

# Disinfecting and Sanitizing with Bleach

## Guidelines for Mixing Bleach Solutions for Child Care and Similar Environments

### Preparation Tips

- **Prepare** a fresh bleach solution each day in a well-ventilated area that is separate from children.
- **Label** bottles of bleach solution with contents, ratio, and date mixed.
- **Use cool water.** Always add bleach to cool water, NOT water to bleach.
- **Wear** gloves and eye protection.
- **Prepare** solution in an area with an eye wash.

### Disinfecting Solutions

For use on diaper change tables, hand washing sinks, bathrooms (including toilet bowls, toilet seats, training rings, soap dispensers, potty chairs), door and cabinet handles, etc.

	Using bleach with a concentration of:		
Water	2.75 %	5.25-6.25 %	7.5-8.25 %
1 Gallon	1/3 cup + 1 Tablespoon	3 Tablespoons	2 Tablespoons
1 Quart	1 ½ Tablespoons	2 ¼ teaspoons	1 ½ teaspoons

### Sanitizing Solutions

For use on eating utensils, food use contact surfaces, mixed use tables, high chair trays, crib frames and mattresses, toys, pacifiers, floors, sleep mats, etc.

	Using bleach with a concentration of:		
Water	2.75 %	5.25-6.25 %	7.5-8.25 %
1 Gallon	1 Tablespoon	2 teaspoons	1 teaspoon
1 Quart	1 teaspoon	½ teaspoon	¼ teaspoon

Disinfection of non-porous non-food contact surfaces can be achieved with 600 parts per million (ppm) of chlorine bleach. To make measuring easier, the strengths listed in this table represent approximately 600-800 ppm bleach for disinfecting, and approximately 100 ppm for sanitizing. Chlorine test strips with a measuring range of 0-800 ppm or higher can also be used to determine the strength of the solution.

**Contact your local health jurisdiction** for further instructions on cleaning and disinfecting if specific disease or organisms are identified as causing illness in your program.

**Use only plain unscented bleach** that lists the percent (%) strength on the manufacturer's label. Read the label on the bleach bottle to determine the bleach strength. For example, Sodium Hypochlorite...6.25% or 8.25%.

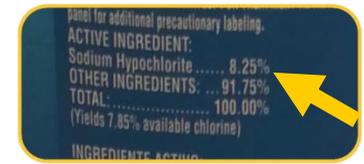
This chart was created by the Disinfection Workgroup led by the Washington State Department of Health. Workgroup members consist of staff from the Department of Early Learning, Snohomish Health District, Local Hazardous Waste Management Program in King County, Washington State Department of Ecology, the Coalition for Safety and Health in Early Learning, and the Washington State Department of Health. Adapted graphically from: *DOH Publication 970-216 January 2015.* (<http://here.doh.wa.gov/materials/guidelines-for-bleach-solutions>)

### Steps to Follow

- **Clean** the surface with soap and water before disinfecting or sanitizing.
- **Rinse** with clean water and dry with paper towel.
- **Apply** chlorine bleach and water solution to the entire area to be disinfected or sanitized.
- **Air dry** for at least 2 minutes.

# How to Read the Bleach Chart

Bleach now comes in several different concentrations. Because of this, the Washington State Department of Health has developed a new chart to assist child care providers in mixing bleach water sanitizing and disinfecting solutions at the right concentrations. It is critical to look at the bleach bottle label to determine which concentration you have. You will need to find the percent sodium hypochlorite, which should look something similar to picture to the right.



Once you find out what percent bleach you have, you will need to look at the attached chart to determine the recipe for mixing it. If, for example, you wanted to mix up one quart of disinfecting solution for your diaper changing table and bathroom, and you had 8.25% bleach, you would add one and a half teaspoons of bleach to one quart of cool water. For one quart of sanitizing solution using 8.25% bleach, you would need 1/4 teaspoon of bleach mixed into one quart of cool water. For assistance in reading the chart and/or mixing bleach solutions, please contact us at 425.339.5278 or by email at [childcarehealth@snohd.org](mailto:childcarehealth@snohd.org). We are happy to assist you.

## Chemical Safety

The following guidelines should be used when preparing and using bleach as a sanitizer and/or disinfectant:

- Wear gloves and eye protection when mixing chemicals.
- Prepare solution in an area with an eye wash.
- Use cool water when mixing bleach. Add bleach to the water, not the other way.
- Use a funnel when pouring bleach into the spray bottle to avoid spills.
- Make dilutions of sanitizer and disinfectant in a well-ventilated area. Never mix solutions in the classroom.
- Never store incompatible chemicals in the same space. For example, bleach and ammonia products should never be mixed or stored together.
- Adjust spray bottles to a heavy spray setting, rather than a fine mist.
- Avoid applying disinfectant strength when children are in the immediate area.
- If possible, or if chemical odors are present, ventilate the area.
- Always follow a three-step process for cleaning and sanitizing/disinfecting.

**Spray Bottle Labels** - Snohomish Health District has developed color labels that child care providers can print out themselves. There are different versions for the various concentrations of bleach. To get spray bottle labels, call 425.339.5278 or email [childcarehealth@snohd.org](mailto:childcarehealth@snohd.org) and request labels for the specific concentration of bleach used at the child care.

