Questions and Answers

Integrated Pest Management in Schools: Basics for Winter

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Sanitation

Q: Could you provide more information about the routine use of disinfectant wipes?

A: We've seen the routine use of disinfectant wipes occurring more and more recently. The use of disinfectants is pretty thoroughly regulated, and they should not be used in places where there is not a need for them. Disinfecting is recommended only in areas where there are droppings or blood. We use disinfectants in restrooms, infirmaries or if we're cleaning up spills of blood or other body fluids, but it’s not necessary in other places. In a situation where there has been an outbreak of norovirus or flu, it may become useful to use disinfectants in high-touch areas on an interim basis during the time of the outbreak. However, that decision should be made by an administrator or the school nurse and should not be a decision made by an individual teacher.

Q: Could you please briefly describe the distinction between disinfectants and sanitizers?

A: Sanitizers are designed to reduce pathogens to levels that minimize the chance of people getting sick. Disinfectants are designed to destroy all microorganisms. The third level is sterilization, which completely destroys all living things. Sterilization is usually only achievable in medical situations. So, we sanitize to maintain our health and disinfect to make sure pathogens are not transferred into the environment.

Q: Why are air fresheners allowed in lobby areas and bathrooms since they contain VOC’s?

A: Many things contain or emit VOC’s. However, not all VOC’s are considered hazardous, and they are not regulated as a class. Having a district policy to minimize chemical exposures would
eliminate the use of air fresheners. This benefits asthmatics and people with other respiratory or chemical sensitivities.

**Pests**

**Q:** What is the correct response for managing bedbugs?

**A:** You need to have good policies and an early detection program that allows you to recognize bedbugs when they come in. Bedbugs are introduced largely as hitchhikers, so they’ll frequently come in on the outer clothes, book bags or briefcases of students or staff. You need to be aware of that and recognize what a bedbug looks like so you can identify what is and what is not a bedbug. Then, isolate that jacket, book bag or other item to prevent the bedbug from getting out. Actual control of bedbugs needs to be done by a licensed pest control operator, so developing these policies is something that you'll do in conjunction with your pest control operator and your administration staff.

**Q:** Does it really take seven days in the freezer to kill dust mites?

**A:** It depends on what you're putting in the freezer. For instance, a stuffed animal is by nature an insulator, so when the bugs start to get cold, they are going to migrate into the center to retain their warmth. Seven days is recommended in order to be sure that you have actually penetrated the entire material and gotten to a sub-freezing temperature for long enough. For something like books or records, there is actually a 30-day recommendation to be considered safe and sanitary. Freezing is, therefore, a very effective way of getting rid of bug infestations in sensitive materials that are otherwise very difficult to deal with.

**Q:** Are there materials, including stuffed toys, that are resistant to dust mites?

**A:** It’s not a big niche. I found one toy company advertising “dust mite resistant” as a benefit.

**Q:** How long does it take to eliminate dust mites in an environment at 50 percent or below humidity? Is it faster than the freezing method?

**A:** Any reduction of dust mites through humidity is going to be gradual. When you reduce humidity, you eliminate a dust mite’s ability to breed. You still have an ongoing colony that is going to gradually decline. It's not a fast fix; it's a long-term reduction strategy.

**Q:** Is there any additional information that you could reference responding to spiders as a pest?

**A:** Spiders are predators that eat other bugs. If you have spiders that means you have other bugs, which means you have some source of entry of food and usually a moisture problem. What you want to do is identify what the spiders are eating and where their food is coming from. That means fixing moisture problems and looking for subtle routes of entry. For instance, exterior lights are usually serviced by a conduit that then leads into the building. Lights may attract
insects to the light fixture and they can then simply follow the wires back into the building. In that case, you would need to address sealing that conduit. So the spiders themselves are not your problem, it's what the spiders are eating. Spiders are usually best removed with a vacuum cleaner because that way you don’t run any risk of contact with them. Even though most spiders are incapable of biting, most people still don’t want to get that close to them.

**Q:** Would you recommend owl stations at, or near schools, to control gophers and snakes?

**A:** If you can get real live owls to nest that’s wonderful, but plastic owls are largely ineffective. Birds and gophers identify them within a matter of days, and snakes don’t actually look up and see the plastic owl, so this is not likely to be an effective control.

**Q:** When removing mice nests, do you suggest training school personnel about hantavirus prevention or hiring a professional pest control service?

**A:** Even if hiring a professional service, all maintenance staff should be aware of the risk of hantavirus. Hantavirus is carried by white-footed deer mice, not by the domestic house mouse, so in general it is less of a risk. But if you have schools that are in rural or suburban areas surrounded by fields, you certainly have a risk of white-footed deer mice entering your building, particularly in the fall and winter time.

The problem with hantavirus is that it is expressed in the droppings of the mice, and then over time the droppings dry out, disintegrate and turn into dust. If we inhale that dust when we clean, we’re exposed to the virus. Cleaning up mouse droppings should always be done in a dustless fashion. Spray it down with water, or with a very weak solution of water and bleach, and make sure to wear gloves and respirators (at least N95 or better) during cleanup.

**Q:** Who should I contact in California to approve a bait station for red fire ants?

**A:** The California Department of Pesticide Regulation (DPR) is responsible for approval of all pesticides and devices. They have an active School IPM program that can be accessed at: [http://apps.cdpr.ca.gov/schoolipm/](http://apps.cdpr.ca.gov/schoolipm/). You can also find the contact information for your EPA Region 9 representative here: [http://www.epa.gov/aboutepa/region9.html](http://www.epa.gov/aboutepa/region9.html).

**Other**

**Q:** Do you have any advice for encouraging state and federal agencies to work together to address the presence of bleach in preschools?

**A:** There is an interagency working group exploring this issue. I’m not sure when they will report.

**Q:** Do you have any information related to creating an IPM management program for tribal schools?
A: EPA's Integrated Pest Management in Schools training provides resources designed to encourage school officials to adopt IPM practices to reduce children's exposure to pesticides. It can be accessed through the Tribal Compliance Assistance Center: http://www.epa.gov/tribalcompliance/contact/index.html.

Also, as part of EPA’s National Enforcement and Compliance Assurance Priority in Indian country, EPA is assisting the Bureau of Indian Affairs (BIA) and tribal schools to understand and address environmental issues including asbestos, lead in paint and in drinking water, pesticides, laboratory chemicals, and poly-chlorinated biphenyls (PCBs). The information is available in a bound notebook, a CD-ROM, and on the Internet. The materials are available on EPA Region 10’s Tribal Schools Compliance Assistance Notebook Web site: http://yosemite.epa.gov/R10/TRIBAL.NSF/Programs/Tribal+Schools.