



### Highlights

- Washing hands with soap and water is the best and least expensive approach!
- Alcohol-based hand rubs are the next best.
- Do not introduce toxic chemicals into the environment while trying to protect from the influenza virus.
- Avoid the chemical triclosan as the active ingredient in any product.

### In the News..... Schools Deploy Arsenal of Sanitizers Against Swine Flu Threat

Threat Pushes Sales Up for Manufacturers

*One school is placing hand sanitizers everywhere: Germ-X sanitizer at the front desk in the main office, soap and Kleenex tissue in the bathrooms, Germ-X, Purell soap and Kleenex tissue in the grade classroom. Lessons in coughing technique and washing hands properly are also given.* For the full article:

<http://www.washingtonpost.com/wp-dyn/content/article/2009/09/16/AR2009091603551.html>

With the advent of H1N1 schools are concerned about making sure the school is safe. Are some of them going too far and unknowingly introducing hazardous chemicals? The current guidance is evolving.



## Guidelines for Schools

The general policy on hand hygiene as recommended by CDC includes the following approaches in decreasing order of effectiveness for control of influenza viruses:

1. Washing hands with soap and water (as long as it takes to sing the Happy Birthday song twice) and is the **most effective** method of prevention.
2. Cleaning hands using an **alcohol**-based hand-rub sanitizer that contains greater than 60% alcohol (ethyl or isopropyl ) ex. Purell, Germ X, Sani Hands for Kids. These products significantly reduce the number of germs on the skin and are fast acting. However, they are not effective if hands are visibly dirty.
3. Cleaning hands using a **non-alcohol** based hand-rub gel sanitizer. These sanitizers have not been proven to be as effective as the alcohol-based sanitizers against viruses. In addition, many of these products contain triclosan. This chemical has raised health concerns and should be avoided. It is in 75% of liquid hand and dish soaps including major name brands and store brands. Look for it listed as the active ingredient.

The use of anti-microbials found in many liquid and bar soaps should be limited. Overuse of these may lead to the development of resistant bacteria.

## WHAT IS THE DIFFERENCE BETWEEN HAND SANITIZERS, CLEANERS, SANITIZERS AND DISINFECTANTS? These terms are often used interchangeably, but are not the same.

**Hand sanitizers** are designed as a personal care product to be used if soap and water is not available. They contain ingredients to help reduce the number of germs on the hand. They are not effective if hands have visible dirt on them. They should not contain any ingredients such as bleach or phenol (Lysol) that could be hazardous to health.

**All Purpose Cleaners** remove dirt and most organisms. These cleaners are used on surfaces and are not intended for use on the body. Choose the less toxic, third party certified green cleaners.

**Sanitizers** reduce bacteria by 99.9%. They are designed to clean dirt and germs from hard surfaces such as bathroom counters, doorknobs, etc. There are third-party certified green sanitizers available that have lower or no toxicity, fewer volatile organic compounds, and minimal health effects.

**Disinfectants** destroy multiple specific test organisms. They are designed to kill specific bacteria and viruses and therefore contain more toxic ingredients. They are considered pesticides and are regulated by the EPA. Disinfectants should be used judiciously. To date there are no third-party certified green disinfectants. Choose the least toxic disinfectant that has been proven to be effective against the virus or bacteria in question. Products containing quaternary ammonium compounds or hydrogen-peroxide are less toxic disinfectants. Each disinfectant has different requirements for the amount of contact time with the surface to be effective. The surface generally has to be cleaned before a disinfectant is applied.

To determine whether a product is safe and effective, specific information on each product should be reviewed. This can be done by reviewing the Material Safety Data Sheet (MSDS) or technical bulletin provided by the manufacturer. Check the label for usage directions and health warnings such as caution, poison, caustic, and danger.

**Cleaners don't disinfect and disinfectants don't clean.**

The new Green Cleaning in Schools law—Public Act 09-81—AN ACT CONCERNING GREEN CLEANING PRODUCTS IN SCHOOLS prohibits individuals from bringing in their own cleaning supplies. Schools may wish to provide teachers with small bottles of the third-party certified all-purpose cleaning products used by the custodial staff.

### **RESOURCES**

- CDC H1N1 website: Provides the latest guidelines for schools response to the flu.  
<http://www.cdc.gov/h1n1flu/schools/technicalreport.htm>
- NLM Household Products Database: Health & Safety information on household products.  
<http://hpd.nlm.nih.gov/index.htm>
- Inform Cleaning for Health: Educational materials on the *Cleaning for Health* program.  
[www.informedgreensolutions.org](http://www.informedgreensolutions.org)
- DPH/Flu: Provides CT specific flu information and information for schools and families.  
<http://www.ct.gov/ctfluwatch/site/default.asp>
- CTDPH: Cleaning Schools Effectively the Safe & Healthy Way. A guidance document for schools.  
[http://www.ct.gov/dph/lib/dph/environmental\\_health/eoha/pdf/disinfectant\\_fs\\_revised.pdf](http://www.ct.gov/dph/lib/dph/environmental_health/eoha/pdf/disinfectant_fs_revised.pdf)