Cleaning, Sanitizing and Disinfecting in Child Care Settings

Proper cleaning and sanitation are important to insuring that children attending a child care program remain healthy by reducing the risk of illness by decreasing bacteria, viruses, fungi and mold. Young children sneeze, cough, drool, and regularly need diapers or assistance with toileting. They hug, kiss, touch everything, put things in their mouths and spread germs. Young children’s immune systems are immature and as a result children tend to experience colds and other illnesses more frequently than older children and adults, especially when they spend time in child care. The Wisconsin Child Care Certification and Licensing Rules (DCF 202, 250 and 251) require that diaper changing surfaces be cleaned and disinfected between diaper changes. The Group Child Care Licensing Rules (DCF 251) require that dishes and utensils be cleaned and sanitized after use.

Note Some bleach is now being sold with a higher concentration of sodium hypochlorite. Please see section on bleach solutions for more information.

What is the difference between cleaning, sanitizing and disinfecting?

<table>
<thead>
<tr>
<th>Process</th>
<th>Solution/Product Necessary</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleaning</td>
<td>ALWAYS CLEAN BEFORE SANITIZING or DISINFECTING</td>
<td>Scrub, wash, and rinse surface. Dirt can prevent sanitizers/disinfecants from working effectively.</td>
</tr>
<tr>
<td>Sanitizing</td>
<td>Dishes, food contact surfaces, toys a child may mouth, etc</td>
<td>Cover the cleaned area with sanitizing solution. Leave the solution to air dry or follow the manufacturer’s recommendation before wiping off.</td>
</tr>
<tr>
<td>Disinfecting</td>
<td>Diapering areas, bathrooms, and all bodily fluids.</td>
<td>Cover the cleaned area with disinfecting solution. Leave the solution to air dry or follow the manufacturer’s recommendation before wiping off.</td>
</tr>
</tbody>
</table>

All disinfectants sanitize, but not all sanitizers are capable of disinfecting.

A quaternary ammonia product that appears on the list of approved sanitizers may be used for both sanitizing dishes and disinfecting diaper changing surfaces if it has been mixed to the correct ratio per the manufacturer’s instructions.

What can be used to sanitize and disinfect?

- Sanitizing and disinfecting are usually done using products called antimicrobials that kill bacteria, viruses, fungi and mold on hard surfaces.
- Because antimicrobials are intended to kill germs, they are pesticides.
- All products used to sanitize or disinfect must be registered by the Environmental Protection Agency (EPA).
- **Bleach is the most commonly used product for sanitizing and disinfecting in early childhood settings.**

How should sanitizers and disinfectants be stored?

- Working containers of sanitizers or disinfectants (such as spray bottles) must be labeled as sanitizing or disinfecting solutions.
- Working containers of disinfecting solutions must be prepared each day and kept out of the reach of children.
- Bulk containers of sanitizers or disinfectants must be labeled with the contents and must be kept out of the reach of children.
- Sinks or dishpans of sanitizers used to sanitize clean dishes or toys must be prepared prior to use. The open container used to sanitize dishes or toys must also be used out of the reach of children.

Can soft surfaces or linens or linens be sanitized?

Yes, soft furnishings, removable coverings, clothing, linens and cloth toys should be washed and sanitized when soiled or disinfected when contaminated with bodily secretions. To sanitize or disinfect these types of items:

- Wash materials with hot water measured at a temperature of at least 140°F. or with an approved laundry sanitizer or disinfectant.
- Linens and toys should be dried completely in a clothes dryer on the highest heat setting possible.
**BLEACH**

**Why do so many child care programs choose bleach as a sanitizer and disinfectant?**

- It is Wisconsin Licensing/Certification-Approved.
- It’s readily available, and fairly inexpensive
- Bleach is easy to use.
- If used correctly, a low concentration of bleach reliably sanitizes and disinfects non-porous surfaces of common and harmful bacteria.
- Has a short killing time
- Does not need to be rinsed as it breaks down quickly into harmless components.

*Currently, there is no substitute for bleach that is as economical and effective.*

**Update January 2013:** Some bleach is now being sold with a higher concentration of sodium hypochlorite than was previously available (8.25% sodium hypochlorite versus the formerly available bleach solution of 5.25%-6%). Solutions below are for the lower concentration of sodium hypochlorite at 5.25%-6%. If a program uses bleach with a higher concentration of sodium hypochlorite it must be an EPA registered product and it must be diluted based on the label instructions when used for disinfecting or sanitizing.

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### Bleach Solution Preparation Tips
- Use caution when mixing bleach. If bleach is mixed with other cleaners or chemicals hazardous gases may be released.
- Always follow licensing rules for proper solution strength.
- Set up a specific location to mix the bleach solution.
- Store bleach in a well-ventilated area inaccessible to children.
- Assign a specific person the responsibility of mixing the disinfecting bleach solution daily. Wear gloves and eye protection when diluting bleach.
- Use a funnel to pour bleach into cool water.
- Keep the bleach solution properly labeled and out of the reach of children.
- Do not spray bleach solution when children are nearby.
- Keep solution out of direct sunlight to preserve the effectiveness of chlorine.

### Bleach Sanitizing Solution
(5.25%-6% sodium hypochlorite at 50 – 100 ppm)
- 1/16 teaspoon bleach to 1 cup cool water
- OR
- ¼ teaspoon bleach to 1 quart cool water
- OR
- 1 ½ teaspoon bleach to 1 gallon cool water

Use this solution to sanitize dishes, food contact surfaces, toys that a child may mouth, etc.

**Working containers of disinfecting solutions must be prepared each day and kept out of the reach of children.**

### Bleach Disinfecting Solution
(5.25%-6% sodium hypochlorite at 500 – 800 ppm)
- ¾ teaspoon bleach to 1 cup cool water
- OR
- 1 tablespoon bleach to 1 quart cool water
- OR
- ¼ cup bleach to 1 gallon cool water

Use this solution to disinfect diapering areas, bathrooms, and any surfaces known to be or commonly contaminated by blood, vomit, urine, feces, sputum, mucus, or other bodily fluids.

**Working containers of disinfecting solutions must be prepared each day and kept out of the reach of children.**

### Sanitizing Alternatives to Bleach
Any product that appears on the list of approved sanitizers published by the Wisconsin Department of Health Services may be used in accordance to its label.

### Disinfecting Alternatives to Bleach
A quaternary ammonia product or any product that that is EPA registered as a hospital-grade disinfectant may be used in accordance to its label.

Sanitizers and disinfectants other than bleach have benefits as well as limitations. For example, when using a quaternary ammonia (quat) product, a longer contact time is required and the product needs to be rinsed off if it is used on a surface that may be mouthed by children. As with bleach, proper cleaning of equipment and surfaces with soap or detergents before applying the sanitizer is required.

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