



# Healthy Colorado Schools



## GOOD HEALTH AND IPM

Let's work with school administrators and policy makers to have healthy food in schools **AND** healthy environments. Federally supported school meals programs serve breakfast and lunch in classrooms (<http://www.healthyschoolscampaign.org/>) to improve student learning and achievement. It makes sense; hungry kids don't learn as well

as well-fed kids. Nevertheless, these programs can create a challenging situation for those responsible for keeping the school clean and pest-free. One concern about having food in the classroom is that the food isn't always eaten. It may end up in trashcans, on the floor, or in desks. Food waste attracts pests such as mice and ants, and can cause extra work

for maintenance personnel. Sanitation and pest proofing are our best tools to prevent pests from making the school their home. Healthy indoor environments -- free of pests, pest allergens and pesticides -- are good for everyone, staff and students alike.

**Remember, Healthy Children Learn Better.**

### Special points of interest:

- ✓ Healthy Indoor Environments And Learning
- ✓ How To Avoid The Flu
- ✓ Pesticides & School Grounds—What Should We Do?
- ✓ IPM By The Numbers—Making A Business Case
- ✓ EPA's Rodenticide Ruling
- ✓ The Benefits Of A Written IPM Plan

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## THE FLU AND YOU



The number of influenza cases in Colorado continues to grow. If you want to see how many cases have been hospitalized, the [Colorado Department of Public Health and Environment](#) keeps a weekly count.

important thing you can do (besides staying healthy yourself) is to routinely clean frequently touched objects and surfaces, including doorknobs, keyboards, and phones, to help remove germs.

A University of Arizona study (<http://uanews.org/story/germs-spread-fast-at-work-study-finds>), found

that more than half of commonly touched surfaces in an office—like doorknobs, copy machine buttons, telephones, desk and tabletops, the office refrigerator, the handle of the coffeepot—can become infected with a virus when a single person in the office is ill.

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As someone in charge of facilities, the most

## PESTICIDES ON SCHOOL GROUNDS?

Should we be using pesticides to control weeds and insects on school grounds? Healthy and well-maintained landscapes and vigorously growing turf will deter weed and insect invasions but somehow, these pests still manage to find openings to establish and spread.

The Denver Post (2/10/2013) reported concerns with using pesticides in several Colorado municipalities, including Boulder and Durango. The article states that they “have changed policies in response to residents worried about health consequences of synthetic pesticides. They're focused on eliminating chemical controls of weeds and insects in public parks and playgrounds, and proponents say such programs prove there are ways to

both protect health and keep landscapes lovely.” (Read more: Colorado's turf wars over pesticide use trigger fears of total ban (<http://www.denverpost.com/news/>).

In our survey, **weeds were the most prevalent pest in outdoor areas.** Ninety-six% of school districts said that weeds had been a problem on school grounds. Weeds detract from the aesthetic appeal of landscaped areas, can interfere with footing on athletic fields, and some weeds – like the spurge – contain substances that can be harmful if contacted or ingested. Noxious weeds in particular are problematic wherever they occur because of their tendency to take over

landscapes and turf. Colorado law requires that they be controlled.

Sixty-five% of school districts said that they spot spray with herbicides and 61.5% said that they apply weed and feed herbicides to turf. Whether you have dandelions in sports fields or puncture vine in the playground, there are many IPM approaches to controlling weeds. Tactics to control weeds without the use of chemicals include keeping weeds from going to seed, hand-weeding or pulling, use of mulches and biological agents such as insects. Aggressive weeds can crowd out grass and other desirable plants, so proper fertilization and irrigation is important.

## BUSINESS CASE FOR IPM

Schools want to use cost-effective strategies for pest management while providing a healthy indoor and outdoor environment for students and staff. Many Colorado schools are keeping track of pest management costs. 48% track the number of pesticide applications per year; 50% track the product names and quantity of pesticides used; and 42% track costs associated with pest management activities (personnel, hours, spent, materials used, monitoring devices, equipment and licensing). Salt Lake City School District provides an

example of IPM program costs. Startup costs, including tools, training and exclusion measures, were approximately \$4,500 over the first two years for three buildings. Ongoing costs for an IPM program encompassing over 37 k-12 schools include pest-monitoring traps, exclusion tools/tactics, and pesticide applicator licensing (renewals) and education, and range between \$1,500 and \$3,000 per year; costs are continually decreasing. Annual training for custodians, kitchen and maintenance personnel and in-service sessions with teachers and nurses are not

included in the above ongoing costs, but are a necessary component for a successful program.

How much does your school spend on pest management? IPM can reduce pest complaints with no long-term increase in costs.



