

#### Office of Child Care: GENERAL SANITATION GUIDELINES

#### **CLEANING AND SANITIZING**

Keeping a clean and sanitary child care environment is one of the most important defenses against the spread of illness or infection among children and providers.

Carefully washing surfaces, materials, and equipment with detergent and water or other cleansers is sufficient for cleaning them and for removing many germs that could present a health risk. However, some surfaces and items must be sanitized with a disinfectant after they are washed or cleaned because they are especially likely to become contaminated and serve as vehicles for transmitting illness. In these cases, only use of a disinfecting agent will ensure that germs are virtually eliminated or reduced to a level where the transmission of illness is unlikely.

Cleaning agents (soap, detergent) are not disinfectants, and disinfectants are not cleaning agents. Disinfectants will not work effectively if the surface has not been cleaned first. Before being sanitized with a disinfectant, an object or surface should be washed with a cleaning agent and rinsed with clean water.

# **Selecting an Appropriate Sanitizer or Disinfectant**

One of the most important steps in reducing the spread of infectious diseases in child care settings is cleaning, sanitizing or disinfecting surfaces that could possibly pose a risk to children or staff.

Routine cleaning with detergent and water is the most common method for removing some germs from surfaces in the child care setting. However, most items and surfaces in a child care setting require sanitizing or disinfecting after cleaning to further reduce the number of germs on a surface to a level that is unlikely to transmit disease.

# What is the difference between sanitizing and disinfecting?

Sometimes these terms are used as if they mean the same thing, but they are not the same.

*Sanitizer* is a product that reduces but does not eliminate 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 (dishes, utensils, cutting boards, high chair trays), toys that children may place in their mouths, and pacifiers. See Appendix K, Routine Schedule for Cleaning, Sanitizing and Disinfecting for guidance on use of sanitizer vs. disinfectant.

**Disinfectant** is a product that destroys or inactivates germs (but not spores) on an inanimate object. A disinfectant may be appropriate to use on hard, non-porous surfaces such as diaper change tables, counter tops, door & cabinet handles, and toilets and other bathroom surfaces. See Appendix K, Routine Schedule for Cleaning, Sanitizing and Disinfecting for guidance on use of sanitizer vs. disinfectant.

The U.S. Environmental Protection Agency (EPA) recommends that only EPA-registered products be used. Only a sanitizer or disinfectant product with an EPA registration number on the label can make public health claims that they are effective in reducing or inactivating germs. Many bleach and hydrogen peroxide products are EPA-registered and can be used to sanitize or disinfect. Please see the "How to Find EPA Registration Information" section below to learn more specific information on the products.

Always follow the manufactures' instructions when using EPA-registered products described as sanitizers or disinfectants. This includes pre-cleaning, how long the product needs to remain wet on the surface or item, whether or not the product should be diluted or used as is, and if rinsing is needed. Also check to see if that product can be used on a food contact surface or is safe for use on items that may go into a child's mouth. Please note that the label instructions on most sanitizers and disinfectants indicate that the surface must be pre-cleaned before applying the sanitizer or disinfectant.

#### Are there alternatives to chlorine bleach?

A product that is not chlorine bleach can be used in child care settings IF:

- it is registered with the EPA;
- it is also described as a sanitizer or as a disinfectant;
- it is used according to the manufacturer's instructions.

Check the label to see how long you need to leave the sanitizer or disinfectant in contact with the surface you are treating, whether you need to rinse it off before contact by children, for any precautions when handling, and whether it can be used on a surface that may come in contact with child's mouth.

Some child care settings are using products with hydrogen peroxide as the active ingredient instead of chlorine bleach. Check to see if the product has an EPA registration number and follow the manufacturer's instructions for use and safe handling. (Please see the "How to Find EPA Registration Information" section below for more information.) Remember that EPA-registered products will also have available a Material Safety Data Sheet (MSDS) that will provide instructions for the safe use of the product and guidance for first aid response to an accidental exposure to the chemical.

In addition, some manufacturers of sanitizer and disinfectant products have developed "green cleaning products" that have EPA registration. As new environmentally-friendly cleaning products appear in the market, check to see if they are EPA-registered.

#### Household Bleach & Water

Many household bleach products are now EPA-registered. When purchasing EPA-registered chlorine bleach, make sure that the bleach concentration is for household use, and not for industrial applications. Household chlorine bleach is typically sold in retail stores as an 8.25% sodium hypochlorite solution.

EPA-registered bleach products are described as sanitizers and disinfectants. Check the label to see if the product has an EPA registration number and follow the manufacturer's safety and use instructions. (Please see the "How to Find EPA Registration Information" section below for more information.) Pay particular attention to the mixing "recipe" and the required contact time (i.e., the time the solution must remain on a surface to be effective) for each use. Remember, the recipe and contact time are most likely different for sanitizing and disinfecting.

