



Chlorine (Bleach) Solution for Disinfecting

The main purpose of disinfecting is to reduce the number of germs present on surfaces, toys or objects. An efficient and economical disinfecting solution is household bleach. This solution is effective for all hard surfaces, objects and toys as well as body fluid contamination (e.g., blood, stool, vomit). These germs do not have to be visible on a surface to result in disease transmission. By mixing a different amount of bleach with water you can make a high, medium or low level disinfectant. Before doing so, please take note of the following points:

- Different brands can have a different chemical composition (e.g., 3% vs 5.25% vs 9%). Keep this in mind when determining your chemical to water ratio. The solutions below are mixed using 5.25% bleach (sodium hypochlorite).
- Cleaning must be done before disinfecting.
- A change in disinfectant strength and type may be needed if your centre goes into respiratory or gastric outbreak. Please contact RCDHU if this occurs for guidance.

CONCENTRATION	CONTACT TIME	WHEN TO USE	HOW TO MIX
HIGH- LEVEL 1:10 dilution of bleach 5000 ppm	10 mins	<ul style="list-style-type: none">• Cleaning blood or body fluid spill• When directed by public health	62 ml (1/4 cup) : 500 ml (2 cups) water OR 100 ml (1/2 cup) : 1 liter (4 cups) water
INTERMEDIATE LEVEL 1:50 dilution of bleach 1000 ppm	2 mins	<ul style="list-style-type: none">• Washrooms• Change tables	10 ml (2 tsp): 500 ml (2 cups) water OR 20 ml (4 tsp): 1 liter (4 cups) water
INTERMEDIATE LEVEL 1:100 dilution of bleach 500 ppm	5 mins	<ul style="list-style-type: none">• Safe level for toys• Washrooms• Change tables	5 ml (1 tsp): 500 ml (2 cups) water OR 10 ml (2 tsp): 1 liter (4 cups) water
LOW- LEVEL 1:500 dilution of bleach 100 ppm	1 min	<ul style="list-style-type: none">• Safe level for food surfaces, dishes and utensils	1 ml (1/4 tsp) : 500 ml (2 cups) water OR 2.5 ml (1/2 tsp) : 1 liter (4 cups) water