**Future career choice for bugs at schools using IPM**

## ARE YOU USING POISON BAITs FOR MOUSE CONTROL?

The use of poison baits is a common practice to control our most prevalent pest this time of year—the house mouse. The U.S. Environmental Protection

Agency is concerned that “ the use of these products has been associated with accidental exposures to thousands of children each year.” Children are particularly at risk because the products are placed on floors, where children can find them (and sometimes eat them). More than half of all reported poisonings occur in children under the age of six.

EPA has new rules on how rodenticides can be used. Previously, poison baits were available in both block and pellet form. EPA is requiring that all rodenticide bait products available for sale to consumers be sold only with bait stations. Loose bait such as pellets is prohibited. On January 30, 2013, EPA banned 12 rodent poisons because the products failed to abide by safety regulations. The problem products are

**d-Con Concentrate, Ready Mixed, Ready Mixed Generation II, Mouse Prufe, Mouse Prufe II, Mouse Prufe III, Pellets, Pellets Generation II, Bait Pellets II, Bait Pellets III, Ready Mix Baitbits, and Bait Packs III.**

If you have a pest control contract, ask your provider what they are using to control mice. If you provide pest control in-house, inspect your pesticide product storage facility for these products. EPA has a list of products that meet their risk reduction standards (<http://www.epa.gov/pesticides/mice-and-rats/rodent-bait-station.html>).

EPA also has concerns about the active ingredients— anticoagulants—found in rodenticides, which act by reducing the ability of blood to clot. Mice and rats must feed on first generation anticoagulants (warfarin, coumarin) multiple times before getting a fatal dose. Second generation anticoagulants (brodifacoum, difethialone, bromadiolone, or difenacoum) are designed to be toxic in a

single feeding. Bromadiolone, for example, is found in products such as Conrac All-Weather Blox and Tomcat Ultra Block Bait.

EPA is requiring that “consumer size” products (products containing ≤ 1 pound of bait) do NOT contain second-generation anticoagulants. Second-generation coagulants are very toxic and persist a long time in body tissues. Since it takes several days to die, rodents can feed multiple times before death. The dead rodent carcasses may have residues that are many times the lethal dose. Wildlife or pets that feed on those poisoned rodents may consume enough to suffer harm. These compounds will be allowed for use in agricultural settings, but protective bait stations will be required for all outdoor, above-ground uses.



***A four-year survey (1999 to 2003) by the [Environmental Protection Agency](#) found that at least 25,549 children under age six ingested enough rodenticide to suffer poisoning symptoms. Currently about 15,000 calls per year come in to the [Centers for Disease Control](#) from parents whose children have eaten rodenticides. Even if you place bait where children can't get it, rodents are apt to distribute it around your house and property.***

**For More Information About  
The Colorado Coalition For  
School IPM:**

Colorado State University  
Fort Collins, CO 80523-1177  
Phone: 970-491-1377  
Email: [deborah.young@colostate.edu](mailto:deborah.young@colostate.edu)  
<http://coloradoipmcenter.agsci.colostate.edu>

The Colorado Coalition for School IPM is an effort by Colorado State University, U.S. Environmental Protection Agency, Colorado Department of Agriculture, Colorado Department of Public Health and Environment, Colorado Department of Education, school districts, National Environmental Health Association and private pest control professionals.



**For All The Latest News Don't Forget To  
Check Out Our Website/Blog at:**

[www.ccsipm.wordpress.com](http://www.ccsipm.wordpress.com)

**THE FLU AND YOU continued:**

Researchers found that germs may spread more quickly on hands (from touching contaminated surfaces ) than by coughing and sneezing. We touch many things during the day, especially in this push-button generation.

Disinfecting surfaces and washing hands is the best way to reduce your chance of infection.



**Be sure and keep regularly used surfaces clean to help prevent the spread of illness.**

**DOES MY SCHOOL NEED A WRITTEN PLAN FOR IPM?**

One-fifth of the schools in Colorado have a written plan for IPM. Plans might include policies on least-risk options to manage pests, practices to minimize pest pressure, food and food storage, use of furniture, and lists low-toxicity pesticides. IPM recommends

preventative practices and sanitation first and the use of low-risk pesticides after other methods have been ineffective. Sample policies and plans are available on the IPM Institute of North America website ([http://www.ipminstitute.org/school-ipm-2015/resources.htm#IPM\\_Policies](http://www.ipminstitute.org/school-ipm-2015/resources.htm#IPM_Policies)).



**Having a written plan helps you put all of the pieces of the IPM puzzle together quickly and efficiently!**