

Sanitizer and Disinfectant Guidance for Childcare Centers

Bleach Used as a Sanitizer (toys, tabletops, and food preparation surfaces)

Clorox and other bleach manufacturers have changed the percentage of sodium hypochlorite (the active ingredient) in bleach products from 6% to 8.25%. Bleach is still an approved sanitizer for food contact surfaces, with a two minute contact time, but the increased percentage changes the mixing instructions to achieve the approved concentration of 50 to 200 parts per million (ppm). Please refer to the following table for mixing instructions:

Concentration (ppm)	Amount of Bleach (8.25%)	Amount of Water
50	½ tsp	1 gallon (128 oz)
50	1/8 tsp	1 quart (32 oz)
50	1/16 tsp	1 pint (16 oz)
100	1 tsp	1 gallon (128 oz)
100	¼ tsp	1 quart (32 oz)
100	1/8 tsp	1 pint (16 oz)
200	2 tsp	1 gallon (128 oz)
200	½ tsp	1 quart (32 oz)
200	¼ tsp	1 pint (16 oz)

Bleach Used as a Disinfectant (diaper changing tables and restrooms, as well as High Hazard Body Fluids such as blood, urine, vomit, or feces)

The concentration and contact time for Clorox and other bleach products used as a disinfectant differ from previous guidance given and what is stated in the *Rules and Regulations Governing the Health and Sanitation of Child Care Facilities* (effective May 30, 2005). The current U.S. Environmental Protection Agency (EPA) registration and labeled instructions for Clorox used as a disinfectant requires a concentration of **2,400 ppm, a five minute contact time, and a rinse step.** The label on Clorox gives the following mixing instructions: ½ cup of bleach to one gallon of water.

All cleaning, sanitizing, and disinfecting products shall be used in accordance to the labeled instructions. If a facility is using bleach as a disinfectant it must be used in accordance with the labeled instructions. For some facilities that do not use a disinfectant on a regular basis this change may not have a significant impact. However, if your facility serves infants or toddlers that require diaper changing, this solution may no longer be practical for use. Please note that bleach is not the only approved disinfectant that can be used in child care facilities and it is still approved provided your facility follows directions on the label.

Other Disinfectants

Manufacturers of disinfectants with active ingredients such as quaternary ammonium or hydrogen peroxide also make approved products. To determine if a disinfectant is approved for use in a child care facility the following shall be verified:

- The chemical has an EPA registration number and is registered for use in Colorado.
- The chemical is labeled as a hospital grade disinfectant and is effective against:
 - *Salmonella choleraesuis* (enterica);
 - *Staphylococcus aureus*; and,

- Pseudomonas aeruginosa.
- The use of the chemical must be in accordance with the EPA labeled instructions including:
 - Concentration;
 - Contact Time;
 - Method; and,
 - Surfaces

Below is a list of approved disinfectants that have been approved by this Department. This is not an exhaustive list and any mention of a product does not represent endorsement by Tri-County Health Department. Your facility is encouraged to research other products and present them to this Department for review and approval.

Product	Contact Time	EPA Registration Number	Approximate Price	Active Ingredient	Ready to Use
Oxivir Tb	1 minute	70627-56	\$4.00/32 oz bottle	Hydrogen Peroxide	Yes
Lysol IC Disinfectant	3 minutes	1839-83-675	\$7.00/32 oz bottle	Quaternary ammonium	Yes
Betco BetOne RTU Disinfectant	1 minute	88494-4170	unknown	Ethyl Alcohol	Yes
CleanCide Ready to Use (Not Wipes)	5 minutes	34810-35	\$11.50/32 oz bottle	Citric Acid	Yes
Clorox Health Care Bleach Germicidal Cleaner	1 minute	56392-7	\$8-12/32 oz bottle	Sodium Hypochlorite	Yes
Clorox Health Care Hydrogen Peroxide Cleaner Disinfectant	1 minute	67619-24	\$10.50/32 oz bottle	Hydrogen Peroxide	Yes
IV-7 Ultimate Germ Defense	2 minutes	72977-3-73912	\$12-13/32 oz bottle	Citric Acid and Silver	Yes
MadaCide-1	3 minutes	1839-83-11703	\$35/gallon (\$12.50/32 oz bottle)	Quaternary ammonium	Yes
Opti-Cide 3	2 minutes	70144-1	\$9.00/32 oz bottle	Isopropyl alcohol and quaternary ammonium	Yes
Oxivir Five 16 Concentrate	5 minutes	70627-58	\$43/gallon (concentrated) \$2.63/gallon when mixed	Hydrogen Peroxide	No (test strips required)
Pure Green 24	2 minutes	72997-3-84364	\$40/32 oz bottle	Silver ions and citric acid	Yes
Virostat TBQ	3 minutes	1839-83-86226	\$3.00/32 oz bottle	Quaternary ammonium	Yes