

# COVID-19

## WATER, SANITATION, AND HYGIENE STANDARDS IN HEALTH CARE FACILITIES

Indicator		Minimum standards	Unit	Source
Water amount <sup>1</sup>	Outpatient	≥ 5	L/inquiry	WHO <sup>i</sup>
	Hospitalized patients	40–60	L/patient/day	
	Operating theatres and delivery rooms	≥ 100	L/intervention	
	Complementary feeding unit with dry rations	0.5-5	L/inquiry	
	Complementary feeding unit with prepared rations	≥ 15	L/inquiry	
	Therapeutic feeding unit for hospitalized patients	≥ 30	L/patient/day	
	Isolation unit for patients with acute respiratory infections	≥ 100	L/patient/day	
	Amount of water for hand washing in health care facilities where the amount of water is limited	≥ 0.5–2 <sup>2</sup>	L/wash/person	ASH Initiative at EESS and WHO <sup>ii</sup>
	Continuity of water supply service	≥ 8	hours/day, in intermittent networks	
	Water storage reserve	≥ 3	days	PAHO/WHO <sup>iii</sup>
Access to water	Number of users per shower, separated for staff and patients, as well as by sex.	≤ 40	users/shower	WHO <sup>i</sup>
Water quality	Free residual chlorine concentration throughout the distribution system and consumption points	equal to 0.5	mg/L	PAHO/WHO

<sup>1</sup> The amounts refer to the water used for various purposes: washing hands, cleaning, washing, drinking, and cooking. The actual amounts of water required also depend on various factors, such as climate, availability and type of facilities (including type of toilets), level of health care, and local practices regarding water use.

<sup>2</sup> With water-saving techniques, such as turning off the tap while soaping up.

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Hygiene	Number of functional hand hygiene facilities <sup>3</sup> in at least the critical locations <sup>4</sup>	≥ 1	functional hand hygiene facility	WHO/ UNICEF <sup>iv</sup>
	Number of hand hygiene facilities for every 20 beds	≥ 2	hand hygiene facility/20 beds	
	Maximum distance between hand hygiene facilities and toilets	≤ 5	meters	
Sanitation	Number of beds per toilet <sup>5</sup> in hospital services <sup>6</sup>	≤ 10	beds/toilet	PAHO/WHO
	Number of outpatients per toilet in hospital services <sup>6</sup>	≤ 20	outpatients/toilet	
	Number of beds per toilet in short-term care <sup>6</sup>	≤ 20	beds/toilet	
	Number of outpatients per toilet in short-term care <sup>6</sup>	≤ 50	outpatients/toilet	
Solid waste	Minimum categories in which waste must be segregated at the time of generation: sharps waste; infectious waste; pathological/anatomical waste; chemical and pharmaceutical waste; radioactive waste; common waste	6	categories	WHO <sup>v</sup>
	Minimum number of color-coded containers for waste segregation in each room <sup>7</sup>	3	containers	
	Capacity and color of containers for general non-hazardous waste <sup>(1)</sup>	20–60 Black	L	
	Container capacity for infectious waste <sup>8</sup> (labelled biohazard) <sup>(2)</sup>	15–40	L	
	Maximum distance between containers for the collection of solid waste and where that waste is generated	≤ 5	meters	
	Container washing frequency (except sharps containers)	≤ 1 (daily)	day	

<sup>3</sup> Functional hand hygiene facilities should have an alcoholic hand solution or a basin/bucket with a tap, liquid soap, and water, and a disposable paper dispenser with a wastebasket.

<sup>4</sup> **Strategic places** are the service points, waiting room, entrance, and exit of the establishment and less than 5 m from the latrines. **Points of care** are the places where three elements converge: patients; health workers; and care or treatment that involves contact with the patient or his environment: consulting rooms, operating rooms, delivery rooms and laboratory. **Service areas** include the sterilization areas, kitchen, laundry, showers, waste disposal areas and mortuary.

<sup>5</sup> Toilets should be technically and culturally appropriate, locking and well lit, with enough space for caregivers to assist patients, and people with limited abilities to enter.

<sup>6</sup> Minimum of 4 designated toilets (1 for staff and 3 for patients: 1 for women, 1 for men and 1 for children): WHO and SPHERE.

