Greetings from School IPM 2015!

Every day, 49 million children attend school in the United States, served by nearly seven million teachers and staff. But they’re not alone. Schools are also frequented by a number of pests including cockroaches, mice, dust mites and more. Asthma is epidemic among children, impacting nearly 6% of school children nationally with rates as high as 25% in urban centers. Cockroaches are potent asthma triggers.

Integrated Pest Management (IPM) is a prevention-based, highly effective approach proven to reduce pest complaints and pesticide use by up to 90% in schools and other public buildings. IPM practices such as sanitation and exclusion also improve food safety, fire safety and energy conservation. Our newsletter highlights real-life examples of IPM in practice and can help you start an IPM program in your school district. For more information, visit www.schoolipm2015.com.

US EPA Grant Helps CESA 10 Raise IPM Awareness

Twelve Cooperative Educational Service Agencies (CESAs) provide services to public school districts throughout Wisconsin including information technology, special education and instructional technology. CESA 10 is unique in that it specializes in facilities management services for schools and government facilities statewide, and runs programs to help districts reduce energy costs, become energy efficient, and provide a safe and healthy environment for staff and students. CESA 10 Facilities Management Department has staff statewide and offices in Madison and Chippewa Falls.

Last year, CESA 10 received a US Environmental Protection Agency (EPA) School Integrated Pest Management (IPM) grant to raise IPM awareness and facilitate its implementation in Wisconsin public schools. Under the two-year grant, CESA 10 will implement IPM in 13 pilot schools and work to educate additional “partner” districts about IPM. Pilot schools are required to report key metrics for CESA 10 to review, and many partner schools also provide data. “We want to help schools understand the laws around the state and how they can comply with and even exceed those laws for the health and safety of their students and staff,” says Jennifer Everhart, environmental health and safety consultant for CESA 10.

Through the grant, CESA 10 will offer compliance reviews, employee
What's New This Month

Green Shield Certified is hosting a free webinar, "Reducing Asthma Triggers Using Integrated Pest Management Techniques," on February 21 at 12:00pm CST. Participants will learn ways to manage and reduce asthma triggers by controlling pest allergens using IPM techniques. Presenters include John Kane, Dr. Chad Gore and Dr. Thomas Green.

Upcoming Events

February 20-21, 2013
Texas School IPM Coordinator Training
Grand Prairie, TX
More Information

March 1, 2013
California DPR School IPM Workshop
Antioch, CA
More Information

April 17-18, 2013
Texas School IPM Coordinator Training
Waco, TX
More Information

April 27-30, 2013
National School Plant Managers Association Meeting
San Antonio, TX
More Information

New Science Standards Provide Exciting Opportunity for Expanded IPM Education

This grant capitalizes on the “CESA Model” of cooperative affordable services. Seth Dibblee, coordinator for IPM in schools for US EPA Region 5, says one of the concerns about IPM adoption is economic sustainability after pilot grants run out. “The CESA model is one that could help solve this problem,” he says. Allowing schools to purchase services collectively and at a discount is an ideal way to position IPM services. “Adding IPM to the menu of services provided by CESA 10 makes it a routine consideration for districts instead of something special that they have to consider,” comments Dibblee.

Education is an important component. “CESA 10 already has the infrastructure in place for providing training in the schools with their other programs, so they are uniquely able to provide this service for IPM,” says Dibblee. Because it can be difficult for facility managers to find time and money to travel to another part of the state for training, CESA 10 is bringing training opportunities directly to schools. “We're looking at regional trainings, webinars and other means for information to be delivered directly to schools regardless of location,” says Everhart.

Additionally, many schools need help with recordkeeping. CESA 10 has put together an example binder full of templates for information schools should be tracking, including services and costs for pest control contracts. “This exercise can help facility managers keep a close eye on how much the school is paying for contracted services. Often this is just a line item on the budget that gets automatically renewed without an evaluation of the services provided and the cost,” says Everhart.

CESA 10 is also helping districts meet the Wisconsin requirement that a licensed applicator makes or supervises all pesticide applications on school grounds. “Through the grant, CESA 10 is providing funds for the training for school staff to become licensed applicators and exploring the possibility of providing more convenient locations for the applicator exam, so that schools can be in compliance with state laws,” says Dibblee.

Everhart is proud of the districts' performance so far. “We've been using Texas A&M AgriLife Extension's IPM calculator and all the schools have been getting A’s,” comments Everhart. The goal now is to show facilities staff at these schools how they can work IPM tasks into their normal daily activities by combining them with tasks they already do, such as inspections of ventilation systems or kitchen appliances.

