

Cleaning and Disinfection Procedures

Keeping the child care environment clean and orderly is very important for health, safety, and the emotional well-being of both children and providers. One of the most important steps in reducing the number of germs, and therefore the spread of disease, is the thorough cleaning of surfaces that could possibly pose a risk to children or staff. Surfaces considered most likely to be contaminated are those with which children are most likely to have close contact. These include toys that children put in their mouths, cribs rails, food preparation areas, and surfaces likely to become very contaminated with germs, such as diaper-changing areas.

Routine cleaning with soap and water is the most useful method for removing germs from surfaces in the child care setting. Good mechanical cleaning (scrubbing with soap and water) physically reduces the numbers of germs from the surface, just as handwashing reduces the numbers of germs from the hands. Removing germs in the child care setting is especially important for soiled surfaces which cannot be treated with chemical disinfectants, such as some upholstery fabrics.

However, some items and surfaces should receive an additional step, **disinfection**, to kill germs after cleaning with soap and rinsing with clear water. Items that can be washed in a dishwasher or hot cycle of a washing machine do not have to be disinfected because these machines use water that is hot enough for a long enough period of time to kill most germs. The disinfection process uses chemicals that are stronger than soap and water. Disinfection also usually requires soaking or drenching the item for several minutes to give the chemical time to kill the remaining germs. Commercial products that meet the Environmental Protection Agency's (EPA's standards for "hospital grade" germicides (solutions that kill germs) may be used for this purpose. One of the most commonly used chemicals for disinfection in child care settings is a homemade solution of household bleach and water. Bleach is cheap and easy to get. The solution of bleach and water is easy to mix, is nontoxic, is safe if handled properly, and kill most infectious agents. (Be aware that some infectious agents are not killed by bleach. For example, cryptosporidia is only killed ammonia or hydrogen peroxide.)

A solution of bleach and water loses its strength very quickly and easily. It is weakened by organic material, evaporation, heat, and sunlight. Therefore, bleach solutions should be mixed fresh each day to make sure it is effective. Any leftover solution should be discarded and the end of the day. NEVER mix bleach with anything but fresh tap water! Other chemicals may react with bleach and create and release a toxic chlorine gas.

Keep the bleach solution you mix each day in a cool place out of direct sunlight and out of the reach of children. (Although a solution of bleach and water mixed as shown in the accompanying box should not be harmful if accidentally swallowed, you should keep all chemicals away from children.)

If you use a commercial (brand-name) disinfectant, read the label and always follow the manufacturer's instructions exactly.

**Recipe for Bleach Disinfecting Solution
(For use in bathroom diapering areas, etc.)**

1/4 cup bleach
1 gallon of cool water

OR

1 tablespoon bleach
1 quart cool water

Add the house hold bleach (5.25% sodium hypochlorite) to the water.

**Recipe for Weaker
Bleach Disinfecting Solution
(For use on toys, eating utensils, etc.)**

1 tablespoon bleach
1 gallon cool water

Add the bleach to the water

Washing and Disinfecting Toys

- Infants and toddlers should not share toys. Toys that children (particularly infants and toddlers) put in their mouths should be washed and disinfected between uses by individual children. Toys for infants and toddlers should be chosen with this in mind. If you can't wash a toy, it probably is not appropriate for an infant or toddler.
- When an infant or toddler finishes playing with a toy, you should retrieve it from the play area and put it in a bin reserved for dirty toys. This bin should be out of reach of the children. Toys can be washed at a later, more convenient time, and then transferred to a bin for clean toys and safely reused by the other children.

- To wash and disinfect a hard plastic toy:
 - Scrub the toy in warm, soapy water. Use a brush to reach into the crevices.
 - Rinse the toy in clean water.
 - Immerse the toy in a mild bleach solution (see above) and allow it to soak in the solution for 10-20 minutes.
 - Remove the toy from the bleach and rinse well in cool water.
 - Air dry.
- Hard plastic toys that are washed in a dishwasher or cloth toys washed in the hot water cycle of the hot water cycle of a washing machine do not need to be additionally disinfected.
- Children in diapers should only have washable toys. Each group of children should have its own toys. Toys should not be shared with other groups
- Stuffed toys used by only a single child should be cleaned in a washing machine every week, or more frequently if heavily soiled.
- Toys and equipment used by older children and not put into their mouths should be cleaned at least weekly and when obviously soiled. A soap and water wash followed by clear water rinsing and air drying should be adequate. No disinfection is required. (These types of toys and equipment include blocks, dolls, tricycles, trucks, and other similar toys.)
- Do not use wading pools for children in diapers.
- Water play tables can spread germs. To prevent this:
 - Disinfect the table with chlorine bleach solution before filling it with water.
 - Disinfect the all toys to be used in the table with chlorine bleach solution. Avoid using sponge toys. They can trap bacteria and are difficult to clean.
 - Have all children wash their hands before and after playing in the water table.
 - Do not allow children with open sores or wounds to play in the water table.
 - Carefully supervise the children to make sure they don't drink the water.
 - Discard water after play is over.

