### Children are at greater risk for exposure to toxic chemicals

It is important to avoid introducing unneeded chemicals into the child care environment because:

- Children’s bodies are still developing
- Exposure to chemicals can have a greater health impact
- Children breathe faster and eat and drink more with respect to their size
- Behaviors like crawling on floors and putting things in their mouths can expose children to more chemicals and microorganisms

### What is the difference between products that clean, sanitize, and disinfect?

- **Cleaners:** All-purpose cleaning agents remove dirt and many microorganisms by physical scrubbing/wiping. Use green cleaners or water with soap or detergents.
- **Sanitizers:** Sanitizers reduce amounts of bacteria on inanimate surfaces to acceptable levels. Their use is regulated by the U.S. EPA.
- **Disinfectants:** Disinfectants kill many bacteria and viruses on hard, non-porous surfaces. Their use is regulated by the U.S. EPA.

### Select and use disinfectants carefully:

- Choose a disinfectant that is effective against specific microorganism(s) of interest. Product labels must state this information.
- Disinfectants work best on surfaces that are free from dirt and grime. Clean surfaces with general purpose cleaners before using disinfectants.
- Let disinfectants sit on the surface for the amount of time specified on the label.
- Use disinfectants only in target areas. See table on page 2.

### Know when to clean, sanitize, or disinfect

Use an all-purpose **cleaner** on surfaces first to remove grime. Then, **disinfect** surfaces that come in contact with bodily fluids. **Sanitize** food contact surfaces and surfaces touched by many hands. See table on page 2.

### GREEN CLEANING

**Use green cleaners whenever you clean**

Green cleaning products have less harmful effects on human health and the environment when compared with competing products.

Use Green Cleaners that are certified by a third party such as Green Seal, Eco-Logo or Safer Choice/Design for the Environment.

### READ THE LABELS on ALL Products

- **Look for Signal Words:** Poison (most dangerous), Danger, Warning, Caution (least dangerous)
- **Check the ingredients:** Look for products with less toxic ingredients such as plant-based ingredients, no ammonia, no bleach, no fragrance, and with a more neutral pH (7)
- **Look for the EPA Registration number** on sanitizers and disinfectants
- **Look for products that are certified** by an independent third party: Green Seal, Eco-Logo, Safer Choice/Design for the Environment
**Recommended Cleaning, Sanitizing, and Disinfection Protocols for Child Care Areas**

<table>
<thead>
<tr>
<th>Area</th>
<th>Use Green Cleaners</th>
<th>Sanitize</th>
<th>Disinfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>General: shelves, windows, high countertops, carpets, glass</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surfaces touched by many hands (doorknobs, push bars, stair railings)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Diaper changing areas, bathrooms</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Mouthed toys, water fountains</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kitchen: eating utensils, bottles, dishes; food preparation areas</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Surfaces/Objects contaminated with blood &amp; body fluids</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

**During an outbreak of GI illness or flu, clean/sanitize more frequently, between uses or groups.**

**What About Bleach & Quats?**

Public health professionals now recommend avoiding products containing bleach for routine cleaning and disinfecting. Instead, they recommend using safer yet effective products with hydrogen peroxide as the active ingredient. Bleach is known to trigger asthma attacks and cause new cases of asthma in those who use it frequently, like janitors and custodians, professional house cleaners, and maids. For some of these people, very small exposures can cause increasing symptoms after the first exposure.

Another family of chemicals to avoid during routine cleaning and disinfection are quaternary ammonium compounds or “Quats.” They can cause similar health problems. Quats are found in many disinfectants. Here are some examples of quats:

- **Benzalkonium chloride**— also called:
  - N-alkyl-dimethyl benzyl ammonium chloride;
  - alkyl dimethylbenzylammonium chloride; Zephiran; Benzalkon A; ADBAC
  
- **Didecyl dimethyl ammonium chloride**:
  - Also called: DDAC

**CT DPH** recommends using US EPA-registered bleach-free disinfectants and sanitizers with hydrogen peroxide as the active ingredient.

For more information:

- Third Party Certifiers: [Green Seal](#), [Eco-Logo](#) or [Safer Choice/Design for the Environment](#) (DfE)
- [2013 Update Report: Bleach-free Disinfection and Sanitizing for Child Care](#)
- [Green Cleaning, Sanitizing, and Disinfecting: A Curriculum for Early Care and Education](#)
- [Cleaning for Healthy Schools - Infection Control Handbook](#)
- [Caring for Our Children: National Health and Safety Performance Standards](#)