

EXISTING MAINTENANCE PRODUCTS

Which products does your school use and why?

Who uses them?

Where are they stored?

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|---|-----------------------------------|
| Air Freshener/Room or Toilet Deodorizer | Graffiti Remover |
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| All-purpose Cleaners | |
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| | Gum Remover |
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| Bathroom Cleaners or Deodorizers | |
| | |
| | Hand Soaps |
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| Carpet Cleaners | Heavy Duty Cleaner |
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| Carpet Stain Removers | |
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| Disinfectants, Sanitizers | Miscellaneous |
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| Enzymes/Bacterial | Pesticides |
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| | |
| Floor Care | |
| | |
| | Toilet Cleaner |
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| Furniture Polish: wood, metal, laminate, plastic | Upholstery fabric cleaners |
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| Glass Cleaners | |
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To find this and more information on how to adopt best practices for green cleaning in schools, please visit the Cleaning for Healthy Schools website: www.cleaningforhealthyschools.org.

FREQUENTLY ASKED QUESTIONS: Cleaning for Healthy Schools: Products and Practices for a Safer Indoor Environment

What is "Cleaning for Healthy Schools"?

Cleaning for Healthy Schools (CfH) is an approach to cleaning that uses safer, less toxic products while achieving a cleaner and healthier school and releasing fewer harmful particulates and toxic substances into the environment.

How does CfH work?

This program combines safer, less toxic cleaning products with dirt reduction strategies (such as walk-off mats at entrance points) and advanced technology (such as microfiber mops and cloths, high-filtration vacuums and vacuum attachments for other floor care equipment).

Why is equipment important?

High-performance equipment is an important component of environmentally preferable cleaning because these tools—such as high efficiency particulate air (HEPA) filtration vacuum cleaners, microfiber mops and cloths, multilevel walk-off mats, and two-chamber mop buckets—are designed to prevent dirt and soil from contaminating surfaces, thus reducing the amount of chemicals required for cleaning.

Can cleaning products really be dangerous?

One out of three cleaning products contains ingredients known to cause human health or environmental problems.¹ A study conducted by the Janitorial Products Pollution Prevention Project found that the average janitor uses 48 pounds of hazardous chemicals per year.² Some of the ingredients in conventional cleaning products can cause cancer, mutate genetic material, sensitize the skin, and cause chemical burns. The effects of these chemicals can be serious. A review of workers' compensation data from Washington state found that 6 out of 100 janitors are injured by chemicals every year; the most common injuries are serious burns to the eyes or skin.³

Another major concern is that many cleaning chemicals contain respiratory irritants. Even short-term exposure to cleaning agents can trigger asthmatic attacks.⁴ Janitorial staff are even more at risk than other building occupants. A study published in the American Journal of Industrial Medicine found that janitorial workers and firefighters experience the highest rates of occupational asthma.⁵ All building occupants are affected by the indoor environmental quality (IEQ) of a facility. Research tells us that improving IEQ will improve performance and reduce absenteeism and building related health problems.⁶ Cleaning chemicals and processes affect the quality of the indoor air.

How do the concepts "green", "environmentally preferable" and "CfH" differ?

"Green" is a non-regulated, generic term that is promoted to the general public as meaning "safer for the environment." But because there is no officially sanctioned definition of "green", many products use the term in their title without actually being better for health or the environment. "Environmentally preferable" is a term used in government and other large-scale discussions to mean products that are in some way demonstrably better for the environment. But this could refer to the amount of recycled material used in the product, or using less toxic chemicals, or conserving energy. CfH uses products and strategies that are safer for the health of the people working or living in schools and for the environment.

Does CfH cost more than what we're doing now?

It doesn't have to. For most schools, there are trade-offs which balance out.

Is a plant-based product (also known as bio-based) inherently healthier or safer for the environment than other products?

Not necessarily. While there are benefits to using plant-based products rather than petroleum (oil) products because the basic building blocks (plants) can be grown year after year, there is little information about the health effects from many plant-based ingredients. Just because something comes from plants doesn't make it safe - but doesn't mean it's more dangerous than petroleum-based products, either. CfH focuses on choosing products that have been certified by independent companies as being safer for people and the environment, regardless of what their basic building blocks are.

Can cleaning chemicals really be more dangerous for children than adults?

