



# Disinfecting Wipes: Unsafe for Kids & Classrooms!

Healthy Schools Network, Inc. ©2016

[www.healthyschools.org](http://www.healthyschools.org)  
[www.cleaningforhealthyschools.org](http://www.cleaningforhealthyschools.org)

## ***DISINFECTING WIPES POSE HEALTH THREAT FOR SCHOOL CHILDREN***



## **BACKGROUND**

► Disinfectants are a normal part of every school's cleaning program. Federal and state health regulations and guidance materials specify which disinfectants to use, which germs they should be used against, and when they are required (e.g., for cleaning up bodily spills, for disinfecting or sanitizing kitchen and food preparation areas, or in nurses' offices). Supermarket-bought disinfecting wipes are typically not designed for these situations.

► Children are not just "little adults." Children are uniquely vulnerable to environmental contaminants. Their bodies are still developing; they eat, drink, and breathe more per pound of body weight than adults; they spend more time outside; their lungs are still developing; and they are less aware of hazards or how to avoid them. At school, children are assigned to classes and desks, and are expected to follow directions. This means they may not be able to say "no" to disinfectants used around them, or "no" to using a hazardous product to clean up their desktops, if directed to by school personnel.

► Cleaning, disinfecting, and sanitizing are all different. According to the CDC:

*Cleaning* removes germs, dirt, and impurities from surfaces or objects. Cleaning works by using soap (or detergent) and water to physically remove germs from surfaces. This process does not necessarily kill germs, but by removing them, it lowers their numbers and the risk of spreading infection.

*Disinfecting* kills germs on surfaces or objects. Disinfecting works by using chemicals to kill germs on surfaces or objects. This process does not necessarily clean dirty surfaces or remove germs, but by killing germs on a surface after cleaning, it can further lower the risk of spreading infection.

*Sanitizing* lowers the number of germs on surfaces or objects to a safe level, as judged by public health

standards or requirements. This process works by either cleaning or disinfecting surfaces or objects to lower the risk of spreading infection.”<sup>1</sup>

## DANGERS OF DISINFECTING WIPES

- ▶ Many popular wipes contain toxic chemicals that can cause immediate acute side effects such as skin and eye irritation (Fig.1), as well as contribute to chronic and long-term conditions.
- ▶ Disinfecting wipes contain active ingredients that have been found to cause:
  - Asthma (e.g., chlorine bleach/sodium hypochlorite, peroxyacetic acid, quats.)
  - Cancer (e.g., ortho-phenylphenol)
  - Skin sensitization (e.g., chlorine bleach, pine oil, thymol).
- ▶ Disinfecting chemicals often contain a class of substances called quaternary ammonium compounds or “quats”. These chemicals are skin irritants, can irritate your lungs, and have been linked to asthma and reproductive harm.
- ▶ The overuse of antibacterial cleaners can promote antibacterial-resistant bacteria, aka “super-bugs.”

Children should never be directed to use disinfectant wipes or other hazardous chemicals at school. But they can and should help keep their classrooms clean. Children can usually clean up small classroom spills with damp paper towels or micro-fiber cloths. For bigger jobs, teachers should keep a water-diluted, certified green cleaning product in a spritzer bottle at the ready or alert the custodian.

### Federal and state regulations that may pertain to disinfecting wipes used at school:

- Twenty-six states have restrictions on the use of pesticides by schools.
- Occupational Safety and Health (OSHA) regulations require that workers have access to Safety Data Sheets (SDS) on products they handle on the job. That means that if a parent voluntarily sends a disinfecting wipe to a school or a wipe is purchased by the school for employee use, it must be accompanied by an SDS which is kept on file at the school.

## DO DISINFECTING WIPES WORK? *Not necessarily.*

- ▶ Often disinfecting wipes aren’t necessary because simple cleaning is all that is needed.
- ▶ Many people mistakenly believe that disinfectants work instantly on contact. Truth is, they don’t. They have to be used exactly as directed in order to work. The process of disinfecting means a surface must first be cleaned, then the wet disinfectant applied and allowed to sit for a “dwell time,” allowed to dry, and rinsed clean (Fig. 2). Only then will the surface be very temporarily free of most germs. This is a time consuming process rarely undertaken in schools.
- ▶ All disinfectants have “dwell” times. Many require minutes at a time to be effective. Read the product label and use exactly as directed. Simply wiping will not disinfect, yet this is how the product is almost always used. ***Read the directions on the Lysol and Clorox wipes’ labels.*** (Fig. 1 & 2).
- ▶ Also, according to the Food and Drug Administration (FDA): “There currently is no evidence that over-the-counter (OTC) antibacterial soap products are any more effective at preventing illness than washing with plain soap and water.”

---

<sup>1</sup> “How To Clean and Disinfect Schools To Help Slow the Spread of Flu”: <http://www.cdc.gov/flu/school/cleaning.htm>

## HOW TO KEEPS DESKS, CLASSROOMS, & KIDS CLEAN

- ▶ Teaching proper hand-washing techniques and encouraging healthy habits through diet and exercise are excellent ideas -and both can be effective in reducing student absenteeism and illness in the classroom.
- ▶ Only use sanitizers and disinfectants when *absolutely necessary*. For instance, bodily spills can contain viruses and bacteria and using specific disinfectants in such cases may be required. But they must be used properly and children should not be exposed to the chemicals.
- ▶ Parents need to insist that their schools use third-party-certified green cleaning products (certified by Green Seal or UL-EcoLogo), which are readily available to all schools and diluted for different jobs, including wiping down desktops. Studies show switching to these products does not cost more money—in fact, it often produces major cost savings.

## MORE INFORMATION

[Cleaning for Healthy Schools](#)

[San Francisco Environment’s Comprehensive Report on Safer Disinfectant Products](#)

[Environmental Working Group’s Lysol Report Card](#)

[New York State’s Green Cleaning Program](#)

[National Pesticide Information Center's Antimicrobial Fact Sheet](#)

[FDA Taking Closer Look at 'Antibacterial' Soap](#)



Figure 1. Disinfectant wipes label reading “PRECAUTIONARY STATEMENTS: Hazards to Humans and Domestic animals. CAUTION: May cause eye irritation. Avoid contact with eyes. Wash hands after use.” Note as well that to sanitize, the surface must remain wet for 30 seconds; to disinfect, it must remain wet for a full 10 minutes.

Claims Comparison	Clorox Commercial Solutions® Clorox® Disinfecting Wipes	Lysol® Professional Brand Disinfecting Wipes	Wipes Plus® Disinfecting Wipes
Disinfection time	1-4 min ✓	30 sec-10 min (Only Human Immunodeficiency Virus type 1 [HIV-1] at 30 sec, rest at 4-10 min) ✓	10 min
Number of disinfecting claims	25	31 ✓	12
Sanitization time	10-sec sanitization ✓	10-30 sec sanitization	N/A
Compliant with OSHA Bloodborne Pathogens Standard	Yes ✓	No	No
Number of allergen-removal claims	12 ✓	12 ✓	No
One-step product (no pre-cleaning required)	Yes ✓	No	No

Figure 2. Chart displaying disinfection time for different brands of wipes. The shortest is 1-4 minutes, the longest is 10. From Clorox web page: “<https://www.cloroxprofessional.com/products/clorox-disinfecting-wipes/at-a-glance/>”