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IPM for Microorganisms: Cleaning, Disinfecting, and Sanitizing

Between December and April the number of influenza cases peaks in the U.S. each year. During 2016 the number of cases was particularly high in many states. Gladly this year, case numbers are, so far, lower. School aged students (5-18 years) typically make up about 23% of flu cases, and as all teachers, school staff and parents know, a lot of students attend school when they are sick. Similarly, many faculty and staff feel that is impossible to take leave when they are battling a cold or minor illness.

In attempts to reduce the spread of flu and other pathogens in the classroom teaching staff often request that students bring disinfectant wipes into the classroom. Teachers may not realize that disinfectant wipes are registered pesticides as they are designed to kill microbes. Disinfectant products can be used in residential settings, schools, childcare facilities and medical centers safely and effectively, but there are a few things everyone should know:

1. **Always** follow **label** directions. The "Directions for Use" are specific, and the product may not work if you don't follow them. Most products require **application**, leaving to **stand** for a set amount of time, and **rinsing** completely with water to remove residues.
2. Most disinfectants require the use of protective gloves when using.
3. Dirt, food debris, and litter reduces the effectiveness of products.
4. Many products can be harmful when touched or inhaled. Certain ingredients pose particular problems for asthmatics and individuals with compromised lung function.
5. Whether disinfectants are used in medical or residential settings, or elsewhere, they may not be used on surfaces that come in contact with food.



It is entirely inappropriate to ask students to clean desks and surfaces with disinfectant wipes

If children are allowed to handle disinfectant wipes or breathe in the chemicals, you are not following label directions which is a breach of Federal Law.

Many labels clearly state "KEEP OUT OF REACH OF CHILDREN"

Some of the most commonly used ingredients are asthma triggers, skin and eye irritants.

Flu seasons are highly unpredictable. Although widespread flu occurs yearly, the timing, severity, and length of flu season depends on many constantly changing factors. Each year different flu viruses occur, different vaccines become available, and the number of people who are susceptible to the circulating flu viruses differs greatly. The timing of flu can vary from season to season. In the U.S., seasonal flu activity most commonly peaks between December and March, but flu viruses can cause illness from early October to late May.

So how can teachers maintain the healthiest classrooms and limit the spread of flu and other pathogens? **Flu viruses spread mainly from person to person through coughs and sneezes of infected people.** Less often, a person might get flu by touching a contaminated surface or object then touching their own mouth, eyes, or nose.

Encourage students and teachers to do the following:

- **Stay home when you are sick.** If possible, stay home from work, school, and errands when you are sick. You will help prevent others from catching your illness. Avoid close contact with people who are sick. Accommodate students keeping up with school work from home as much as possible.
- **Cover your nose and mouth** with a tissue when you cough or sneeze. Throw the tissue away immediately after use and **wash your hands**. If a tissue is not available, cover your mouth and nose with your sleeve, or the crook of your elbow (the “vampire sneeze”, **not** your hand).
- **Wash your hands often with soap and water**, especially after you cough or sneeze. Give students the opportunity to wash their hands. NEVER have students use disinfectant wipes as hand sanitizer wipes, these are two very different things.
- **Avoid touching your eyes, nose, or mouth.** Encourage students to avoid touching their own or others faces.
- **Clean and disinfect surfaces or objects.** This is a job for custodial or teaching staff (not students) who can accurately use products correctly following all the steps necessary.



Integrated Pest Management (IPM) is often used in schools for pests such as weeds, rodents, and cockroaches, but IPM principles can also be used for addressing microscopic pests such as viruses, fungi, and bacteria. When addressing microscopic pests, select the cleaning product based on the need, and only when necessary. For example, while soapy water is sufficient to clean up a spill, that’s the best option for the job. However, the correct use of a disinfectant may be required on wrestling mats to prevent the spread of infectious skin diseases like ringworm (a fungal infection of the skin). Remember that disinfectants are registered pesticides and therefore the label must be followed to avoid health problems such as eye injuries, chemical burns, and respiratory illness as well as to achieve disinfection.

