

# Chapter 3: Health Promotion and Protection

## 3.3 Cleaning, Sanitizing, and Disinfecting

### 3.3.0



#### 3.3.0.1: Routine Cleaning, Sanitizing, and Disinfecting

Keeping objects and surfaces in a child care setting as clean and free of pathogens as possible requires a combination of:

- a. Frequent cleaning; and
- b. When necessary, an application of a sanitizer or disinfectant.

Facilities should follow a routine schedule of cleaning, sanitizing, and disinfecting as outlined in Appendix K: Routine Schedule for Cleaning, Sanitizing, and Disinfecting.

Cleaning, sanitizing and disinfecting products should not be used in close proximity to children, and adequate ventilation should be maintained during any cleaning, sanitizing or disinfecting procedure to prevent children and caregivers/teachers from inhaling potentially toxic fumes.

#### **RATIONALE**

Young children sneeze, cough, drool, use diapers and are just learning to use the toilet. They hug, kiss, and touch everything and put objects in their mouths. Illnesses may be spread in a variety of ways, such as by coughing, sneezing, direct skin-to-skin contact, or touching a contaminated object or surface. Respiratory tract secretions that can contain viruses (including respiratory syncytial virus and rhinovirus) contaminate environmental surfaces and may present an opportunity for infection by contact (1-3).

#### **COMMENTS**

The terms *cleaning*, *sanitizing* and *disinfecting* are sometimes used interchangeably which can lead to confusion and result in cleaning procedures that are not effective (4).

For example, if there is visible soil on a diaper changing or table surface, *clean* it with detergent and water before spraying the surface with a sanitizer or disinfectant. Using a sanitizer or disinfectant as this “first step” is not effective because the purpose of the solution is to either *sanitize* or *disinfect*. Each term has a specific purpose and there are many methods that may be used to achieve such purpose.

Task	Purpose
Clean	To remove dirt and debris by scrubbing and washing with a detergent solution and rinsing with water. The friction of cleaning removes most germs and exposes any remaining germs to the effects of a sanitizer or disinfectant used later.
Sanitize	To reduce germs on inanimate surfaces to levels considered safe by public health codes or regulations.
Disinfect	To destroy or inactivate most germs on any inanimate object, but not bacterial spores.

Note: The term “germs” refers to bacteria, viruses, fungi and molds that may cause infectious disease. Bacterial spores are dormant bacteria that have formed a protective shell, enabling them to survive extreme conditions for years. The spores reactivate after entry into a host (such as a person), where conditions are favorable for them to live and reproduce (5).

Only U.S. Environmental Protection Agency (EPA)-registered products that have an EPA registration number on the label can make public health claims that can be relied on for reducing or destroying germs. The EPA registration label will also describe the product as a *cleaner*, *sanitizer*, or *disinfectant*. In addition, some manufacturers of *cleaning* products have developed “green cleaning products”. As new environmentally-friendly cleaning products appear in the market, check to see if they are 3rd party certified by Green Seal: <http://www.greenseal.org>, UL/EcoLogic: <http://www.ecologo.org>, and/or EPA's Safer Choice: <http://www.epa.gov/saferchoice>. Use fragrance-free bleach that is EPA-registered as a sanitizing or disinfecting solution (6). If other products are used for sanitizing or disinfecting, they should also be fragrance-free and EPA-registered (7). All products must be used according to manufacturer's instructions. The following resource may be useful: [Green Cleaning, Sanitizing, and Disinfecting: A Toolkit for Early Care and Education](#).

Employers should provide staff with hazard information, including access to and review of the Safety Data Sheets (SDS) as required by the Occupational Safety and Health Administration (OSHA), about the presence of toxic substances such as, cleaning, sanitizing and disinfecting supplies in use in the facility. The SDS explain the risk of exposure to products so that appropriate precautions may be taken.

### TYPE OF FACILITY

Center, Early Head Start, Head Start, Large Family Child Care Home, Small Family Child Care Home

### RELATED STANDARDS

3.3.0.2 Cleaning and Sanitizing Toys

3.3.0.3 Cleaning and Sanitizing Objects Intended for the Mouth

5.2.1.6 Ventilation to Control Odors

Appendix J: Selecting an Appropriate Sanitizer or Disinfectant

Appendix K: Routine Schedule for Cleaning, Sanitizing, and Disinfecting

### REFERENCES

1. Thompson, S. C. 1994. Infectious diarrhoea in children: Controlling transmission in the child care setting. *J Paediatric Child Health* 30:210-19.
2. Butz, A. M., P. Fosarelli, D. Dick, et al. 1993. Prevalence of rotavirus on high-risk fomites in day-care facilities. *Pediatrics* 92:202-5.
3. D. Leduc, eds. 2015. *Well beings: A guide to health in child care*. 3rd ed. (revised) Ottawa, Ontario: Canadian Paediatric Society.
4. U.S. Centers for Disease Control and Prevention. 2014. How to clean and disinfect schools to help slow the spread of flu. <http://www.cdc.gov/flu/school/cleaning.htm> Microbiology Procedure. Sporulation in bacteria. <http://www.microbiologyprocedure.com/microorganisms/sporulation-in-bacteria.htm>.
5. Children’s Environmental Health Network Fragrances. Retrieved from: <http://www.cehn.org/our-work/eco-healthy-child-care/ehcc-faqs/fragrances/>.
6. Children’s Environmental Health Network 2016. Household chemicals. [http://cehn.org/wp-content/uploads/2015/12/Household\\_chemicals\\_1\\_16.pdf](http://cehn.org/wp-content/uploads/2015/12/Household_chemicals_1_16.pdf).



