

Pre/post-test quiz for WASH FIT Trainings

1. A facility should have sufficient water storage for how long?
 - a. 12 hours
 - b. 24 hours
 - c. **48 hours**
 - d. 72 hours

Answer: Water storage should be protected from contamination and able to withstand extreme weather events. Additional backup storage should be provided during high risk periods. Where possible, storage of more than 2 days should be provided and water prioritized for essential/life-saving services (i.e. delivery rooms acute care wards).

2. What is the minimum quantity of water required per patient per day in a healthcare facility to meet basic needs (including hand hygiene, drinking, and cleaning)?
 - a. 5 liters
 - b. **15 liters**
 - c. 30 liters
 - d. 50 liters

Answer: The WHO recommends a minimum of 15 liters of water per patient per day in healthcare facilities to meet basic needs such as drinking, hand hygiene, cleaning, and sanitation.

3. What are the key steps for cleaning and disinfecting a contaminated surface in a healthcare facility?
 - a. FREE TEXT
 - b. FREE TEXT
 - c. FREE TEXT

Possible Answer: Remove visible dirt or debris from the surface using a detergent or soap solution. Apply a disinfectant, ensuring it is the correct type and concentration for the surface and contamination. Leave the disinfectant for the recommended contact time before wiping or rinsing, ensuring proper ventilation. Use appropriate PPE during the process to avoid exposure.

4. What are some key indicators to monitor to assess WASH services in healthcare facilities?
 - a. FREE TEXT
 - b. FREE TEXT
 - c. FREE TEXT

Possible Answers: Availability of safely managed drinking water (e.g., regular chlorine residual testing and documentation). Functionality and cleanliness of toilets and handwashing stations. Compliance with waste segregation and disposal guidelines. Frequency of staff training on infection prevention and control (IPC) practices. Availability of cleaning supplies and personal protective equipment (PPE).

5. What are the main risks of inadequate WASH services during an infectious disease outbreak?
 - a. Increased transmission of diseases among patients and staff
 - b. Higher risk of healthcare-associated infections (HAIs)
 - c. Strain on healthcare resources due to preventable illness
 - d. **All of the above**

Answer: d. All of the above. Inadequate WASH services increase the risk of disease transmission, lead to more healthcare-associated infections, and place additional strain on already limited resources.

6. What is the percentage of healthcare-associated infections (HAIs) that can be prevented through proper hand hygiene and WASH practices?
- 10%
 - 20%
 - 50%
 - 70%

Answer: d. 70%. According to the WHO, up to 70% of healthcare-associated infections can be prevented through proper hand hygiene, effective infection prevention and control measures, and adequate WASH services in healthcare facilities.

7. Name 3 ways that a facility can reduce its water consumption and conserve water.
- FREE TEXT
 - FREE TEXT
 - FREE TEXT

Possible Answers: Water reduction strategies include use of high-efficiency, low flow sinks for hand washing, low-water washing machines, ensuring pipes and fixtures do not leak (and using a system to regularly check and report and fix leaking faucets the same day), checking meters to analyse water use, and using greywater and/or rainwater where available to flush toilets, clean outdoor pavement areas, water plants etc.

8. General (non-infectious) waste constitutes what percentage of all waste in a healthcare facility?
- 75%**
 - 65%
 - 55%
 - 45%
 - 35%

If waste is correctly segregated, the majority of waste is considered non-infectious (packaging, paper, plastic). When waste is not segregated, this waste is contaminated by infectious material meaning the percentage of infectious waste goes up dramatically.

9. If waste is not correctly segregated, which of the following may occur?
- Recyclable waste cannot be recycled
 - The quantity of infectious waste that needs to be treated increases
 - Costs of waste management increase due to higher volume of infectious waste
 - Needle stick injuries and other avoidable health risks may occur when waste is handled (e.g. cuts from glass, exposure to blood and other bodily fluids, etc)
 - All of the above**

10. Which of the following statements are **false**?
- Non-burn waste technologies don't require a reliable water supply to function**
 - Non-burn waste technologies don't release pollutants into the atmosphere
 - Non-burn waste technologies meet the requirements of the Stockholm Convention
 - Waste should be segregated regardless of the type of treatment technology used.

Answer: Non-burn technologies (e.g. autoclaves) require a reliable water supply to function. This can be a limiting factor in low-cost settings.

11. What type of PPE is needed for those handling waste?

- a. FREE TEXT
- b. FREE TEXT
- c. FREE TEXT

The most important PPE for reducing risk of injury are gloves to protect from exposure to blood and other infectious material and boots for waste handlers to protect from sharp injuries to the foot. Availability and access to soap and water or alcohol hand rub are also important to maintain cleanliness and inhibit transfer of infection via dirty hands. In certain cases, masks may be needed to protect from respiratory hazards and/or particulates from burning waste. Finally for waste handlers industrial aprons and overalls are recommended.