Washing and Disinfecting Bathroom and Other Surfaces

Bathroom surfaces, such as faucet handles and toilet seats, should be washed and disinfected several times a day, if possible, but at least once a day or when soiled. The bleach and water solution or chlorine-containing scouring powders or other commercial

bathroom surface cleaner/disinfectants can be used in these areas. Surfaces that infants and young toddlers are likely to touch or mouth, such as crib rails, should be washed with soap and water and disinfected with a nontoxic disinfectant, such as bleach solution, at least once every day, more often if visibly soiled. After the surface has been drenched or soaked with the disinfectant for at least 10 minutes, surfaces likely to be mouthed should be thoroughly wiped with a fresh towel moistened with tap water. Be sure not to use a toxic cleaner on surfaces likely to be mouthed. Floors should be washed and disinfected at least once a day and whenever soiled.

Washing and Disinfecting Diaper Changing Areas

Diaper Changing Areas should:

- Only be used for changing diapers.
- Be smooth and nonporous, such as Formica (NOT wood).
- Have a raised edge or low “fence” around the area to prevent a child from falling off.
- Be next to a sink with hot and cold running water.
- Not be used to prepare food, mix formula, or rinse pacifiers.
- Be easily accessible to providers.
- Be out of reach of children.

Diaper changing areas should be cleaned and disinfected after each diaper changer as follows:

- Clean the surface with soap and water and rinse with clear water.
- Dry the surface with a paper towel.
- Thoroughly wet the surface with the recommended bleach solution.
- Air dry. Do not wipe.

Washing and Disinfecting Clothing, Linen, and Furnishings

Do not wash or rinse clothing soiled with fecal material in the child care setting. You may empty solid stool into the toilet, but be careful not to splash or touch toilet water with your hands. Put the soiled clothes in a plastic bag and seal the bag to await pick up by the child’s parent or guardian at the end of the day. Always wash your hands after handling soiled clothing.

Explain to parents that washing or rinsing soiled diapers and clothing increases the chances that you and the children may be exposed to germs that cause diseases. Although receiving soiled clothes isn’t pleasant, remind parents that this policy protects the health of all children and providers. Each item of sleep equipment, including cribs, cots, mattresses, blankets, sheets, etc., should be cleaned and sanitized before being assigned to a specific child. The bedding items should be labeled with that child’s name, and should only be used by that child. Children shall not share bedding. Infants’ linens (sheets, pillowcases, blankets) shall be cleaned and sanitized

daily, and crib mattresses shall be cleaned and sanitized weekly and when soiled or wet. Linens from beds of older children shall be laundered at least weekly and whenever soiled. However, if a child inadvertently used another child's bedding, you shall change the linen and mattress cover before allowing the assigned child to use it again. All blankets shall be changed and laundered routinely at least once a month.

Cleaning up Body Fluid Spills

Spills of body fluids, including blood, feces, nasal and eyed discharges, saliva, urine, and vomit shall be cleaned up immediately. Wear gloves unless the fluid can be easily contained by the material (e.g., paper tissue or cloth) being used to clean it up. Be careful not to get any of the fluid you are cleaning in your eyes, nose, mouth or any open sores you may have. Clean and disinfect any surfaces, such as counter tops and floors, on which body fluids have been spilled. Discard fluid-contaminated material in a plastic bag that has been securely sealed. Mops used to clean up body fluids should be (1) cleaned, (2) rinsed with a disinfecting solution, (3) wrung as dry as possible, and (4) hung to dry completely. Be sure to wash your hands after cleaning up any spill.

Source: The ABCs of Safe and Healthy Child Care: A Handbook for Child Care Providers, Department of Health and Human Services, U.S. Public Health Service, Centers for Disease Control and Prevention.