

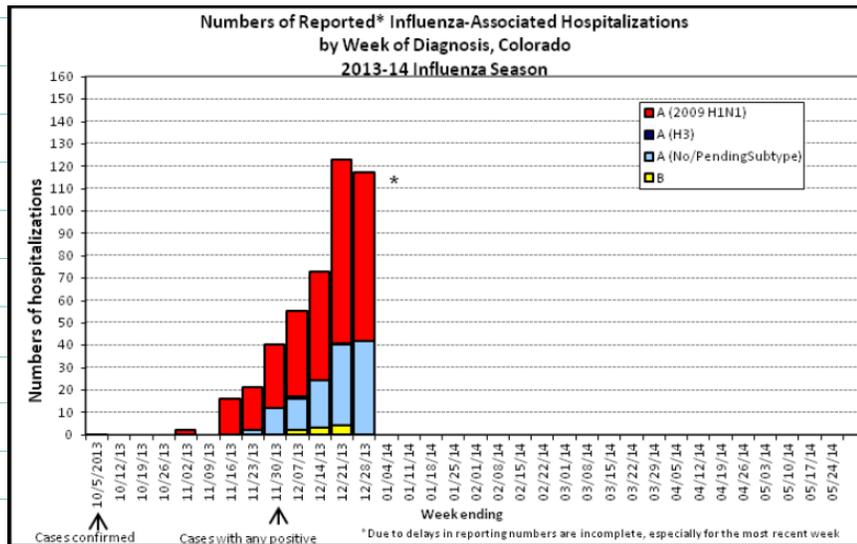
Healthy Colorado Schools

Colorado Department of Public Health and Environment



FROM THE CO. DEPT. OF PUBLIC HEALTH & ENVIRONMENT

Influenza activity (Influenza A) continues to increase in the state. A comprehensive cleaning program with a written protocol for infection control can help prevent the spread of pathogens (germs) that cause infectious diseases throughout the entire school. It also ensures that facilities use the most appropriate products and procedures available for the task to help avoid exposing product users and other building occupants to potential health hazards.



Special points of interest:

- ✓ Influenza & IPM
- ✓ School IPM Policy Update
- ✓ Bed Bugs
- ✓ InPESTigator—the new IPM science curriculum
- ✓ IPM on School Grounds
- ✓ IPM People
- ✓ Colorado Coalition For School IPM Quarterly Mtg. Date

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SCHOOL IPM POLICY UPDATE

The School IPM Policy working group has developed a generic School IPM policy that they will present to the Coalition at the January 27th meeting for review, discussion, and adoption.

The policy serves as a starting point and guideline for schools wishing to formalize their IPM programs. It is deliberately designed to allow individual schools to customize it to meet their districts' needs, while focusing on the common goal of health and wellness for students and staff.

Some of the key elements addressed in the draft include: IPM objectives, IPM Coordinator, IPM key components, use of pesticides, and transition time.

For more information please contact [Genevieve Berry](#).

IT'S NOT TOO COLD FOR BED BUGS

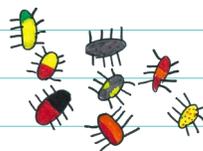
Entomologist Joelle Olson and her colleagues described how exposing bed bugs to freezing temperatures affects them (Journal of Economic Entomology). The study found that bed bug-infested clothing and other small items need a minimum of 80 hours at temperatures of 3 degrees F. Thus, at least here in Colorado, it doesn't stay cold for a long enough period of time to achieve 100% mortality.



Bed bugs, like many other insects, use a “freeze-intolerant” strategy against the cold, meaning they attempt to protect themselves from freeze injury by lowering the freezing point of their body fluids. For this study, the researchers evaluated the super-cooling point (SCP) and the lower lethal temperature (LLT) for all life stages of bed bugs, as well as their potential to feed after exposure to sub-lethal temperatures.

ARE YOU AN INPESTIGATOR?

