



National Collaborating Centre
for Environmental Health

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Reducing COVID-19 Transmission Through Cleaning and Disinfecting Household Surfaces

This document provides information to public health professionals who may be consulted on the appropriate use of cleaning and disinfection products as well as frequency of cleaning and disinfecting in homes to protect the health of the public.

Apart from commercial products specifically approved for use in the lists maintained by Health Canada, household bleach (sodium hypochlorite) is an inexpensive and commonly used disinfectant for use against SARS-CoV-2. A study demonstrates that 0.05% (500 ppm) and 0.1% (1000 ppm) sodium hypochlorite solutions are both able to reduce the SARS virus by more than 3 log₁₀ within 5 minutes .14

Another study found that 500 ppm sodium hypochlorite solution was able to inhibit viral replication in cell culture after less than 2 minutes contact time; 1000 ppm sodium hypochlorite completely

inhibits viral replication and damages viral genome in less than 2 minutes contact time .18

Higher concentration bleach solutions are not necessary to ensure effective inactivation of SARS-CoV-2, and may increase risk of irritation to mucosae such as eyes and throat .36

Consider using single-use cleaning products such as paper towels or wipes. Mops and cloths should be cleaned with laundry soap and hot water and disinfected with diluted bleach solution (1000 ppm) after use.

Table 4: Recommended products and concentrations

Surface Type	Cleaning Options	Sanitizing Options	Disinfecting Options	Frequency
High-touch surfaces (e.g., doorknobs, light switches, toilets, faucet handles, tables, chairs)	<ul style="list-style-type: none"> Pre-mixed disinfecting cleaner products Soap/detergent and hot water 	N/A	<ul style="list-style-type: none"> Health Canada approved disinfectant 1000 ppm (1:50) diluted bleach solution; air dry after application 	Household with no symptomatic or COVID-19- positive individuals: Once every few days. Household with symptomatic or COVID-19-positive individuals: Twice per day
All other surfaces	<ul style="list-style-type: none"> Pre-mixed disinfecting cleaner products Soap/detergent and hot water 	N/A	<ul style="list-style-type: none"> Health Canada approved disinfectant product 500 ppm (1:100) diluted bleach solution; allow surface to remain wet for 5 minutes, then air dry 	Household with no symptomatic or COVID-19-positive individuals: Once per week. Household with symptomatic or COVID-19-positive individuals: Daily
Food contact surfaces (e.g., cutting boards, countertops, utensils, pots/pans, appliances)	<ul style="list-style-type: none"> Soap/detergent and hot water 	<ul style="list-style-type: none"> 100–200 ppm diluted bleach solution 25 ppm iodine or follow manufacturer's instructions 	N/A	After each use
		<ul style="list-style-type: none"> 200 ppm quats or follow manufacturer's instructions Hot water at 77°C or above (dishwasher with a hot rinse cycle is adequate) 		
Mobile phones and electronics	<ul style="list-style-type: none"> Wipe off visible dirt or grime 	N/A	<ul style="list-style-type: none"> Follow manufacturer's recommendations Alcohol-based or disinfecting wipes Sprays with 60–70% alcohol 	Once every few days or when visibly soiled
Toys, toy bins, playmats	<ul style="list-style-type: none"> Soap/detergent and hot water with a brush 		<ul style="list-style-type: none"> Health Canada-approved disinfectant that is safe for children 500 ppm diluted bleach solution; rinse with potable water after 2minutes contact time Dishwasher or launder with a hot rinse cycle 	High-touch surfaces and toys: Once every few days Toy bins and low-touch surfaces: Once a week or when visibly soiled
Cleaning equipment	<ul style="list-style-type: none"> Use single-use disposable products Mops and cloths: Laundry detergent with hot water followed by 1000 ppm diluted bleach solution 			

PCS Daily Cleaning and Disinfecting Process

Daily cleaning and disinfecting during a pandemic without the use of disposable single use wipes, paper towels or sprays.

PCS Neutral pH 1000 Oxidizing microfibre reuse cleaning and disinfecting process.

To comply with public health recommendations of 1000 ppm sodium hypochlorite solution. Cleaning and disinfecting frequently touched surfaces.

Neutral pH PCS 1000 Oxidizing Disinfectant/ Disinfectant Cleaner
Contains 1000 PPM of neutral PH sodium hypochlorite when packed.

Materials

- Cleaning bucket with water only.
- PCS microfibre cloth.
- 946 mL container of Neutral pH PCS 1000 Oxidizing Disinfectant/Disinfectant Cleaner
- PCS portion aid.

Process

- Squeeze water from PCS micro fibre cloth and fold damp cloth so as to have eight sides.
- Use PCS portion aid to measure and apply 30 mls of Neutral pH 1000 Oxidizing Disinfectant/Disinfectant Cleaner to cloth.
- Wipe frequently touched surfaces allow surfaces to air dry.
- Cloth can be used to wipe multiple surfaces, use low level chlorine test strips to validate cloth is still effective.
- Rinse cloth in a bucket of water and repeat the process. Change water in the bucket frequently or when visibly soiled.
- Public health recommends disinfecting cleaning cloths with 1000 ppm of sodium hypochlorite after washing clothes with laundering detergent.

PCS recommended end of day cleaning and 1000 ppm sodium hypochlorite decontamination process.

- Wash cloths at the end of day in solution of hot water and diluted Micro Laundry or ECOgent General Purpose cleaner and rinse thoroughly with warm water.
- Squeeze excess water from cloth.
- Use PCS portion aid to apply 30 mls of Neutral pH PCS 1000 Oxidizing Disinfectant/Disinfectant Cleaner to cloth allow to impregnate cloth for 5 minutes then rinse, squeeze excess water from cloth and allow cloth to air dry at the end of use for the day.

Neutral pH PCS 1000 Oxidizing Disinfectant/Disinfectant Cleaner.

DIN 02314851 Contains 1000 ppm of neutral pH sodium hypochlorite when packed



#5906-6	6 x 946 mL
#5906-18.9	Bag in a box to refill 946 mLs containers
#3528	PCS Portion Aid
#PCSMF-Blue	Cloth 14 inch x 14 Inch 300 per case
#PCSMF-Green	Cloth 14 inch x 14 Inch 300 per case
#PCSMF- Yellow	Cloth 14 inch x 14 Inch 300 per case
#PCSMF-Red	Cloth 14 inch x 14 Inch 300 per case

REFERENCES

[Reducing COVID-19 Transmission Through Cleaning and Disinfecting Household Surfaces](#)

[Bleach Solution For Disinfecting](#)

[Neutral pH PCS 1000 Oxidizing Disinfectant/Disinfectant Cleaner](#)

[Discover The Benefits of PCS Neutral pH Sodium Hypochlorite's](#)