYS FOLLOW THE INSTRUCTIONS ON THE PRODUCT LABEL. The label will tell you which bugs the product will kill, how to mix the product, and where and how to apply the product. Do not apply pesticides repeatedly or in excess of label directions - more is not better and may be unsafe for your family. Do not apply pesticides to beds or furniture unless the label allows it. Not following the label instructions can harm the health of your family, your pets, or you and can result in contamination of your home that can be expensive and time consuming to clean up. Do not use other household chemicals such as kerosene, rubbing alcohol, or bleach for pest control. They can cause negative health effects, fire, or explosions.

Treating an infestation: Integrated Pest Management (IPM)

How can bed bugs be treated safely?

Like lice infestations, bed bugs are best treated using a combination of practices, such as inspection, monitoring, reducing clutter, using physical barriers, and carefully applying pesticides if needed. This type of comprehensive pest control strategy is called "integrated pest management" (IPM). This approach includes vigilant activities by homeowners and renters, such as:

- checking luggage and clothes when returning from a trip or buying second hand clothing, mattresses, or furniture;
- thoroughly inspecting infested areas and the surrounding living space;
- reducing clutter where bed bugs can hide;
- installing encasements on box springs, mattresses and pillows, and using interceptors under bed posts and furniture legs;
- aggressively cleaning infested areas and clothing, in conjunction with professional heat/steam or cold treatments of baseboards and other belongings;
- carefully using pesticides approved for indoor use on bed bugs (see http://cfpub.epa.gov/oppref/bedbug/ for a list of EPA-approved pesticides), or hiring pest management professional.

There is no federal certification program for IPM pest control professionals, and some professionals practice IPM without specific certification, but two non-profit organizations do have certification programs. To learn more about their programs or to find a pesticide control applicator in your area, visit http://greenshieldcertified.org/ or

http://www.certifiedgreenpro.org/. This information is being provided solely to assist you and is not an endorsement or recommendation by CDC of any pest control individual or company.

DO NOT USE BLEACH in areas where you have treated your home with a pesticide. Bleach can convert some pesticides to more toxic forms that could result in harmful exposures to your family. See the following links and for more information on how to effectively treat bed bug infestations:

- Environmental Protection Agency: http://www.epa.gov/bedbugs
- National Pesticide Information Center: http://www.npic.orst.edu/pest/bedbug.html

Important phone numbers and Web sites

If you believe you or a family member has become ill from a pesticide exposure:

Call your local poison control center: 1-800-222-1222, your local hospital emergency room, or the National Pesticide Information Center at 1-800-858-7378. You can also call the Centers for Disease Control and Prevention Information Line at 1-800-CDC-INFO for information about pesticides.

If you believe your pet has become ill from a pesticide exposure:

Contact your local veterinarian or call the National Animal Poison Control Center at 1-888-426-4435.

To report a possible pesticide misuse:

Contact your state pesticide regulatory agency. You can state specific contact information at: http://www.npic.orst.edu/reg/state_agencies.html

To learn more about pesticides and bed bugs

ATSDR ToxFaqs
http://www.atsdr.cdc.gov/substances/index.asp

CDC Parasites Web site
http://www.cdc.gov/parasites/bedbugs/

Environmental Protection Agency Web sites
http://www.epa.gov/bedbugs
http://www.epa.gov/pesticides

National Pesticide Information Center
http://www.npic.orst.edu

The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national, and international organizations.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Categories of Health Alert messages:

Health Alert conveys the highest level of importance; warrants immediate action or attention.

Health Advisory provides important information for a specific incident or situation; may not require immediate action.

Health Update provides updated information regarding an incident or situation; unlikely to require immediate action.

##This message was distributed to state and local health officers, public information officers, epidemiologists, and HAN coordinators, as well as clinician organizations.##

==========

You have received this message based upon the information contained within our emergency notification database. If you have a different or additional e-mail or fax address that you would like us to use, please contact your state-based Health Alert Network program at your state or local health department.

==========