

COVID-19

ENVIRONMENTAL PUBLIC HEALTH RECOMMENDATIONS FOR COLLECTIVE RESIDENTIAL PLACES

NURSING HOMES, ORPHANAGES AND OTHER COLLECTIVE RESIDENTIAL PLACES

Nursing homes, orphanages and other collective residential places that provide services to vulnerable people are fundamental for the well-being of society. It is, therefore, essential that these collective residential places have adequate environmental and hygiene conditions to protect the health of caregivers, visitors and residents.

This note includes recommendations to protect health during the COVID-19 pandemic and the information should be given to all caregivers, service personnel, residents, family and visitors.

Area	Key actions
Drinking water	<p>Objective: Ensure the quality of drinking water for consumption.</p> <ul style="list-style-type: none">• Use treated water or safe sources. Establishments without access to treated water must inform the corresponding authorities.• Avoid storing water if possible but if water storage is necessary, ensure that the container is clean and has a lid.• Ensure that staff, caregivers, and residents identify and have access to drinking water points.• Wash all containers used for community drinking water prior to use and ensure that they have lids.• Restrict the use of public drinking points.
Hand washing	<p>Objective: Ensure good hand washing practices to reduce the transmission of the virus.</p> <ul style="list-style-type: none">• Wash hands with soap and water.• Ensure that all the hand surfaces are covered with soap for 40-60 seconds.• Make sure that hand washing facilities are accessible, functional, and have soap and water.• Equip toilets and hand washing stations so they are fully accessible to residents (elderly and children) bearing in mind mobility and height concerns.• Dry hands with paper towels, which must be discarded after use, or with individual personal towels.• Maintain sufficient supplies of essentials for hand washing (e.g., soap, water, paper towels).

COVID-19

	<ul style="list-style-type: none"> • If soap and water are not available, use disinfecting solutions for hand hygiene only if the hands are not visibly dirty or contaminated with secretions: <ul style="list-style-type: none"> ○ 70% alcohol-based hand sanitizer (ABHR 70%). ○ sodium hypochlorite disinfectant solution at 0.05%¹ concentration (see the table below) • Wash hands frequently and at certain critical moments: <ul style="list-style-type: none"> ○ immediately upon arrival from the street; ○ before and after coming into contact with the elderly and children; ○ before and after performing a cleaning task; ○ after going to the bathroom; ○ before and after eating; ○ before and after preparing food; ○ after touching animals.
<p>Cleaning surfaces and washing clothes</p>	<p>Objective: Ensure good practices when cleaning surfaces.</p> <ul style="list-style-type: none"> • Horizontal surfaces and surfaces with a high frequency of contact (for example: light switches, door handles, bed rails and telephones) should be cleaned at least twice a day, with a sodium hypochlorite disinfectant solution at 0.1% concentration (see table below) or with 70% alcohol-based disinfectant. • Visibly dirty surfaces must first be cleaned with water and detergent, before the application of a sodium hypochlorite disinfectant solution at 0.1% concentration (see below), which is then left to act for at least 1 minute, after which it is rinsed with water. • The same procedure should be used for bathrooms at least twice a day. • Clothes should be washed normally with warm soapy water, but if they have been worn by patients, they should, after washing, be soaked in a sodium hypochlorite disinfectant solution at 0.05%¹ concentration for 30 minutes before being rinsed in clean water and dried in the sun.
<p>Ventilation</p>	<p>Objective: Ensure adequate ventilation and clean air.</p> <ul style="list-style-type: none"> • Verify with the service provider that routine maintenance and the cleaning of ventilation, heating and air conditioning systems has been carried out in accordance with an established schedule. • Ensure good ventilation of spaces and avoid confined conditions. This may include opening windows to the outside when there is little outdoor pollution.

COVID-19

	<ul style="list-style-type: none"> • Avoid using solid fuels and kerosene for cooking and heating if possible. Should these fuels be used, operators should increase outdoor ventilation in kitchen areas and notify authorities with a view to procuring cleaner energy alternatives.
Waste management	<p>Objective: Ensure adequate solid-waste management to avoid virus transmission.</p> <ul style="list-style-type: none"> • Maintain an optimal separation of waste (ordinary / general, recycling, health care wastes). • Wash containers intended for recycling before waste separation into the indicated containers. Should this not be possible, such residues must be included with ordinary waste. • Waste storage areas should be fenced off and access to soap and water for hand washing must be ensured. • Personal protective equipment (PPE) must be worn during solid waste management activities. • All containers must be cleaned with soap and water and dried well.

HOW TO PREPARE THE DISINFECTANT SOLUTIONS.

- Use locally available sodium hypochlorite concentrations, which is indicated on the label of the container, to mix the appropriate concentration of disinfectant solution suitable to its intended use, as per the indications shown in the table below.
- Use personal protective equipment such as gloves, masks, eye protection and aprons when mixing the solutions.
- Prepare solutions daily according to stated needs and in alignment with amounts shown in the table below.
- Use specific containers for each of the prepared solutions, and mark (label) the containers clearly with the different concentrations.
- Do not reuse packaging from edible products to prepare the disinfectant solution in order to avoid the risk of accidental poisoning.
- Add the amount of sodium hypochlorite to the amount of water as indicated in the table below.
- Do not mix sodium hypochlorite with soaps or cleaners.
- Store sodium hypochlorite out of the reach and sight of children, in a safe place that is not exposed to light and heat.
- Use sodium hypochlorite products without added fabric softeners, colors, or perfumes.

COVID-19

Sodium Hypochlorite concentration	Disinfectant Solution Concentration							
	0.05% ¹				0.1%			
(as per label)	For hand washing and laundry				For disinfection of surfaces and floors, and cleaning utensils			
	Quantity of sodium hypochlorite		Quantity of water		Quantity of sodium hypochlorite		Quantity of water	
1%	50 ml	1/5 cup	1 L	1 qt	100 ml	2/5 cup	1 L	1 qt
3%	16 ml	3 tsp	1 L	1 qt	30 ml	1 oz	1 L	1 qt
4%	13 ml	1/2 oz	1 L	1 qt	25 ml		1 L	1 qt
5%	10 ml	2 tsp	1 L	1 qt	20 ml	4 tsp	1 L	1 qt
10%	5 ml	1 tsp	1 L	1 qt	10 ml	2 tsp	1 L	1 qt

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

PAHO/CDE/CE/COVID-19/20-0022 • © Pan American Health Organization, 2020.
 Some rights reserved. This work is available under license CC BY-NC-SA 3.0 IGO

¹ 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.