Yes. Cleaning chemicals can cause bigger problems for children because they are more vulnerable to toxic chemicals than adults: Children breathe more frequently and more deeply than adults, which means toxic chemicals and dust in the air are more likely to get into children's bodies.⁷ Children are also more likely to sit on floors, engage in repeated hand-to-mouth activities, and place their heads on surfaces - and so they are more likely to come into contact with toxic chemicals on surfaces. Because their bodies are still growing and developing, when children get toxic chemicals in their bodies, these chemicals can have different and more long-lasting health problems.^{8,9}

Coming into contact with, swallowing or breathing in toxic chemicals has been linked to learning disabilities, problems with how brains develop, and cancer, and research is ongoing. The relationships between chemical exposure and childhood learning disabilities, neurological problems, and cancer are currently being researched. However, it could be decades before we understand the reasons for the exponential increase in childhood neurological disorders.¹⁰

How do we know which cleaning products are really better for our health and the environment? Can't we just read the labels on the packages?

Product labels come from manufacturers or distributors of products. What is included on the labels is not well enforced by federal or state government. Companies that sell you your cleaning products may not even know the complete, true chemical contents of the products.

Because of this, the only real way to tell the chemical contents is to ensure that cleaning products are certified by independent ("third-party" - not the maker or the buyer) groups to make sure that they meet certain specific criteria to reduce risks to human health and the environment.

The most common non-profit, third-party certification organizations used in the U.S. are Green Seal and EcoLogo (formerly known as Environmental Choice). These groups evaluate products to be sure they are effective, and follow rules to protect human health and the environment. These organizations rely on stakeholder groups that represent industry, human health, and environmental concerns to develop these generally accepted standards.

Some districts have their own certification process.

How do we know if a product is third-party certified?

Environmentally preferable cleaning chemicals that have been third-party certified usually carry the mark or label of that "third party".



Do the products recommended in the CfH Program work as well as the products we have been using?

The third-party certification process also verifies performance of the products. They must work as well as or better than traditional cleaning products that perform the same task. For more information about the performance of environmentally certified products, contact the Toxics Use Reduction Institute's Simple Solutions Laboratory at the University of Massachusetts Lowell. See the following website: www.turi.org/content/content/view/full/2231/.

Are products recommended in the CfH Program used differently?

Using the new generation of environmentally preferable products can require changes in cleaning practices or methods. The Green Seal certification process recommends manufacturers provide training in the use of the new chemicals. Request training from your vendor.

- 1 GovPro.com, "Purchasers Buy Safer, Effective, and Affordable Commercial Cleaning Chemicals," no date, available at <http://www.govpro.com/ASP/viewArticle.asp?strArticleID=104096&strSite=GOVPROS>.
- 2 Janitorial Products Pollution Prevention Project, "Southern California Janitorial Chemicals Safety Project," January 2002, available at <http://www.wrppn.org/Janitorial/socalresults.cfm>.
- 3 Janitorial Products Pollution Prevention Project, *How to Select and Use Safe Janitorial Chemicals*, Project Completion Report, December 1999, p. viii, available at <http://www.p2pays.org/ref/21/20377.pdf>.
- 4 C. E. Mapp, V. Pozzato, V. Pavoni, and G. Gritti, "Severe Asthma and ARDS Triggered by Acute Short-Term Exposure to Commonly Used Cleaning Detergents," *European Respiratory Journal* 16, 3 (September 2000): 570–72.
- 5 F. Reinisch, R. J. Harrison, S. Cussler, et al., "Physician Reports of Work-Related Asthma in California, 1993–1996," *American Journal of Industrial Medicine* 39, 1 (January 2001): 72–83.
- 6 P. W. Wargocki, D. P. Wyon, and P. O. Fanger, "Pollution Source Control and Ventilation Improve Health, Comfort and Productivity," in *Proceedings of the Cold Climate HVAC Conference 2000*, pp. 445–50, Sapporo, Japan, November 1–3, 2000; and M. J. Mendell, W. J. Fisk, M. Petersen, et al., "Indoor Particles and Symptoms among Office Workers: Results from a Double-Blind Cross-Over Study," *Epidemiology* 13, 3 (2002): 296–304.
- 7 US Environmental Protection Agency, "Children's Health: Childhood Asthma Is Increasing," June 10, 2004.
- 8 P. J. Landrigan, "Children as a Vulnerable Population," *International Journal of Occupation, Medicine, and Environmental Health* 17, 1 (2004): 175–77.
- 9 L. R. Goldman, "Children—Unique and Vulnerable: Environmental Risks Facing Children and Recommendations for Response," *Environmental Health Perspectives* 103, Supplement 6 (September 1995): 13–18.
- 10 Michael Szpir, "New Thinking on Neurodevelopment," *Environmental Health Perspectives* 12, 2 (February 2006): A101–7.