

COVID-19 and health care facilities

This document is intended to provide points of consideration on WASH in health care facilities (HCFs) to Water Mission country programs, in light of COVID-19.

Ways Water Mission is poised to respond in light of COVID-19

Many of the HCFs around the world responding to COVID-19 do not have reliable, accessible safe water. Water Mission is equipped and positioned to support these facilities and healthcare providers by:

- Ensuring they have water that is treated (with chlorine) and safe for drinking, handwashing, and disinfecting, using technology such as an erosion chlorinator
- Encouraging medical staff to store and transport water in a manner that prevents recontamination
- Promoting coronavirus-specific hygiene information amongst medical staff, patients, and community members.¹

Water treatment

Based on what is currently known about the COVID-19 virus, the WHO states that, “WHO guidance on the safe management of drinking-water and sanitation services applies to the COVID-19 outbreak. Extra measures are not needed.”² Current evidence suggests that risk to water supplies from COVID-19 are low, particularly when centralized water treatment and disinfection are utilized. Treated water should be safely stored in regularly cleaned and covered containers. See following section for specific disinfection criteria.³

In short, Water Mission’s current standards for water treatment in HCFs are appropriate and adequate in light of COVID-19. Access to safe water of adequate quantities in HCFs is a foundation for reducing and eliminating COVID-19 transmission in the context of HCFs and is of utmost importance.

Without safe water, clinics and hospitals cannot safely and effectively care for patients. The spread of viruses and rise of complications from non-COVID-19 diseases become significant. The good news is that simple water treatment solutions are available and can be incorporated into healthcare facility water supplies. This treated water can then be used to:

- Eliminate the risk of most life-threatening waterborne diseases;
- Maintain hygienic conditions of facilities; and
- Help stop the spread of the coronavirus through frequent handwashing, an important way to prevent infection and fight COVID-19, according to the Center for Disease Control and Prevention (CDC).⁴

¹ Water Mission, “Amid COVID-19, Doctors and Nurses Need Clean, Safe Water;” 17 March 2020

<https://watermission.org/covid-19-safe-water/>

² World Health Organization. “Water, sanitation, hygiene and waste management for COVID-19. Technical brief;” 3 March 2020 <https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-covid-19>

³ World Health Organization. “Water, sanitation, hygiene and waste management for COVID-19. Technical brief;” 3 March 2020 <https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-covid-19>

⁴ Water Mission, “Amid COVID-19, Doctors and Nurses Need Clean, Safe Water;” 17 March 2020

<https://watermission.org/covid-19-safe-water/>

Cleaning and disinfection

The table below shows the Water Mission standards for chlorine solutions at healthcare centers and hospitals (Sphere, 2011; CDC, 2019).

Chlorine Concentration	Healthcare Facility Activity
0.5 – 1.0 mg/L	Drinking water (free residual chlorine at point of delivery)
500 mg/L (0.05%)	Handwashing*
	Laundry (after cleaning)
5000 mg/L (0.5%)	Cleaning materials, aprons, boots, cooking utensils and dishes
	Washing personal protective equipment (e.g., gloves)
	Rinsing bedpans, buckets
	Cleaning bathrooms and surfaces
10000 mg/L (1%)	Mother solution for chlorinating water
20000 mg/L (2%)	Preparing dead bodies
	Added to excreta and vomit buckets (Cholera)

**The preferred method for handwashing is using water and soap.*

Both for protection from the chlorine solution and any potential microbes and viruses, always wear gloves when performing cleaning and disinfection activities.

For more detailed technical information on chlorine disinfection in health care facilities and guidance for calculating chlorine concentration, please see Water Mission document titled “Chlorine Disinfection in Healthcare Facilities.”

COVID-19 hygiene and sanitation information

Hand hygiene in health care facilities

Handwashing is a critical component of infection prevention and containment (IPC) in healthcare facilities and has been identified by the WHO as “one of the most important measures that can be used to prevent infection with the COVID-19 virus.”⁵

If hands are not visibly dirty, the preferred method is to perform hand hygiene with an alcohol-based hand rub for 20–30 seconds using the appropriate technique. When hands are visibly dirty, they should be washed with soap and water for 40–60 seconds using the appropriate technique. If soap or alcohol-based rub are not available, a chlorinated solution (0.05%) can be used but is not ideal.⁶

The following are critical points for handwashing for healthcare workers⁷

⁵ World Health Organization. “Water, sanitation, hygiene and waste management for COVID-19. Technical brief;” 19 March 2020 <https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-covid-19>

⁶ World Health Organization. “Water, sanitation, hygiene and waste management for COVID-19. Technical brief;” 19 March 2020 <https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-covid-19>

⁷ World Health Organization. “My 5 Moments for Hand Hygiene;” accessed 19 March 2020 <https://www.who.int/infection-prevention/campaigns/clean-hands/5moments/en/>



- Before touching a patient
- Before clean/aseptic procedures
- After body fluid exposure/risk
- After touching a patient
- After touching patient surroundings

Hand hygiene should be performed at all five moments, in addition to washing hands before eating and after using the toilet.

Sanitation in health care facilities

The WHO guidance on safely managed sanitation services apply in the COVID-19 outbreak, and extra measures are not needed in addition to standard guidelines. According to the WHO, “the risk of catching the COVID-19 virus from the feces of an infected person appears to be low.⁸” Detailed technical information regarding the handling and disposal of feces for those with suspected or confirmed COVID-19 cases can be accessed in the World Health Organization’s technical brief titled [“Water, Sanitation, Hygiene, and Waste Management for COVID-19.”](#)

Note

This is Version 1.0 developed on March 23, 2020. To make sure you are accessing the latest version, and to get other helpful resources, visit our [COVID-19 Resources](#) page.

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⁸World Health Organization. “Water, sanitation, hygiene and waste management for COVID-19. Technical brief;” 19 March 2020 <https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-covid-19>