12. Chlorine is as effective as using soap and water for hand washing

- a. True
- b. False**

The most effective materials for hand washing are soap and water or alcohol hand rub where hands are not visibly soiled.. Chlorine should only be used in emergency settings where no soap is available and chlorine can irritate the skin, exposing it to infections and also is ineffective where hands are not soiled.

13. What is the appropriate chlorine residual in drinking water?

- a. ≥ 0.2 mg/L in non-emergencies, ≥ 0.2 mg/L in emergencies
- b. ≥ 0.2 mg/L in non-emergencies, ≥ 0.5 mg/L in emergencies**
- c. ≥ 0.5 mg/L in non-emergencies, ≥ 0.5 mg/L in emergencies
- d. ≥ 0.2 mg/L in non-emergencies, ≥ 1 mg/L in emergencies

The chlorine residual should be frequently measured and dosing adjusted if residual is not met (changes in pH, temperature, organic content and water source will affect chlorine efficacy). Evidence of documented chlorine residuals should be available from previous testing. In the event of a flood, chlorine alone will not disinfect water sufficiently as the water is likely too turbid. In such situations it is important to first filter the water to mechanically remove larger particles and then disinfect with chlorine or other disinfectants.

14. True or false: the WASH FIT assessment should be adapted to the local context

- a. True**
- b. False

Yes, the assessment should be aligned with national standards, with any existing WASH FIT materials in the country, and terminology adapted to local languages and situations etc.

15. WASH FIT is a one-time activity. Once you have completed the WASH FIT assessment, there is nothing further to do.

- a. True
- b. False**

Answer: WASH FIT is a continuous cycle of improvement. The assessment should be conducted every 6-12 months, between which the team should be making improvements, carrying out spot checks.

16. Every staff member in a facility knows the problems they are facing so spending time doing an assessment is a waste of time.

- a. True
- b. False**

Answer: The assessment is fundamental to the WASH FIT process and provides the foundation for all subsequent steps. It is useful to bring all information together in one place and may highlight problems that staff were not aware of.

17. It is expected that future climate change will exacerbate many of the impacts on water supply that countries are already experiencing.

- a. True**
- b. False

Answer: Things aren't going to get any easier. Climate change is expected to (1) alter the frequency & intensity of weather events, and (2) increase existing stresses on water resources as well as water quality, therefore further impacting the safety and security of water supplies.

18. A risk assessment makes a judgment about the likelihood of occurrence and severity of consequences of a problem.

- a. True**
- b. False

Answer: The risk is calculated by adding the likelihood of occurrence (0-10) and severity of consequences (0-10) together for the total risk score out of 0-20.

19. You need to have a large budget in place before you start making any improvements.

- a. True
- b. False**

Answer: A lot can be done in a facility with relatively few resources (staff training, repairs to taps, pipes and drains, practicing waste segregation). It may take time to secure more funding for larger infrastructure repairs and improvements and it is best not to wait until this happens to complete the low hanging fruit.

20. What resources would you need (besides WASH FIT) to start and implement the process?

- a. FREE TEXT
- b. FREE TEXT
- c. FREE TEXT

Answer: (1) Support from management, including the facility manager, senior staff is critical. They need to understand the WASH FIT process, the key needs identified in the assessment and the benefits of improving services (e.g. for meeting national regulations on waste, for reducing infections and saving costs, for improving staff morale, etc); other needed resources include (2) understanding of related national guidelines (e.g. IPCAF, health care waste), (3) time to conduct the assessment, make the improvement plan and follow-up as well as engage in and organize on-site trainings on items like cleaning, (4) some financial resources to make initial improvements (e.g. waste segregation bins, increased water storage, etc), and (5) ability to coordinate and engage with those outside the facility including the regional CDCs to understand water quality and municipal authorities to

support water supply, centralized wastewater treatment and off-site waste treatment options.

- d. Understanding of national guidelines/tools,
- e. Time/some resources to make improvements;

21. There have been power cuts recently at the facility. What steps should you take to ensure your water, sanitation and waste services can continue to operate?

- a. FREE TEXT
- b. FREE TEXT
- c. FREE TEXT

Possible Answers increase water storage in key areas/wards and situated as much as possible to flow by gravity, ensure water storage containers clean, covered and have appropriate chlorine residual, if water needs to be pumped secure additional power source- e.g. generator, solar powered water pumping), if treating waste on-site, ensure it can connect to generator or alternative power source.