CESA 10 is a non-profit educational agency providing facilities management services to assist school districts and governments reduce energy costs, practice sustainable initiatives, become more energy efficient, and provide a safe and healthy environment for staff, students and community members. CESA 10 is actively looking for future partnerships for its Facilities Management Services. For more information on CESA 10's Environmental Health and Safety Services, Energy Management Services including Sustainability Services, Owner's Representative Service, Behavior Based Energy Management, and Bus Routing, call 888-947-4701 or visit www.cesa10.k12.wi.us/fm.
The Next Generation Science Standards (NGSS), a new document being created by the National Research Council (NRC), the National Science Teachers Association, the American Association for the Advancement of Science (AAAS) and Achieve, could provide an ideal opportunity to bring IPM curricula into K-12 classrooms nationwide.

States currently use the National Science Education Standards from the NRC and Benchmarks for Science Literacy from the AAAS, but these documents are both nearly 15 years old. In order to update these standards, the NRC first developed A Framework for K-12 Science Education, which identified the science all K-12 students should learn. Released in July 2011, this document was developed by a committee of experts, including practicing scientists, science education researchers, and science education standards and policy experts. Now, states are leading the development of the NGSS, which will be based on the Framework and will prepare students for college and future careers. The NGSS will be arranged into individual disciplines and grade levels. It will be the responsibility of individual states to design curricula to fit the standards.

The NGSS are currently undergoing a final review before publication in March 2013. Multiple stakeholder groups have been asked to review the standards and provide comments. In a letter written to Achieve on behalf of the National School IPM Steering Committee, Dr. Thomas Green, president of the IPM Institute of North America, comments, "IPM is an ideal science curriculum topic because of deep connections to biology, ecology, behavior, environmental and human health, sustainability, and IPM's broad applicability and ability to be demonstrated in school settings for structural, landscape, human health and other pests."

The next step in this process will be implementation of the NGSS throughout the country. Well-designed IPM curricula are already available through multiple sources, including Penn State University Extension, the University of Florida, eXtension.org and the Maine Department of Agriculture, Conservation and Forestry. These standards provide a unique opportunity for these curricula and others to be presented to states for inclusion in their schools' K-12 curricula.

To facilitate incorporation of IPM curricula, the National School IPM Steering Committee is working to identify key contacts at the national and state level to create awareness of these existing resources, and identify opportunities to collaborate.

→ Kitchen Shelving and Pests: What's the Connection?
School kitchens have all of the essentials for pests including food, water and harborage. Pest proofing for kitchens includes reducing clutter to reduce harborage, cleaning thoroughly to eliminate food sources, repairing leaks and conducting regular inspections for signs of pests. Storage shelving in kitchens and food storage also plays a role.

The ideal shelving includes wire racks. Solid wood, metal or plastic shelves allow crumbs and other food debris to collect; wire racks allow spills to fall through to the floor where they can be swept up during regular cleaning. Any shelving should be on lockable wheels to ease moving for cleaning and inspection. Place shelving perpendicular to the wall, not parallel, to facilitate cleaning and minimize obstructed view of the seams where walls meet floors, which are the most common travel corridor for pests.

The lowest rack should be at least 12 inches off the floor. “At the very minimum the IPM person will need to be able to inspect under the racks and behind the items at least 12 to 18 inches-this way you can see if mice are nibbling on items or if there are droppings,” suggests Janet Hurley, school IPM extension specialist for Texas A&M AgriLife Extension Service.

Food items should be removed from corrugated cardboard shipping boxes before shelving. Cardboard should be immediately removed to recycling containers outside the building. Leaving items in cardboard containers can create a primary means of transport for pests into the building, limit ability to inspect, and provide a favored hiding place for many pests, including mice and cockroaches. “Watch out for cardboard,” says Hurley. “The more you have, the harder it is to inspect.”
Specially designed canned food racks are also available which can be loaded from the back, so older cans move to the front and get used first. These racks also help reduce potential for worker injury from lifting heavy boxes of cans onto shelves.

The American Institute of Baking (AIB) *Consolidated Standards for Retail Establishments* includes food storage design and food safety measures to help kitchens pass inspections. Many tips that are useful for food safety are also a part of IPM, such as cleaning up spills promptly, emptying trash containers regularly, cleaning drains and fixing leaks.

The San Francisco Department of the Environment published *Pest Prevention by Design*, which details building design tips to facilitate easier pest prevention and management. Included in the document is a section on institutional kitchen design beginning on page 67.