If you are not using an EPA-registered product for sanitizing and disinfecting, please be sure you are following state or local recommendations and/or manufacturer's instructions for creating safe dilutions necessary to sanitize and/or disinfect surfaces in your early care and education environment. Using too little (a weak concentration) bleach may make the mixture ineffective; however, using too much (a strong concentration) bleach may create a potential health hazard.

# To safely prepare bleach solutions:

- Dilute bleach with cool water and do not use more than the recommended amount of bleach.
- Select a bottle made of opaque material.
- Make a fresh bleach dilution daily; label the bottle with contents and the date mixed.
- Wear gloves and eye protection when diluting bleach.
- Use a funnel.
- Add bleach to the water rather than the water to bleach to reduce fumes.
- Make sure the room is well ventilated.
- Never mix or store ammonia with bleach or products that contain bleach.

# To safely use bleach solutions:

- Apply the bleach dilution after cleaning the surface with soap or detergent and rinsing with water if visible soil is present.
- If using a spray bottle, adjust the setting to produce a heavy spray instead of a fine mist.
- Allow for the contact time specified on the label of the bleach product.
- Apply when children are not present in the area.
- Ventilate the area by allowing fresh air to circulate and allow the surfaces to completely air dry or wipe dry after the required contact time before allowing children back into the area.
- Store all chemicals securely, out of reach of children and in a way that they will not tip and spill.

Adapted from: California Childcare Health Program. 2013. Safe and Effective Cleaning sanitizing and disinfecting. *Health and Safety Notes* (March).

#### To Review:

- Determine if the surface requires sanitizing or disinfecting;
- Check the labels of all products to see if they are EPA-registered; there are alternatives to chlorine bleach;
- Many chlorine bleach products (8.25% sodium, hypochlorite) are now EPA-registered.
   If EPA-registered, you must follow the label instructions for "recipes" and contact times:
- If using non-EPA-registered products, follow state or local recommendations for "recipes" and contact times;
- Prepare and use the solutions safely;
- Use products that are safe for oral contact when used on food contact surfaces or on items that may mouthed by children.
- Before using anything other than a bleach-and-water solution for sanitizing, consult with your CCA Regional Office.

### **Cautions:**

- When using a bleach-and-water solution, make sure the bleach concentration is intended for household use, not for industrial application. Household chlorine bleach is typically sold in retail stores as an 8.25% sodium hypochlorite solution.
- Never mix bleach or a bleach-and-water solution with other fluids (particularly ammonia or acidic fluids like vinegar) because this will rapidly create highly toxic fumes.
- Whenever children are present, bleach solution (or any other disinfectant) should be applied by dipping, soaking, or wiping the item or surface with a cloth (but not a sponge, since sponges harbor bacteria and are hard to clean). Spraying is acceptable only when:
  - Children are not present, or
    Dipping/soaking is not feasible and wiping with a cloth is likely to spread the contamination for example, when disinfecting diapering stations, and toilets
- Whenever a disinfectant of any kind is used, there should always be adequate ventilation. This is especially important in confined or enclosed areas such as bathrooms. A child who is asthmatic or sensitive to the disinfectant should be kept away from the immediate area until it can dissipate completely. If this step is not sufficient, the operator or provider should discuss with the child's parent other alternatives for reasonably accommodating the child's sensitivity.
- If using a commercial disinfectant, always read the label carefully and follow the manufacturer's instructions for use.
- Bleach-and-water solutions lose their strength and are weakened by heat and sunlight. For maximum effectiveness, mix a fresh solution every day. Discard any leftover solution at the end of the day.
- Keep all containers and bottles of diluted and undiluted sanitizer out of the reach of children. Label containers in which sanitizers have been diluted for direct application with the name of the solution (such as "Bleach Sanitizer") and the dilution of the mixture.

How strong a disinfectant solution should be and how long it should remain in contact with a particular surface will depend on how the solution is applied and on how contaminated the surface might be. A stronger concentration is required when a cloth or objects are dipped into the solution because each dipping releases some germs into the solution, potentially contaminating the solution. In general, it is best not to rinse off the solution or wipe the object dry right away. A disinfectant must be in contact with germs long enough kill them.

Because chlorine evaporates into the air leaving no residue, surfaces sanitized with bleachand-water may be left to air dry. Many industrial sanitizers require rinsing with fresh water before the object can be used again.

