

Eco-Healthy Child Care® helps early childhood learning environments to be as healthy, safe and green as possible by reducing children's exposure to toxic chemicals.



# **Household Chemicals**

#### **Health Concerns**

Household chemicals can be toxic to our health and to the environment. Of the 85,000 synthetic chemicals in commercial use today, only a small fraction has been individually tested for toxicity on human health. A wide variety of toxic or hazardous chemicals are routinely used as ingredients for cleaning products. Household chemicals can make indoor air unhealthy to breathe, irritate the skin and eyes, harm the respiratory tract and endocrine system, and pollute the natural environment. Children are especially vulnerable to toxic chemicals because their bodies and organs are still developing. Children are exposed to toxic chemicals through inhalation, skin contact and ingestion.

#### What's the Difference\*?

Make sure the product you choose is doing the job you need it to do.

Routine *cleaning* with detergent and water is the most useful method for removing germs from surfaces in the child care setting.

A **sanitizer** is a product that reduces germs on inanimate surfaces to levels considered safe by public health codes or regulations. A sanitizer may be appropriate to use on food contact surfaces, toys that children may place in their mouths, and pacifiers.

A *disinfectant* is a product that destroys or inactivates germs on an inanimate object. A disinfectant may be appropriate to use on non-porous surfaces such as diaper change tables, counter tops, door and cabinet handles, and toilets and other bathroom surfaces.

## **Choose Safer Cleaning Products**

Safer cleaning products are not only less-toxic and environmentally safe, but they also often cost the same as conventional cleaners.

Green Seal and EcoLogo are non-profit companies that research and certify products that are biodegradable and environmentally friendly. Visit <a href="https://www.greenseal.org">www.greenseal.org</a> and/or <a href="https://www.ecologo.org">www.ecologo.org</a> to verify whether the products you use are safe, healthy and effective. And for companies that are striving for greener chemistry, visit EPA's Design for the Environment website <a href="https://www.epa.gov/dfe">www.epa.gov/dfe</a>.

## **Proper Sanitization and Disinfection\***

Properly diluted unscented regular strength household bleach is commonly used to sanitize and disinfect in child care, as it is easily accessible and affordable. IMPORTANT: Household bleach is now being sold in a variety of concentrations. It is very important to identify the concentration of sodium hypochlorite in the product you purchase so that you can mix the correct amount of bleach and water. The higher the percentage of sodium hypochlorite, the stronger the bleach is. See page 2 for more information.

Mixing an effective yet safe ratio of bleach to water is important. If too much bleach is used, it can affect the breathing of some children; if too little bleach is used, the solution will not properly sanitize or disinfect.

\*portions adapted from Caring for Our Children, 3rd edition

Sanitization and disinfection solutions of bleach and water lose their strength very quickly and easily. The solutions are weakened by organic material, evaporation, heat, and sunlight. Therefore, bleach solutions should be mixed fresh each day to make sure they are effective. Any leftover solution should be discarded at the end of the day. Keep the bleach solution you mix each day in a cool place out of direct sunlight. Always ensure that chlorine bleach solutions are out of the reach of children, as bleach can cause severe damage to eyes and skin, and may be harmful if swallowed.

Keep in mind that there are safe, effective alternatives to chlorine bleach. Healthier options are peroxide-based bleach products that are registered by EPA for use in sanitizing and disinfecting. Remember to always use the least toxic cleaner, sanitizer or disinfectant. For EPA-registered sanitizers and disinfectants, visit: <a href="https://www.epa.gov/dfe">www.epa.gov/dfe</a>.

#### **Paints and Finishes**

Indoor air can be more polluted than outdoor air. Off-gassing from paints and finishes is one of the main sources of poor indoor air quality. For years after paint is applied, low-level toxic fumes are released into the air. Volatile Organic Compounds (VOCs) are the source of these toxic emissions, and until recently, these chemicals were always used in

paint and finish. Low-VOC paints can now easily be found in local stores. Be sure to purchase "low-VOC" paints to protect your health and the environment.

#### **Aerosols**

Keep aerosol spray away! Aerosol sprays - such as deodorants, hair sprays, carpet cleaners, furniture polish and air fresheners - spew invisible droplets of chemicals into the air. The invisible droplets are inhaled by children and can trigger both asthma and allergies.

#### **Bleach**

Read the label to find the concentration of sodium hypochlorite (bleach) in the product to make sure you are using the right amount of bleach and water.

For an 8.25% sodium hypochlorite (bleach) solution, follow this helpful guidance offered by the National Resource Center for Health and Safety in Child Care and Early Education: <a href="http://cfoc.nrckids.org/Bleach/Bleach.cfm">http://cfoc.nrckids.org/Bleach/Bleach.cfm</a>.

- Use only an EPA-registered, unscented product. The product you purchased should have a label that says EPA Reg# and lists the number.
- Follow the manufacturer's instructions.

For a 5.25-6% sodium hypochlorite (bleach) solution, continue to follow the dilution and contact time instructions provided in <a href="mailto:Appendix J">Appendix J</a> of Caring for Our Children, available at: <a href="http://cfoc.nrckids.org/WebFiles/AppendixJ.pdf">http://cfoc.nrckids.org/WebFiles/AppendixJ.pdf</a>

FOR MORE INFORMATION

Call: 202-543-4033, ext. 13

Email: info@ecohealthychildcare.org

Visit: www.cehn.org/ehcc

#### **Household Chemicals Resources**

- Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs, 3rd Edition (See Appendix J for information on Bleach)
   http://cfoc.nrckids.org/
- Green Cleaning, Sanitizing, and Disinfecting: A Toolkit for Early Care and Education cerch.org/research-programs/child-care/ greencleaningtoolkit/
- Eco-Healthy FAQs on Fragrances www.cehn.org/ehcc/FAQ
- Bleach Solutions
   public.health.oregon.gov/HealthyPeopleFamilies/Babies/HealthChildcare/Pages/bleach.aspx

→ More Household Chemicals resources can be found at: www.cehn.org/ehcc/resources

Eco-Healthy Child Care® (EHCC) is a science-based, award-winning national program that seeks to improve the environmental health of children by partnering with child care professionals to eliminate or reduce environmental health hazards found in child care facilities. Originally created by the Oregon Environmental Council in 2005, EHCC is now managed by Children's Environmental Health Network.

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