“A Classroom InPESTigation: Life Science Curriculum for Grades 3-5” is a *new tool developed* by Colorado State University and Washington State University through a grant from the Western Region Integrated Pest Management Center. There are five, 50-minute lessons that emphasize critical thinking and investigation — just what you need to figure out a pest problem. After pilot testing the curriculum, one teacher said,



“My kids loved the entire unit. They loved them all! We

learned a ton and had a great time doing so”.

The teaching materials use Colorado and Washington State and Next Generation Science standards.

Students can help get parents interested in IPM. We want everyone to manage pests, indoors and outdoors, in homes, gardens, landscapes, fields, forests and schools, in ways that protect human and environmental health. For a copy of the curriculum (soon to be posted on the website), contact deborah.young@colostate.edu.



IPM ON SCHOOL GROUNDS

We plan on holding an IPM workshop for grounds this spring. In preparation, we conducted a short survey at the Rocky Mountain Region Turf Association meeting last month. Here's what we found out:

The average level of understanding about IPM was 2.6, on a scale of 1 to 5 (5 = know and understand IPM).

The average level of concern about pest management was 7.6, on a scale of 1 to 10 (10 = great concern).

The main weeds mentioned were thistles, dandelions and bindweed. Spot spraying and hand-weeding were the most prevalent methods of weed control. Many other methods were used.



Accepting broad leaf weeds as part of outdoor areas was lowest on the list.

The most common herbicides mentioned were 2,4-D, a combination of 2,4-D + dicamba, icamba alone, Surflan, and Roundup.

The most common insects noted were white grubs, cutworms, and sod webworms.

The most prevalent disease was Ascochyta, followed by Necrotic Ring Spot and anthracnose (tied).

The most common response to disease control was to use a variety of cultural practices, from mowing height to irrigation to fertilization. Several respondents said to "allow disease to run course".

IPM PEOPLE—HOW DID THEY GET HERE?

People find their way to IPM through various routes; sometimes it's a last ditch effort when everything else has failed to solve the problem, sometimes it's a course of study, or sometimes it's simply professional curiosity.

Eric Ufer, President of [Pest Solutions](#) in Portland, OR, discovered IPM when his rental properties in Pennsylvania became infested with bed bugs. He spent thousands of dollars trying to rid the apartments of bed bugs using traditional methods. His concern about the impact of the chemicals used and the question of how to safely manage pest, kept him awake at night – and led him to start a "Green" pest control company, after he burned out and quit being a stockbroker.

Bonnie Walker, an Environmental Technician for [Aurora Public Schools](#), is an IPM "back-in-the day" veteran. Her summer job at Purdue was in their IPM department. She conducted research for agricultural IPM while obtaining a degree in environmental science. Bonnie did all of this before IPM became the "school-yard" word it is today. Today she uses that knowledge and training to help Rita Davis successfully implement and grow their school IPM program.

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

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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**

**FOR MORE INFORMATION & IPM EXAMPLES CHECK OUT THE FLICKR PHOTO SETS —
EXAMPLES OF IPM PESTS & METHODS**

IPM PEOPLE continued:

Roger Reyes, I.P.M. Coordinator with the [Denver Public Schools](#) discovered IPM in Hawaii, (where they have some pretty impressive bug populations). Roger was working for a pest control company that used IPM, and he saw first-hand the benefits of IPM.

Kent Holle, responsible for Grounds and Pest Management at [St. Vrain School District](#) has studied IPM and received his certificate in Outdoor and Urban IPM through Purdue University's online program. Kent has been able to successfully apply his education to St. Vrain's playing fields, reducing the amount of herbicides used to keep the sports fields in excellent condition.

While no one's path to IPM is exactly the same, everyone involved with IPM shares one core belief: *A strong commitment to provide the safest and healthiest learning environment for the kids and staff in their schools.*

Quarterly meeting of the Colorado Coalition for School IPM

January 27, 2014 , 9:30 – 2:30

Hosted by Aurora Public Schools

Professional Learning & Conference Center

15771 East 1st Avenue, Aurora, CO 80011

**please contact [Deb Young](#) for more information or to RSVP
(RSVP required)**