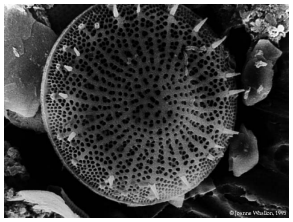
Healthy Colorado Schools

January 2012

Colorado State University

Resolve to use reduced-risk products



We all want a healthy school environment – for students and staff. A healthy environment means fewer pests like cockroaches, which can trigger asthma. While we prefer to prevent pests in the first place, once pests are present, you may need to use a pesticide to eliminate them. Choosing a product with the least amount of risk to both human and environmental health is crucial.

Diatomaceous earth, known as DE, is an effective reduced-risk pesticide. This inert dust is harvested from sediments at the bottom of oceans, lakes, and rivers around the globe. It comes from diatoms – a type of single-celled algae with microscopic, beautiful geometric shells made of silicon dioxide. Over millennia, diatoms accumulate in aquatic sediments as fossils and are harvested and dried into a fine white dust.

DE works mechanically by absorbing water-protecting fats and oils from the outer layer of the exoskeleton and the insect essentially dehydrates. DE – both food grade and forms containing additional pesticides – is effective on anything with an exoskeleton — insects and non-insect arthropods. These pests will contact DE in crack and crevice treatments. Use food grade DE indoors anywhere children could be exposed to it. Puff into wall voids to control cockroaches and other occasional invaders. Apply to cracks and crevices with a bulb duster, or other suitable dust application equipment, to manage a wide variety of pests.

Signal Words alert users to special hazards of the pesticide. Regardless of the signal word on a pesticide product, remember that every product still has the potential to poison (i.e. is harmful at high doses).

CAUTION means the pesticide product is slightly toxic if eaten, absorbed through the skin, inhaled, or it causes slight eye or skin irritation.

WARNING means the pesticide product is moderately toxic if eaten, absorbed through the skin, inhaled, or it causes moderate eye or skin irritation.

DANGER means the pesticide product is highly toxic by at least one route of exposure. It may be corrosive, causing irreversible damage to the skin or eyes. Alternately, it may be highly toxic if eaten, absorbed through the skin, or inhaled. If this is the case, the word "**POISON**" must also be included in red letters on the front panel of the product label.

Integrated Pest Management (IPM) is a sustainable approach to managing pests by combining biological, cultural, physical and chemical tools in a way that minimizes economic, health and environmental risks.

Pests to watch out for

Widow spiders, particularly the western widow (*Latrodectus hesperus*) are common in Colorado. Bites from the widow spider are painful and should be considered dangerous because they contain a nerve toxin. Their bite may require medical attention.

Widow spider nests can be found in window wells, entrances to crawl spaces, old rodent burrows, corners of garages, and abandoned rodent burrows. Look for red or red-orange markings on the underside of the abdomen, which is characteristic of widow spiders.

Reducing clutter will make storage areas less attractive to spiders. Don't put your hands in dark crevices without looking first. Remember that spiders survive by eating insects and are important biological control agents.

agents.

See photos of IPM practices for Colorado schools on our website http://coloradoipmcenter.agsci.colostate.edu/Communities/school_IPM.html

School Policies for Head Lice

Head lice cases tend to pop up in the winter because kids' hats and coats get thrown into piles and are shared. Head lice cause intense itching but do not carry or spread diseases; the embarrassment of head lice can be worse than the lice themselves.

In the past, head lice policies in schools emphasized that a child infested with head lice could not return to school until there are no nits (head lice eggs are called nits) in their hair. "No-nit" policies are discouraged by the Colorado Department of Public Health and Environment. There is no evidence that a no-nit policy prevents or shortens lengths of outbreaks. Contact the school nurse or health department for policies in your district.

One treatment alone may not kill all the lice, so use a combination of treatments -- lotions, shampoos and combing. Some lice are resistant to commonly used insecticides in head lice shampoos.

We do not recommend applying pesticides to the school or home for lice control because the adult lice usually die within two days without a blood meal. Always keep each child's hat and other clothing on separate hooks. Vacuum the classroom daily if a child is found infested with head lice. You can put pillow and other classroom items, which may have nits or lice on them, in a dryer and run on hot for 20 minutes to kill hatching lice.

Bed bugs resistant to insecticides

As of 2010, bed bugs were reported in all 50 states. Bed bugs were almost eradicated from U.S. homes and apartments by the 1950s when DDT was used widely. And then bed bugs became resistant to DDT. Scientists now report that bed bugs are becoming resistant to the commonly used insecticide pyrethrum.

COLORADO SCHOOL IPM PROGRAM
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Who's involved? Colorado State University, Colorado Department of Education, Colorado Department of Agriculture, U. S. Environmental Protection Agency, Colorado Department of Public Health and Environment, school districts, National Environmental Health Association and private pest control applicators all contribute to this program.