# The following two bleach-and-water solution strengths are recommended by the CDC:

### **Strong Bleach Solution**

- Recipe: ¼ cup of bleach to 1 gallon of cool water OR 1 tablespoon of bleach to 1 quart of cool water (add the bleach to the water in either case).
- Minimum contact time: 2 minutes

### Weak Bleach Solution

- Recipe: 1 tablespoon bleach + 1 gallon of cool water
- Minimum contact time: 1 minute

# **Schedule For Cleaning And Disinfecting Specific Items**

### Toys and Mouthed Items:

- Clean at least once a week, then disinfect with Bleach Solution, then air dry.
- Items placed in a child's mouth should be cleaned as needed and not be allowed to pass from one child to another without being cleaned and disinfected.

# Food Preparation and Service Area (including Tables and Chairs used for Meals or Snacks):

• After each use, wipe off, clean, and disinfect with Strong Bleach Solution all surfaces and equipment used for food preparation and service.

### **Eating Utensils and Dishes:**

• Clean and rinse utensils and dishes, then submerge in Weak Bleach Solution.

#### Washable Equipment and Furniture:

- Clean at least two times each year.
- Equipment and furniture should be checked at least once each week for cleanliness and cleaned as appropriate.

#### Cots:

- Clean at least twice each year.
- Always clean and disinfect with Strong Bleach Solution before reassigning a cot to another child.

### Blankets and Sheets Belonging to the Home:

• Launder at least once each week or when they become soiled (whichever occurs first), and between uses if used by another child.

#### Blankets and Sheets Belonging to the Children:

Send home at least every week to be laundered.

### Toilets:

Disinfect with Strong Bleach Solution at least once daily or more frequently as needed.

### Bathroom Sinks and Water Fixtures:

• Clean and disinfect with Strong Bleach Solution daily.

#### Potties:

- After each use, empty, clean if soiled, disinfect with Strong Bleach Solution, then rinse.
- Dispose of the rinse-water by pouring it into the toilet, not into the sink.
- Cloths used for cleaning a potty should be:

  If disposable, used once and then thrown away, or

  If reusable, store in Strong Bleach Solution before laundering.

### **Stuffed Animals:**

Launder at least once each week (provide and/or allow stuffed animals that can be laundered).

# Low Shelves, Doorknobs, and Other Surfaces that are Frequently Touched by Diapered Children:

Wash and disinfect with Strong Bleach Solution daily.

### Walls and Ceilings:

Spot-clean when visibly soiled.

# Wastebaskets:

Empty daily. Use paper or plastic liners.

# Floors (non-Carpeted):

• Wash and disinfect with Strong Bleach Solution at least once a week.

#### Carpets:

- Vacuum daily.
- Shampoo several times per year, as needed.

# **Cleaning Up Body Fluids**

NOTE: Always treat urine, stool, vomit, blood, and body fluids as potentially infectious. Always clean up spills of body fluid and sanitize contaminated surfaces immediately.

- For small amounts of urine and stool on smooth surface
  - Wipe off urine/stool and wash affected area with a detergent solution.
  - > Rinse the surface with clean water.
  - Apply a Strong Bleach Solution to the surface for at least the minimum required contact time.
- For larger spills on floors, or any spills on rugs or carpets:
  - > Wear gloves while cleaning. Disposable gloves can be used, but household rubber gloves are adequate for all spills except blood and bloody body fluids
  - Disposable gloves (latex or vinyl vinyl is less likely to cause an allergic skin reaction) should be used whenever blood may be present in the spill.

- ➤ Take care to avoid splashing any contaminated material onto the mucous membranes of your eyes, nose or mouth, or into any open sores you may have.
- ➤ Wipe up as much of the visible material as possible with disposable paper towels and carefully place the soiled paper towels and other soiled disposable material in a leak-proof, plastic bag then securely tie or seal the plastic bag
- ➤ Use a wet/dry vacuum on carpets, if such equipment is available.
- Immediately use a detergent, or a disinfectant-detergent to clean the spill area. Then rinse the area with clean water.
- For blood and body fluid spills on carpeting, blot to remove body fluids from the fabric as quickly as possible. Then spot-clean the area with a detergent-disinfectant instead of a bleach solution.
- ➤ Additional cleaning by shampooing or steam cleaning the contaminated surface may be necessary
- ➤ Sanitize the cleaned and rinsed surface by wetting the entire surface with a Strong Bleach Solution.

# Dry the surface

- Clean and rinse reusable household rubber gloves, then treat them as a contaminated surface in applying the Strong Bleach Solution to them. Remove, dry and store these gloves away from food or food surfaces. Discard disposable gloves.
- Mops and other equipment used to clean up body fluids should be:
  - > Cleaned with detergent and rinsed with water,
  - > Rinsed with a fresh batch of Strong Bleach Solution,
  - > Wrung as dry as possible, and
  - > Air-dried.
- Wash your hands afterward, even though you wore gloves.
- Remove and bag clothing items (yours and those worn by children) that have been soiled by body fluids.