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. House mice and 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.

Look Out for Questing Ticks

Depending on where you are located, hungry ticks follow an annual cycle, seeking wildlife, pet and human hosts as daytime temperatures rise in late winter and spring. Ticks feed on the blood of their hosts, sometimes transferring pathogens including Lyme disease, ehrlichiosis and Rocky Mountain spotted fever, which can have potential lifelong and/or fatal consequences.

How do these non-flying arachnids locate hosts? They stand absolutely still with their first pair of legs outstretched waiting for passers-by, a behavior called questing. In temperate areas east of the Mississippi, dog ticks (*Dermacentor variabilis*) typically begin questing in April, peaking between May to July, and declining around August. Lone star ticks (*Amblyomma americanum*) are active in April, peak between...
May to July and then suddenly slow at the end of July over much of their range.

Tick populations, and tick-borne diseases are spreading northward across the US, Canada and the UK. Scientists believe the expansion is related to changes in climate, and host population growth including deer and mice.

Tips to Avoid Questing Ticks

1. Wear long sleeves and long pants tucked into socks.
2. Avoid high-risk areas, especially forest edges, tall grass and weedy forest understory.
3. Thoroughly check for ticks after time spent outdoors.
4. Make your yard less tick friendly by mowing your lawn frequently, removing leaf litter and brush, storing wood piles away from your home and keeping pets away from heavily infested areas.

What to do if you find a tick?

1. Carefully remove the tick with tweezers.
2. Preserve the tick so it can be identified and tested if necessary.
3. If you identify a blacklegged tick (*Ixodes scapularis*), [submit it to a lab](#) to test it for pathogens.
4. Visit your doctor to get tested for tick-borne diseases, especially if you think a tick was allowed to feed for more than 24 hours, a requirement for transmission of some pathogens.
5. Send a picture to [TickSpotters](#). Tick experts the University of Rhode Island will return an identification in exchange for the location information, which allows them to track distribution and incidence data nationally.

Other Resources

[TickEncounter](#), funded and managed by the University of Rhode Island Center for Vector-Borne Disease, is a comprehensive, user-friendly resource for managing ticks across the US. Information is seasonally and regionally relevant, important because ticks behave differently in different parts of the US. The [tick identification webpage](#) ranks the most common ticks in a region and describes seasonal activities, diseases vectored, and pictures engorged ticks which can look quite different from their unfed state.

The [Public/Private Tick IPM Working Group](#) was launched last October, amid rising concerns over the spread of ticks and tick-borne diseases. More than fifty individuals from federal, state and local governments, Land Grant Universities, non-governmental organizations and others participate in this forum for communication, networking and collaboration. The Working Group hosts conference calls on the second Wednesday of each month and maintains a listserv. The group is currently completing a priority ranking survey before it moves forward with concrete projects and deliverables. If you are interested in learning more about the Group, contact [Jane Petzoldt](#). The Group is funded by a grant from the [USDA North Central IPM Working Group](#).
May is Asthma Awareness Month! How will you raise asthma awareness and action in your school community?

Plan educational events and activities for students, staff and parents using EPA's Asthma Awareness Month Event Planning Kit. Then check out how to effectively engage local media and broaden your school's reach through social media.

Share your activities with the AsthmaCommunityNetwork.org community by posting to the Events Calendar, Blog and Discussion Forum!

Celebrate #AsthmaAwarenessMonth in Your School and Beyond

Social media is a quick and effective way to reach your target audiences and expand your marketing efforts. Facebook reaches more than 1 billion active users monthly, and there are more than 200 million active Twitter users.

Consider using social media, like Facebook and Twitter, to promote AAM and events at your school and in your community. Use the sample posts below on your program's social media pages.

The Pest Management Strategic Plan posted at School IPM 2015 also includes a section on ticks, including best practices for tick management on school grounds.

School IPM 2015 Updated Priorities

The goal of the School IPM 2015 Strategic Plan is to assess the current status of pest management in our school systems, identify priorities for management, education, research and regulation, compile our current understanding of best practices and set out a plan of action to achieve full implementation of IPM in all of our schools by 2015. The first plan was released in 2009.

Strategic plan priorities were recently updated through a ranking survey completed by all four regional School IPM working groups (Northeastern, North Central, Western and Southern). Priorities were ranked according to the number of votes each priority received during the ranking process, 51 working group members voted. The updated strategic plan will be available at the School IPM 2015 website later this year. Below are the top five ranked priorities for each section.

Management Priorities

1. Track adoption of IPM practices in schools and disseminate economic, environmental and/or health impacts of IPM. Educate policy makers about the needs and benefits of IPM in terms of dollars, health, environmental and academic performance.
2. Identify and piggyback with ongoing environmental health efforts and coordinate with partners in promoting IPM to help schools and child care facilities to meet healthy, high performance and safety, economic and energy efficiency goals.
3. Create job-specific IPM guidelines for roles within schools.
4. Develop IPM decision-making tools.
5. Identify, educate and activate appropriate school-related organizations to embed IPM into the organizational culture.