### 3.3.0.2: Cleaning and Sanitizing Toys

Toys that cannot be cleaned and sanitized should not be used. Toys that children have placed in their mouths or that are otherwise contaminated by body secretion or excretion should be set aside until they are cleaned by hand with water and detergent, rinsed, sanitized, and air-dried or in a mechanical dishwasher that meets the requirements of Standard 4.9.0.11 through Standard 4.9.0.13. Play with plastic or play foods, play dishes and utensils, should be closely supervised to prevent shared mouthing of these toys.

Machine washable cloth toys should be used by one individual at a time. These toys should be laundered before being used by another child.

Indoor toys should not be shared between groups of infants or toddlers unless they are washed and sanitized before being moved from one group to the other.

### RATIONALE

Contamination of hands, toys and other objects in child care areas has played a role in the transmission of diseases in child care settings (1). All toys can spread disease when children put the toys in their mouths, touch the toys after putting their hands in their mouths during play or eating, or after toileting with inadequate hand hygiene. Using a mechanical dishwasher is an acceptable labor-saving approach for sanitizing plastic toys as long as the dishwasher can wash and sanitize the surfaces and dishes and cutlery are not washed at the same time (1).

### COMMENTS

Small toys with hard surfaces can be set aside for cleaning by putting them into a dish pan labeled “soiled toys.” This dish pan can contain soapy water to begin removal of soil, or it can be a dry container used to bring the soiled toys to a toy cleaning area later in the day. Having enough toys to rotate through cleaning makes this method of preferred cleaning possible.

### TYPE OF FACILITY

Center, Early Head Start, Head Start, Large Family Child Care Home, Small Family Child Care Home

## RELATED STANDARDS

- [3.3.0.1](#) Routine Cleaning, Sanitizing, and Disinfecting
- [4.9.0.11](#) Dishwashing in Centers
- [4.9.0.12](#) Dishwashing in Small and Large Family Child Care Homes
- [4.9.0.13](#) Method for Washing Dishes by Hand
- [Appendix K](#): Routine Schedule for Cleaning, Sanitizing, and Disinfecting

## REFERENCES

1. Grenier, D., D. Leduc, eds. 2008. Preventing infections. In *Well beings*. 3rd ed. Ottawa, Ontario: Canadian Paediatric Society

### 3.3.0.3: Cleaning and Sanitizing Objects Intended for the Mouth

Thermometers, pacifiers, teething toys, and similar objects should be cleaned, and reusable parts should be sanitized between uses. Pacifiers should not be shared.

#### RATIONALE

Contamination of hands, toys and other objects in child care areas has played a role in the transmission of diseases in child care settings (1).

#### TYPE OF FACILITY

Center, Early Head Start, Head Start, Large Family Child Care Home, Small Family Child Care Home

#### RELATED STANDARDS

- [3.1.4.3](#) Pacifier Use
- [3.3.0.1](#) Routine Cleaning, Sanitizing, and Disinfecting
- [3.6.1.3](#) Thermometers for Taking Human Temperatures
- [Appendix K](#): Routine Schedule for Cleaning, Sanitizing, and Disinfecting

#### REFERENCES

1. Grenier, D., D. Leduc, eds. 2008. Preventing infections. In *Well beings*. 3rd ed. Ottawa, Ontario: Canadian Paediatric Society.

### 3.3.0.4: Cleaning Individual Bedding

Bedding (sheets, pillows, blankets, sleeping bags) should be of a type that can be washed. Each child's bedding should be kept separate from other children's bedding, on the bed or stored in individually labeled bins, cubbies, or bags. Bedding that touches a child's skin should be cleaned weekly or before use by another child.

#### RATIONALE

Toddlers often nap or sleep on mats or cots and the mats or cots are taken out of storage during nap time, and then placed back in storage. Providing bedding for each child and storing each set in individually labeled bins, cubbies, or bags in a manner that separates the personal articles of one individual from those of another are appropriate hygienic practices (1).

#### TYPE OF FACILITY

Center, Early Head Start, Head Start, Large Family Child Care Home, Small Family Child Care Home

#### RELATED STANDARDS

- [5.4.5.1](#) Sleeping Equipment and Supplies

#### REFERENCES

1. Pickering, L. K., C. J. Baker, D. W. Kimberlin, S. S. Long, eds. 2009. *Red book: 2009 report of the Committee on Infectious Diseases*, 153. 28th ed. Elk Grove Village, IL: American Academy of Pediatrics.

### 3.3.0.5: Cleaning Crib Surfaces

Cribs and crib mattresses should have a nonporous, easy-to-wipe surface. All surfaces should be cleaned as recommended in Appendix K, Routine Schedule for Cleaning, Sanitizing, and Disinfecting.

**RATIONALE**

Contamination of hands, toys and other objects in child care areas has played a role in the transmission of diseases in child care settings (1).

**TYPE OF FACILITY**

Center, Early Head Start, Large Family Child Care Home, Small Family Child Care Home

**RELATED STANDARDS**

[5.4.5.1 Sleeping Equipment and Supplies](#)

[5.4.5.2 Cribs](#)

**REFERENCES**

1. Grenier, D., D. Leduc, eds. 2008. Preventing infections. In *Well beings*. 3rd ed. Ottawa, Ontario: Canadian Paediatric Society.