



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

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January 3, 2020

POSITION STATEMENT: Liquid Bleach Mixing Guidance - **Revised**

PURSUANT TO: Rules Governing the Sanitation of Child Care Centers
15A NCAC 18A .2800

SOURCE: Children's Environmental Health

ISSUE: Guidance for compliance with the generic bleach mixing solution for disinfection and for sanitizing as specified in Rule 15A NCAC 18A .2801(7) and (22).

QUESTION:

Do the mixing specifications as directed in rules .2801(7) and .2801(22) apply to all household liquid chlorine bleach concentrations, such as the 8.25% sodium hypochlorite solution?

ANSWER: No

DISCUSSION AND RATIONALE:

The concentrations of chlorine in readily available household bleach have changed. Currently, one of the most commonly available bleach solutions is **8.25% sodium hypochlorite solution**. It should be noted that mixing instructions provided in the child care sanitation rules were based on bleach concentrations of 5.25% and 6% of sodium hypochlorite solution. Because of varying available concentrations for household bleach, it is necessary to provide mixing guidelines and ensure that operators are testing solutions to achieve proper concentrations.

RESPONSE/INTERPRETATION:

The following is provided as added guidance to assist in compliance with Rules .2801(7) and .2801(22). It is also recommended that child care providers be instructed to read bleach container labels carefully to verify the sodium hypochlorite concentration and to use the following table as a guide for mixing bleach.

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**Bleach Sanitizing and Disinfection Solution Preparation
Instructions**

A fresh solution of sanitizer and disinfectant is required daily when bleach is used as the method for sanitizing and disinfecting. Bleach containing thickeners to prevent splash or fragrance is not recommended. This chart is provided to reflect the mixing of the various strengths of household bleach solutions.

BLEACH SOLUTION MIXING GUIDELINE

Concentration (%) of sodium hypochlorite may be found on the bleach container label

APPLICATION	Bleach per Gallon of Water	Bleach per Quart of Water	Bleach (Free Chlorine Concentration)	Recommended Labeling
5.25% Sodium Hypochlorite				
Disinfecting Strength	¼ Cup	1 Tablespoon	500-800 ppm	Disinfectant
Sanitizing Strength	1 Tablespoon	¾ Teaspoon	50-200 ppm	Sanitizer
6.00 % Sodium Hypochlorite				
Disinfecting Strength	3 ½ Tablespoons	2 ½ Teaspoons	500-800 ppm	Disinfectant
Sanitizing Strength	2 ½ Teaspoons	½ Teaspoon	50-200 ppm	Sanitizer
8.25% Sodium Hypochlorite				
Disinfecting Strength	2 ½ Tablespoons	2 Teaspoons	500-800 ppm	Disinfectant
Sanitizing Strength	2 Teaspoons	½ Teaspoon	50-200 ppm	Sanitizer

Note: Always test solutions after mixing to assure that the proper concentrations are achieved for the prescribed application.

REFERENCES:

2014 National Resource Center for Health and Safety in Child Care Early Education Industrial Test Systems, Inc.

Rules Governing the Sanitation of Child Care Centers 15A NCAC 18A .2800

NOTE: Position statements are policy documents to clarify how to interpret or enforce a law or rule. They are not enforceable on their own but are intended to promote uniform interpretation and enforcement of the underlying law or rule. Updated 1/3/2020.