Regulatory Priorities

1. Establish IPM policies in school systems to institutionalize the commitment to IPM.
2. Identify and promote interagency cooperation among regulatory, environmental, health, insurance, education, State and Federal, Cooperative Extension and other agencies.
3. Create and mandate minimum standards for school IPM at federal level established through high level IPM training/licensing for pest management professionals.
4. Implement and enforce existing IPM laws and policies at the highest level of economic and regulatory accountability.
5. Work to incorporate IPM strategies into building codes.

Upcoming Events

May 18-21, 2014
National Conference on Urban Entomology
San Antonio, TX
More Information

August 24-27, 2014
Research Priorities

1. Identify effective least-risk products and tools to manage pests and measure IPM continual improvement.
2. Research the cost of IPM, including: implementation and education versus conventional pest management. Conduct a cost analysis for misapplication of pesticides (indoor and outdoor), calculate the cost savings of exclusion practices, research effectiveness of pesticides/pest treatments.
3. Research the impact IPM has on indoor and outdoor school environmental health, e.g., school well water, school gardens, use of adjacent properties, children's health, (asthma, allergies, absenteeism, grades, ADHA), academic performance and safety factors.
4. Research and evaluate outreach methods to determine most effective methods of school/community audiences.
5. Evaluate building design, construction, renovation, and maintenance criteria.

Education Priorities

1. Develop and utilize educational methods to provide education and hands-on training for custodial, maintenance, kitchen and grounds staff, school nurses, facility directors, administrators, teachers and IPM coordinators.
2. Partner with pest management professionals (PMPs) and organizations to create and implement effective, economical IPM service relationships.
3. Create best management practice for schools to use with vendors of pest management services, design and construction services, custodial services, food and drink product service providers, etc.
4. Improve superintendents, principals and teacher pre-service training courses and develop curricula for training Extension, state legislators and other change agents.
5. Create multi-state coordinated train the trainer programs on School IPM, e.g., resources for peer-to-peer training.

Several Current Projects Addressing Priorities

The North Central School IPM Working Group, the University of Arizona and other individuals from federal, state and local governments, Cooperative Extension, non-governmental and non-profit organizations are currently working on Stop School Pests - A National Standard IPM Training Program. This project addresses the priority for educational, hands-on training for school staff roles and is funded by the North Central IPM Center and the Environmental Protection Agency. To learn more about the Stop School Pests training program, check out the March School IPM 2015 eNewsletter article.

Texas A&M University, Salt Lake City School District and Colorado State University are currently addressing the priority to develop IPM decision-making tools through their work on iPEST, SchoolDude and the IPM Calculator, funded by the Environmental...
Protection Agency. The North Central School IPM Working Group is currently developing the Illinois IPM Association, which addresses the priority to identify, educate and activate appropriate school-related organizations to embed IPM into the organizational culture, funded by the North Central IPM Center.

Northeastern IPM Center funded Expanding School IPM Implementation within the Northeastern United States: a Best Management Practices (BMP) Approach, addressing the priority to provide succinct guidance documents and training aid for practitioners to use with vendors of pest management services, design and construction services, custodial services, food and drink product service providers and other vendors. To learn more about this project, check out the article below.

The regional working groups continue to address the priority to identify and promote interagency cooperation among regulatory, environmental, health, insurance, education, State and Federal, Cooperative Extension and other agencies.

Best Management Practices for School IPM

In 2013 the Northeastern IPM Center funded Expanding School IPM Implementation within the Northeastern United States: a Best Management Practices (BMP) Approach, led by Lynn Braband of Cornell University. This project evaluated, incorporated, and augmented existing resources in the development of a school IPM best management practices (BMP) website. They piloted the website in train-the-trainer events in three states and systematically evaluated the website through surveys, focus groups, and training events.

The project has led to improved resources and training which should increase the number of schools practicing high-level IPM, thereby safeguarding human health and the environment. The resources created are available on the website.

Topics include:

- IPM basics, why is IPM so important to schools?
- How can your school benefit from using IPM?
- Use of pesticides on school property
- IPM policies and protocols
- Common IPM terms
- Pesticide use and IPM laws by states in the Northeast
- IPM websites and other resources

Site-specific practices address both indoor and outdoor areas: cafeterias, kitchens, storage areas, classrooms, offices, staff lounges, hallways, locker rooms, gyms, pools, mechanical rooms, crawlspaces, walls, windows, roofs, eaves, athletic fields, fence lines, parking lots and sidewalks, low-maintenance turf and planting beds and gardens.
The project team encourages schools to utilize pest prevention and pest monitoring tools to reduce reliance on pesticides and to select least-risk control methods to minimize risks of human exposure to pests and pesticides.