

COVID-19

RECOMMENDATIONS FOR ENVIRONMENTAL PUBLIC HEALTH MEASURES DURING DROUGHT AND WATER CONSERVATION

Water is essential in the fight against SAR-COV-2.

- A minimum of 100 liters per patient per day are needed to treat Acute Respiratory Infections.
- A minimum of 5 liters of water are needed per medical consultation.
- Each person needs a minimum of 15 liters per day for drinking, cooking, and basic hygiene.¹
- Effective hand hygiene is a critical prevention measure.

RECOMMENDATIONS FOR THE PUBLIC SECTOR

- Provide universal access to public hand hygiene stations, with instructions for their correct use.
- Ensure continuous safe water supply to health care facilities.
- Ensure long term care facilities and enclosed community spaces for the elderly have continuous safe water delivery.
- Ensure access to safe water within a maximum of 500 meters from the residence.
- Advocate to uninterrupted access to at least 15 liters of safe water a day for all the population.
- Install temporary storage tanks in underserved areas and where there is interrupted service with residual chlorine levels of 0.5 mg/L.
- Ensure water bowsers and tanker trucks have a residual chlorine level of 0.5-1 mg/L.
- Ensure residual chlorine throughout the supply system of 0.5 mg/L at point of use.
- Strengthen water quality surveillance actions, especially in the most affected areas.
- Promote safe water storage at the households, like elevated buckets with lids and taps.
- Promote low-cost technologies for ensuring water quality such as household water filters.
- The health sector should work with the water sector and other relevant sectors to define and implement intervention.
- Advocate for intersectoral participation (e.g. water sector, agriculture) in the countries' emergency and disaster committees
- Repair leaking pipes.
- Institute a ban on the use of hose pipes.
- Recommend the use of low flow flush toilet systems (by design or retrofitted) in drought prone areas.
- Use prevention interventions that have been shown to be effective against SARS-COV-2.

¹ The Sphere Handbook 2018.

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- Do not wash public built environments (streets, pavements, parking lots, etc.) for decontamination against SARS-COV-2.

RECOMMENDATIONS FOR ALL SETTINGS

- Maintain faucets and toilets.
- Fix drips and leaks.
- Wash hands for the required 40-60 seconds without letting the faucet run; Water is only needed for wetting hands and rinsing hands at the end.
- Run washing machines with a full load of laundry.
- Develop communication materials on water conservation and appropriate use according to national norms.
- Build capacity on nationally appropriate water storage techniques that do not allow vector proliferation.

RECOMMENDATIONS FOR HEALTH CARE FACILITIES

- Improve access to hand hygiene facilities and practices in health care facilities for both workers and the public.
- Use disinfection solutions of 0.05%, 0.1% and 0.5% in accordance with national norms and the table below.
- Use a bucket of water, not a hose pipe, to wash vehicles used for patient transfer before disinfection.
- Use a 1.5-L polyethylene terephthalate (PET) bottle to wash each waste container, rinse then disinfect 0.1% hypochlorite solution and let air dry.
- Ensure a minimum of 3 days of water storage, based on usage data, to ensure normal levels of usage where water supply is interrupted.

RECOMMENDATIONS FOR THE PUBLIC

- Wash dishes in a basin of water, instead of under a running tap. Rinse in a separate basin of water.
- Soak pots and pans, instead of letting the water run while scraping them.
- Do not wash public or private vehicles that are not used for patient transfer.
- Flush the toilet only when it contains solid human waste.
- Place facial tissues and other hygiene products in waste bins, not the toilet.
- Avoid the use of the public water supply for irrigation:
 - Use drip irrigation instead of sprinkles.
 - Use rainwater catchment where possible.
 - Reuse grey water from laundry and dish washing to water plants.

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Sodium hypochlorite concentration	Disinfection solution concentration					
	0.05% ²		0.1%		0.5%	
	For handwashing and laundry		For surface, floor, and cleaning utensil disinfection and for mortuaries		For body fluid spills (blood, vomit, etc.)	
	Sodium hypochlorite	Water	Sodium hypochlorite	Water	Sodium hypochlorite	Water
1%	50 ml	950 ml	100 ml	900 ml	500 ml	500 ml
3%	15 ml	985 ml	30 ml	970 ml	154 ml	846 ml
4%	13 ml	987 ml	25 ml	975 ml	125 ml	875 ml
5%	10 ml	990 ml	20 ml	980 ml	100 ml	900 ml
10%	5 ml	995 ml	10 ml	990 ml	50 ml	950 ml

Climate Change and Environmental Determinants of Health Unit
Communicable Diseases and Environmental Determinants of Health Department

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² If you do not have soap and water, 70% alcohol gel or Hydrogen Peroxide, a sodium hypochlorite disinfectant solution at 0.05% concentration could be used to wash your hands. However, this is the least recommended option, since frequent use can lead to allergies, dermatitis, depigmentation, and even asthma.