Cleaning, Sanitizing, and Disinfecting – Using Bleach Solutions

What’s the difference and how are they done?

Cleaning, sanitizing, and disinfecting mean very different things and involve distinctly different solutions. Child care providers need to know the differences to apply the appropriate technique for the circumstance. Cleaning and sanitizing cannot be done at the same time.

Cleaning removes visible soil and debris.
Method: scrub, wash, and rinse. Always clean before sanitizing or disinfecting.
Cleaning solution: detergent and water

Sanitizing kills 99.9% of the germs on a surface. This makes it unlikely that someone touching the surface will contact germs and become ill.
Method: Cover the cleaned area with sanitizing solution. Leave the solution to air dry at least 2 minutes. Wipe dry, or let it air dry completely.
Sanitizing solution: See the table below.

Disinfecting kills nearly 100% of the germs on a surface. This is the solution to use for body fluid spills to eliminate the spread of bloodborne illnesses such as Hepatitis B and HIV. A stronger bleach solution is used for additional protection against communicable diseases.
Method: Cover the cleaned area with disinfecting solution. Leave the solution to air dry at least 2 minutes. Wipe dry, or let it air dry completely.
Disinfecting solution: See the table below.

### Bleach Solutions Tips

- Child care centers must meet the NC Sanitation of Child Care Center Rules.
- **Location:** Set up a specific location to add bleach to cool water to make a bleach solution. Store bleach in a locked cabinet or room not accessible to the children.
- **Resposibility:** Assign a person the responsibility for mixing the bleach solution(s) daily.
- **Testing:** Test the strength of the solution using suitable test or kit. NC Sanitation Rule .2819 (c)
- **Caution:** Use caution in mixing the bleach solution. If bleach is mixed with other cleaners or chemicals hazardous gases may be released.
  - **Safety:** Keep the bleach solution out of reach of children. Do not spray bleach solution when children are nearby. Keep solution out of direct sunlight to preserve the effectiveness of chlorine.
- **Labeling:** Label the sanitizing solution “B” and the stronger bleach solution “B+”.

### Bleach Solutions

**Bleach (Chlorine) Solution Concentrations**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Classroom Surfaces (tables, toys, water play)</th>
<th>Manual Dishwashing (dishes, utensils)</th>
<th>Toileting and Diapering (surfaces, toilets, lavatories)</th>
<th>Standard and Universal Precautions (blood, body fluid spills)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC Sanitation of Child Care Center Rules 15A NCAC 18 A</td>
<td>1 TB bleach: 1 gallon water 50-200 ppm* <code>.2822(a)(c) &amp; .2812(d)(e) defined as sanitizer .2801(22)</code></td>
<td>1 TB bleach: 1 gallon water 50-200 ppm* <code>.2812(b)(5)(B) defined as sanitizer .2801(22)</code></td>
<td>¼ c. bleach: 1 gallon water (1 TB bleach: 1 quart water) 500-800 ppm* <code>.2817(b), .2818(c) &amp; .2819(c) defined as disinfectant .2801(7)</code></td>
<td>N/A</td>
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<tr>
<td>CFOC National Health and Safety Performance Standards</td>
<td>¼ c. bleach: 1 gallon water (1 TB bleach: 1 quart water) 500-800ppm* Appendix I defined as sanitizer</td>
<td>1 ¼ tsp bleach: 1 gallon water 100 ppm* Standard 4.065 Appendix I defined as weak sanitizer</td>
<td>¼ c. bleach: 1 gallon water (1 TB bleach: 1 quart water) 500-800 ppm* Standard 3.015 Appendix I defined as sanitizer</td>
<td>Standard 3.026 Appendix I &amp; J defined as sanitizer</td>
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<td>OSHA Standards US Dept. of Labor Occupational Safety and Health Administration</td>
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<td>¼ cup: 1 gallon water small spills 500-800 ppm* Standard 4.065 Appendix I defined as weak sanitizer</td>
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*ppm = parts per million

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