

**Answers by:**

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**1. In the Caribbean region, what are the WASH interventions in healthcare settings that have been prioritized in the context of COVID-19?**

WASH priorities are focusing on:

1. handwashing (water supply, soap), and water conservation (handwashing without wasting water video: <https://youtu.be/-b5hV5PQGv4>. If no water available provide alcohol based hand sanitizer
2. Intensified cleaning with bleach solution, and training staff in making adequate disinfecting solution using household bleach (video to be released soon).

As part of the [SMART Hospital Project](#), which upgrades existing hospital and health care facilities (HCF) to increase resilience to impacts from climate change, remain functional during and after natural disasters and to reduce the carbon footprint of the facilities (reduce electricity use, water demand, and reduce waste.)

WASH is an important component and SMART HCF have three days water storage, collects rainwater and uses a hybrid water supply system where rainwater is used for washing and flushing using solar pumps.

The program also has a strong maintenance component to train staff at all levels of its concepts and its application. WASH aspects remain challenging in its application, such as reducing water wastage, fixing leaks, vector breeding control and waste management.

WASH aspects should be part of terms of reference/scope of work of staff, like reporting/fixing leaking faucets or mains, reporting/fixing faulty mosquito screens

**2. in the facilities in your region, what are the recommendations for toilet cleaning in HCF in context of COVID-19?**

[PAHO developed guidelines for environmental cleaning and disinfection during the COVID19 pandemic](#), following [WHO and CDC guidelines](#). More COVID19 related documents, including WASH, PAHO prepared can be found [here](#)

The cleaning of toilets is part of the “cleaning strategy” from high to low areas and from clean to dirty spaces.

Toilet area are to be cleaned last and with designated cleaning utensils and materials preferably color coded in the sequence: Faucets, sinks, door handles, toilet flush knob, other surfaces commonly touched nearby toilet, toilet seat, toilet bowl, floor.

Patients are also instructed to flush with lid down to prevent the spread of aerosols

There is no need to disinfect fecal matter from COVID19 patients before flushing.

### 3. In the facilities in your region, what are the main methods of disposal of infectious COVID-19 biomedical wastes in remote HCF

Medical Waste management in remote areas remains a challenge, with some HCF using de Montfort incinerators, which provide good and safe destruction of relatively small amounts of infectious waste including sharps. Bulky waste like PPE's might pose a problem as these could flog the system. I experimented on the standard de Montfort incinerator to increase its capacity which is feasible. Also designed concepts of improved low cost DRUM incinerators, but these are intrinsically dangerous (fire and personal injuries) and WHO does not recommend these.

Its imperative to separate medical infectious waste from all other waste from HCF. IN the absence of incinerators, infectious waste including non-re-useable PPE, should be stored separately in designated containers and plastic bags and safely managed, handled and transported to dedicated site for burial. The existing WHO guidelines "[Safe Management of Waste from Health-Care Facilities](#)" are applicable.

### 4. Could you provide some examples of more affordable WASH infrastructure used in rural clinics in your region?

As part of the SMART Hospital project we developed and installed a hybrid Public Supply and Rainwater harvesting water supply infrastructure in three rural health care facilities in Dominica. The rainwater is collected in large tanks and a solar pump fills a high level tank on roof or structure, feeding by gravity toilets, faucets for cleaning and washbasins. Doctor's offices, nurses stations and drinking water stations receive public supply, which is disinfected. In case of no public supply the rainwater can easily be disinfected by boiling or adding bleach.

Any rainwater/gravity fed system required vigilant leak detection of water pains and faucets especially flush toilets to prevent wasting precious water.

#### Answers by:

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- In India, what are the main priority interventions for WASH in healthcare currently in the context of COVID-19?  
[The priority interventions include assessment of existing situation of WASH in HCF, undertaking measures to address the gaps related to water supply, sanitation, bio medical waste management, general cleanliness and hand washing facilities and practices and capacity development of healthcare staff on WASH in context of COVID 19. Ensuring 24\\*7 water supply in all healthcare facilities designated for treatment of COVID 19 patients, is being prioritized by the Ministry of Health and family welfare considering the increased requirement of water for frequent handwashing, cleaning and disinfecting.](#)
- Could you speak a little bit about how WASH in healthcare facilities is assessed in India, what are the main indicators and sources of those indicators?  
[WASH in Healthcare facility gets assessed through visits of team of experts designated by the State. The health management information system \(HMIS\) at the State level includes yearly data on WASH in](#)

healthcare facilities in 6 out of 29 States in India. The indicators focus on availability of water supply, water quality, availability of adequate number of toilets proportionate to patient load, frequency of cleaning and disinfection, hand washing facilities and practices. WASH in healthcare facilities also gets assessed during the quality assurance process for Labour room quality strengthening LaQSH scheme; along with other indicators related to maternal and new born health. The National accreditation board for hospitals and healthcare provider conducts assessment of WASH in HCF along with other health focused parameters; but the results of this assessment are used only for accreditation and not shared over public domain.

- In India, what is the main recommendation for disposal of infectious medical waste in the setting of this Covid 19 pandemic?  
Segregation at source, treatment at a common bio medical waste treatment facility based on principals of reduce, reuse and recycle. Seprate management i.e collection, storage and final treatment of COVID 19 bio medical waste. Safety precautions for bio medical waste colleators, waste handlers and staff at the common bio medical waste treatment facility staff