

# School & Home Integrated Pest Management (IPM) Newsletter – August 2017



COLLEGE OF  
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& LIFE SCIENCES  
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## IPM for Microorganisms: Cleaning, Disinfecting, and Sanitizing

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Back to school time brings thoughts of packed lunches, homework, friends, and fun in the learning environment for the school community, but for teachers it also brings concerns about managing their classrooms, and students with the sniffles, stomach bugs and flu. Although flu season does not usually start until winter, teachers plan for flu season well ahead of time. Influenza is a highly contagious viral infection of the respiratory passages including the nose, throat and lungs that often causes fever and severe aching. School aged students (5-18 years) typically make up about 23% of flu cases, and as all teachers, school staff and parents know, many students attend school when they are sick. Similarly, many faculty and staff feel that it is impossible to take leave when they are battling a cold or minor illness.



In attempts to reduce the spread of the flu virus and other pathogens (microorganism that causes disease) 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 or inactivate 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 disinfectant residues.
2. Many disinfectants require the use of protective gloves when using.
3. Dirt, food debris, and litter can reduce the effectiveness of the



disinfectant, and should be removed prior to the use of the disinfectant with a wet or dry cloth.

4. **Many products can be harmful when touched or inhaled.** Certain ingredients pose particular problems for asthmatics and individuals with compromised lung function. These products should be used in a well ventilated area or with the use of proper Personal Protective Equipment (PPE) such as a respirator or mask.
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 until residual disinfectant is removed. It is advised to review the label for use on food contact surfaces.

**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, or 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.
- **If you are ill cover your nose and mouth** with a tissue when you cough, sneeze or talk. Throw the tissue away immediately after use and **wash your hands with soap and water**. 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. Encourage students to wash hands effectively: 1) Rinse hands and arms up to the elbows, 2. Apply soap and lather for at least 15 seconds (sing the Happy Birthday song twice) cleaning hands, arms, and fingernails, 3. Dry with a paper towel. **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 as provided on the label.

Integrated Pest Management (IPM) may be used in schools for pests such as weeds, rodents, and cockroaches, but IPM principles can 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. While soapy water is sufficient to clean up a drink spill, it is not the best option for all jobs, for example a disinfectant is required to clean 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 in order to avoid health problems** such as eye injuries, chemical burns, and respiratory illness, as well as to achieve effective disinfection.

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

1. National Association of School Nurses  
[http://www.cleaningforhealthyschools.org/documents/NASN\\_poster\\_greencleaning.pdf](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](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](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. Stop School Pests (self-guided learning modules)  
<http://articles.extension.org/pages/73468/self-paced-learning-page-for-urban-ipm>
8. Washington State Cleaning Tips for Teachers  
<http://www.doh.wa.gov/CommunityandEnvironment/Schools/EnvironmentalHealth/ClassroomCleaning>

## A Few Final Flu Facts

1. You cannot get the flu from the flu vaccine. It is just impossible. You may still get flu, but it will not be because of the vaccination.
2. The flu is not “just a bad cold”. The flu (influenza viruses) cause serious disease. In the United States, about 200,000 people are hospitalized and tens of thousands of people die each year because of the flu. Children are 2–3 times more likely to develop influenza than adults and more than 20,000 children under the age of five are hospitalized due to the flu each year. Influenza kills about 100 children under the age of five in the United States every year. The Centers for Disease Control and Prevention recommends that children 6 months and older should get vaccinated against the flu every year.
3. People who have the flu often feel some or all of these signs and symptoms:
  - Fever\* or feeling feverish/chills
  - Cough
  - Sore throat
  - Runny or stuffy nose
  - Muscle or body aches
  - Headaches
  - Fatigue (very tired)Some people may have vomiting and diarrhea, though this is more common in children than adults.  
\*Not everyone with flu will have a fever.
4. You may be able to pass on the flu to someone else before you know you are sick, as well as while you are sick. Most individuals can infect others 1 day before symptoms develop and up to 5 to 7 days after becoming sick. Some people, especially young children and people with weakened immune systems, might be able to infect others for a longer period.
5. Complications of flu can include bacterial pneumonia, ear infections, sinus infections, dehydration, and worsening of chronic medical conditions, such as congestive heart failure, asthma, or diabetes.

### Citations

National Pesticide Information Center <http://npic.orst.edu/health/readlabel.html>  
Washington State University [https://schoolipm.wsu.edu/microorganisms/Families\\_Fighting\\_Flu](https://schoolipm.wsu.edu/microorganisms/Families_Fighting_Flu) [https://www.familiesfightingflu.org/resources/flu-fact-vs-fiction/?qclid=Cj0KCQjwiLDMBRDFARIsACNmiX-Dj3bKUvsHuELwCzflCcnmrbr73QDqz-6KANkgmxyHT50LEAJTQ8caApJBEALw\\_wcB](https://www.familiesfightingflu.org/resources/flu-fact-vs-fiction/?qclid=Cj0KCQjwiLDMBRDFARIsACNmiX-Dj3bKUvsHuELwCzflCcnmrbr73QDqz-6KANkgmxyHT50LEAJTQ8caApJBEALw_wcB)

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## 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. Meet Our Native Pollinators - September 1, 2017
2. New Invasive Ants to Know About - October 6, 2017
3. Pantry Pests, Carpet Beetles, and Clothes Moths- November 3, 2017
4. Don't Let Bed Bugs Hamper Your Vacation Plans! – December 1, 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>.

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>



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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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