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USING CHLORINE BLEACH TO KILL COVID-19

Increased environmental disinfection frequency and intensity can keep surfaces free of bacteria and viruses, including COVID-19. Diluted household bleach can be used to kill COVID-19:

- Mix five tablespoons of unexpired bleach with a 7.5% sodium hypochlorite concentration per gallon or four teaspoons bleach per quart of water. Follow manufacturer’s instructions for application and proper ventilation. Never mix household bleach with ammonia or any other cleanser. Apply to a clean and dry surface. Bleach solutions are effective for approximately 24 hours after dilution, so it’s important to make fresh bleach cleaning solutions daily.

Household bleach comes in a variety of strengths. The percentage (%) of bleach (sodium hypochlorite) can be found on the product label. Please use the table below to achieve a 1000 ppm (0.1%) bleach solution; this is an effective concentration to kill COVID-19 with 5 minutes of contact time:

Household Bleach Strength	Bleach to Water Dilution Recipe		Amount of Bleach Added to a Quart or Gallon of Water	
	%	Parts of bleach	Parts of water	
1.7 - 2.3	1	15	1/4 cup	1 cup
2.4 - 3.4	1	22	3 Tbls	3/4 cup
3.5 - 5.4	1	32	2 Tbls	1/2 cup
5.5 - 7.4	1	51	1 Tbls + 1 tsp	1/3 cup
7.5 - 8.4	1	70	1 Tbls	1/4 cup

For additional information, please visit:

<https://www.publichealthontario.ca/en/health-topics/environmental-occupational-health/water-quality/chlorine-dilution-calculator>

- Before using a dilute bleach solution for cleaning, test a small area of the surface to make sure it’s safe for the surface. Always wear an appropriate level of personal protective equipment when using sodium hypochlorite or other chemical cleaners. Always follow the manufacturers instructions regarding ventilation of the area being treated with a dilute bleach solution, as well as exposure to skin, eyes, and face. Do not eat, drink, or smoke while cleaning with a dilute chlorine bleach solution.