



Mixing of Chlorine (Bleach) Solution for Disinfecting

Household bleach (5.25% sodium hypochlorite) mixed with water, is an inexpensive and effective disinfectant. By mixing different amounts of bleach with water, you can make a high, intermediate, or low-level disinfectant.

Level Required	When to be used	How to mix the bleach solution
High-level Disinfection 1:10 dilution of bleach 5000 ppm	<ul style="list-style-type: none"> Cleaning up a large blood or body fluid spill. When directed by public health. 	62 ml (1/4 cup) : 562 ml (2 1/4 cups) water or 250 ml (1 cup) : 2250 ml (9 cups) water
Intermediate-level Disinfection 1:50 dilution of bleach 1000 ppm	<ul style="list-style-type: none"> For use in washrooms and change tables in child-care. 	200 ml (4 teaspoons) household bleach + 1000 ml (4 cups) water or 100 ml (7 tablespoons) household bleach + 5000 ml (20 cups) water
Low-level Disinfection 1:500 dilution of bleach 100 ppm	<ul style="list-style-type: none"> Safe level for toys, dishes, utensils and food contact surfaces. 	1 ml (1/4 teaspoon) household bleach to 500 (2 cups) water or 20 ml (4 teaspoons) household bleach to 10 L (40 cups or approx. 2 gallons)

Remember:

- Cleaning must be done prior to disinfecting.
- A bleach and water solution should be mixed daily to preserve its strength.
- Leave the solution on the surface for a minimum of one minute. For high level disinfection a 10 minute contact time is recommended.
- In the event of a respiratory or enteric (vomiting and/or diarrhea) outbreak, ensure to contact a member of the Health Unit's Infectious Disease Team as soon as possible. A change in disinfectant type and strength may be required.
- Please visit www.publichealthontario.ca for an online chlorine dilution calculator to determine your own recipe.

Sources:

- Association for Professionals in Infection Control and Epidemiology, 2009
- Public Health Ontario
- Health Protection and Promotion Act. Ontario Regulation 562, Food Premises 1990

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