The following links provides more information on cleaning, sanitizing, and disinfecting while minimizing hazards:

1. National Association of School Nurses
http://www.cleaningforhealthyschools.org/documents/NASN_poster_greencleaning.pdf
2. Cleaning for Healthy Schools Information sheet
http://www.cleaningforhealthyschools.org/documents/Sanitizers_and_Disinfectants_2014.pdf
3. National Pesticide Information Center <http://npic.orst.edu/factsheets/antimicrobials.html>
& <http://npic.orst.edu/outreach/schoolinfographic.pdf>
4. Classroom cleaning tips for teachers
<http://www.doh.wa.gov/Portals/1/Documents/Pubs/333-218.pdf>
5. U.S. Department of Health and Human Services
https://www.atsdr.cdc.gov/ntsip/docs/Reducing_Chemicals_in_Schools.pdf
6. California Department of Pesticide Regulation
<http://apps.cdpr.ca.gov/schoolipm/training/main.cfm>
7. EPA: https://www.epa.gov/sites/production/files/documents/ece_curriculumfinal.pdf

Citations

National Pesticide Information Center <http://npic.orst.edu/health/readlabel.html>
Washington State University <https://schoolipm.wsu.edu/microorganisms/>

Webinars and Events

Please join in for the [2017 All Bugs Good and Bad Webinar Series](#). This webinar series provides information about good and bad insects. Webinars are free and open to everyone. Webinars will be on the **first Friday of each month at 2 p.m. Eastern time**.

Upcoming webinars include:

1. Mosquitoes and Insect Borne Diseases - April 7, 2017
2. Ticks - May 5, 2017
3. Aphids, Scales, and White Flies - June 2, 2017

For more information about upcoming and past School IPM webinars:

<http://articles.extension.org/pages/74016/2017-all-bugs-good-and-bad-webinar-series>.

The **EPA Center of Expertise for School IPM** is now hosting its [2016 - 2017 webinar series](#) featuring experts from across the country relaying educational and practical strategies for establishing and improving integrated pest management programs in schools.

Upcoming webinars include:

1. Feed the Kids, Not the Pests: Effective IPM for Cafeterias and Kitchen - March 14, 2017
2. Contending with Invasive Plants on School Grounds - April 11, 2017
3. Managing Bed Bugs in Schools, Childcare Centers and Boarding Schools - May 9, 2017

For more information about upcoming and past School IPM webinars:

<https://www.epa.gov/managing-pests-schools/webinars-about-integrated-pest-management-schools>

April 19, Wednesday, 7:30-3:45 pm. Arizona. [Stop Pests in Housing Workshop](#). Maricopa Agricultural Center, University of Arizona, 37860 W Smith-Enke Rd, Maricopa, AZ 85138.

May 16, Tuesday, 7:30-3:45 pm. Arizona. [Stop Pests in Housing Workshop](#). Palo Verde Room, University of Arizona, Maricopa County Cooperative Extension Office, 4341 E. Broadway Road, Phoenix, AZ 85040.

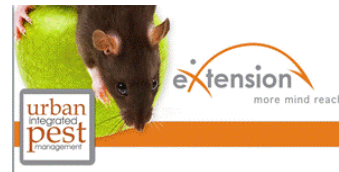
This workshop is a part of the Stop Pests in Housing Project: Enabling Residents to Live Pest Free and Housing Managers to Implement Integrated Pest Management (IPM). The purpose of this workshop is to provide information on: IPM, health impacts of bed bugs and cockroaches in homes, proven management strategies for bed bugs and German cockroaches in housing, pesticide safety, etc. **6 CEUs** will be provided for participating Arizona Pest Management Professionals licensed through Arizona Pest Management Division (formally OPM). Preregistration is required as space is limited. Questions and to register, please contact Dawn Gouge dhgouge@email.arizona.edu.

For more information about the EPA Schools program, visit:

<http://www.epa.gov/schools/>

For more information about Community IPM, visit:

<http://www.extension.org/pages/23359/urban-integrated-pest-management-community-page>



For more information about School IPM in Arizona, visit:

<http://cals.arizona.edu/apmc/westernschoolIPM.html>

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To view all our previous newsletters, visit:

<https://cals.arizona.edu/apmc/public-health-IPM.html#newsletter>

<https://cals.arizona.edu/apmc/westernschoolIPM.html#newsletter>

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