

## Cleaning, Sanitizing, and Disinfecting in Child Care Settings

Young children sneeze, cough, drool, and regularly need diapering 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. Proper cleaning and sanitation decreases bacteria, viruses, fungi, and mold, thereby reducing the risk of illness and helping the children attending a child care program remain healthy.

### What is the difference between cleaning, sanitizing and disinfecting?

	Process	Solution / Product Necessary	Result
<b>Cleaning</b> Always clean before sanitizing or disinfecting.	Scrub, wash, and rinse surface. Dirt can prevent sanitizers / disinfectants from working effectively.	Mild detergent & Water	Removal of visible dirt, soil, and debris from surface.
<b>Sanitizing</b> Dishes, food contact surfaces, toys a child may mouth, etc.	Cover the cleaned area with <i>sanitizing</i> solution. Follow the manufacturer's instructions for preparing, applying, contact time, and rinsing.	Only bleach or a sanitizer that has an EPA registration label and an indication that it has been approved for use as a food contact sanitizer may be used to sanitize dishes and food contact surfaces in group child care centers.	Reduction of the number of bacterial contaminants to safe levels in one test.
<b>Disinfecting</b> Diapering areas, bathrooms, all bodily fluids.	Cover the cleaned area with <i>disinfecting</i> solution. Follow the manufacturer's instructions for preparing, applying, contact time, and rinsing.	Licensing rules require bleach or a quaternary ammonia product to be used to disinfect diaper changing surfaces. A product with an EPA registration label and an indication that it has been approved for use as a disinfectant may also be used.	Disinfecting is a higher level of germ killing. It is the destruction of pathogenic and other micro-organisms on surfaces in multiple tests.

### 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. Note Some bleach is now being sold with a higher concentration of sodium hypochlorite. Please see the section below on bleach solutions for more information.
- All disinfectants sanitize, but not all sanitizers are capable of disinfecting. Any EPA registered product that carries food-contact sanitizing instructions as well as disinfectant instructions on the label may be used for both sanitizing dishes and disinfecting diaper changing surfaces if it has been mixed to the correct ratio indicated by the manufacturer.

### How should sanitizers and disinfectants be stored?

- Working containers of sanitizing or disinfecting solutions (such as spray bottles) must be labeled as sanitizing or disinfecting solutions.
- Working containers of sanitizing or disinfecting solutions must be prepared and used within the time frame outlined in the manufacturer's instructions.
- Working containers of sanitizing or disinfecting solutions must be 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.
- Open containers of sanitizing solutions (such as sinks or dishpans) used to sanitize clean dishes or toys must be prepared and used within the time frame outlined in the manufacturer's instructions.
- Open containers of sanitizing solutions used to sanitize clean dishes or toys must be kept 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 degrees Fahrenheit 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 Child Care Licensing / Certification-Approved.
- It's readily available and fairly inexpensive.
- It is easy to use.
- If used correctly, a low concentration of bleach reliably sanitizes and disinfects non-porous surfaces of common and harmful bacteria.
- It has a short contact time
- It does not need to be rinsed because it breaks down quickly into harmless components.
- Currently, there is no substitute for bleach that is as economical and effective.

### BLEACH SOLUTIONS

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 in the chart below are based on using the bleach containing 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 manufacturer's instructions.

Bleach Solution Preparation Tips	Bleach Sanitizing Solution (5.25%-6% sodium hypochlorite at 50 – 100 ppm)	Bleach Disinfecting Solution (5.25%-6% sodium hypochlorite at 500 – 800 ppm)
<ul style="list-style-type: none"> <li>• Use caution when mixing bleach. If bleach is mixed with other cleaners or chemicals hazardous gases may be released.</li> <li>• Always follow licensing rules for proper solution strength.</li> <li>• Set up a specific location to mix the bleach solution.</li> <li>• Store bleach in a well-ventilated area inaccessible to children.</li> <li>• Assign a specific person the responsibility of mixing the disinfecting bleach solution daily. Wear gloves and eye protection when diluting bleach.</li> <li>• Use a funnel to pour bleach into cool water.</li> <li>• Keep the bleach solution properly labeled and out of the reach of children.</li> <li>• Do not spray bleach solution when children are nearby.</li> <li>• Keep solution out of direct sunlight to preserve the effectiveness of chlorine</li> </ul>	<p>1/16 teaspoon bleach to 1 cup cool water</p> <p>OR</p> <p>¼ teaspoon bleach to 1 quart cool water</p> <p>OR</p> <p>1½ teaspoon bleach to 1 gallon cool water</p> <p>Use this solution to sanitize dishes, food contact surfaces, toys that a child may mouth, etc.</p> <p>Working containers of sanitizing solutions <b>must be prepared each day</b> and kept out of the reach of children.</p>	<p>¾ teaspoon bleach to 1 cup cool water</p> <p>OR</p> <p>1 tablespoon bleach to 1 quart cool water</p> <p>OR</p> <p>¼ cup bleach to 1 gallon cool water</p> <p>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.</p> <p>Working containers of disinfecting solutions <b>must be prepared each day</b> and kept out of the reach of children.</p>

### SANITIZERS AND DISINFECTANTS OTHER THAN BLEACH

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. Always follow the manufacturer's instructions. No matter which products are used during the sanitizing and disinfecting steps, proper cleaning of equipment and surfaces with soap or detergents before applying the sanitizer is always required.

**Sanitizer Alternatives:** Any product that has an EPA registration label and an indication that it has been approved for use as a food contact sanitizer may be used in the sanitizing step as long as the product is used in accordance with the manufacturer's instructions.

**Disinfectant Alternatives:** A quaternary ammonia product, or any product that has an EPA registration label and indication that it is a disinfectant, may be used in the disinfecting step as long as the product is used in accordance with the manufacturer's instructions.

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