<sup>7</sup> The minimum segregation in these three categories of waste: Short sharp; infectious, common/general.

<sup>8</sup> All healthcare wastes from COVID-19 patients are classified as infectious.

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	Set of waste containers for every 20 beds	≥ 1	container set/20 beds	
	Frequency of transport of waste carts to central warehouse	2–6	hours	PAHO/WHO
	Maximum storage time for infectious waste in temperate climates	72 h in winter 48 h in summer	hours	WHO <sup>v</sup>
	Maximum storage time for infectious waste in hot climates	48 h in winter 24 h in summer	hours	
	Minimum personal protective equipment (PPE) for operating personnel to collect, treat, and dispose of waste	mask, overalls/gown, cap, gloves, goggles or a face shield, and boots		PAHO/WHO
<b>Cleaning and disinfection</b>	Disinfection with sodium hypochlorite solutions	0.05% 0.1% 0.5%	clothes and hands surfaces and mortuary body spills	PAHO/WHO
	Minimum number of functional laundry facilities	≥ 1	laundry	WHO <sup>i</sup>
	Minimum number of designated spaces to store cleaning materials	≥ 1	spaces	
	Frequency of cleaning and disinfection of waiting room/admission/triage in facilities with suspected or confirmed COVID-19 patients <sup>9</sup>	≥ 2	session/day	PAHO/WHO
	Frequency of cleaning and disinfection of hospital patient rooms (shared or individual) <sup>10</sup> without COVID-19 cases	1–2	session/day	ASH Initiative at EESS, WHO and CDC <sup>vi</sup>
	Frequency of cleaning and disinfecting inpatient rooms - unoccupied or in transit <sup>11</sup> (terminal cleaning)	1	session/day after departure	
	Cleaning and disinfection frequency in ambulatory care rooms <sup>12</sup>	After each visit and at least one terminal cleaning	session/day	
	Hallway/corridor cleaning and disinfection frequency <sup>13</sup>	≥ 2	session/day	
		Frequency of cleaning and disinfection of body fluid spills	Immediately after they occur	–

<sup>9</sup> Orientation: Focus on high-contact surfaces, then on floors (last).

<sup>10</sup> Orientation: Focus on high-contact surfaces, starting with shared/common surfaces, then moving to each patient's bed; use a new cloth for each bed if possible.

<sup>11</sup> Orientation: Low-contact surfaces, high contact surfaces, floors (in that order); waste and bedding removed, bed completely clean and disinfected.

<sup>12</sup> Orientation: High-contact surfaces should be disinfected after each patient visit.

<sup>13</sup> Orientation: High-contact surfaces (e.g., railings).

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	Frequency of cleaning and disinfection of bathrooms in waiting areas of facilities with confirmed COVID-19 patients <sup>14</sup>	≥ 2	session/day (min)	PAHO/WHO
	Minimum PPE for operating personnel, depending on the type of cleaning/disinfection	Fluid-resistant mask, apron, or coverall/gown, disposable gloves, goggles, or a face shield		PAHO/WHO

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## REFERENCES

<sup>i</sup> [Essential environmental health standards in health care](#), (2008 act. 2016)

<sup>ii</sup> Specifications of the World Health Organization and Initiative on water, sanitation and hygiene in health facilities for COVID-19.

<sup>iii</sup> [Hospital Safety Index: Guide for Evaluators. Second Edition](#), ISBN: 978-92-75-12029-3. World Health Organization; 2018.

<sup>iv</sup> [Water and sanitation for health facility improvement tool "WASH FIT"](#), World Health Organization; 2018.

<sup>v</sup> Safe management of wastes from health-care activities. World Health Organization; 2014.

<sup>vi</sup> CDC and ICAN. Best Practices for Environmental Cleaning in Healthcare Facilities in Resource-Limited Settings. Atlanta, GA: US Department of Health and Human Services, CDC; Cape Town, South Africa: Infection Control Africa Network; 2019.

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<sup>14</sup> Orientation: High-contact surfaces, including door handles, light switches, counters, faucets, then sinks, then toilets, and finally, the floor (in that order).