THE OXFAM HAND WASHING STATION
How to set up, use and maintain communal hand washing stations

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What is Oxfam Handwashing Station?

The Oxfam Handwashing Station (HWS) is a durable, low-cost, easy to set up, use and transport handwashing station that can be put up in any open space in a variety of emergency and development contexts. The handwashing kit, which has been extensively field tested, features a 24-litre water tank and a 4-litre internal liquid soapy water and water dispenser respectively, allowing two users to wash their hands directly with soapy water and subsequently rinsing with water. Bar soap can alternatively be used on a rope attached to the device.

Designed for a hygienic and dignified handwashing experience

- Bright colours and striking design
- Lockable lid, for facility management
- 24 litre water tank for over 200 handwashes
- Plug at tank base to facilitate emptying tank for cleaning
- 4 litre soapy water tank provides cheap and effective soap option
- Two user positions
- Mirrors that increase time spent in handwashing
- 4 water-saving push-up taps made of smooth brass touch point which has antimicrobial properties.
- Water tank twist and click fit to basin
- Soap bar dish and hoops for ‘soap on a rope’ option
- Hooks for personal items or towel
- Basin and drain prevents user being splashed and takes away waste water
- Drain hose to soak-away
- Tamper-proof bolts fix legs to basin and lock the water tank in place
- Wide tripod legs provide better access for people with reduced mobility
Before installation

Engage with the users to discuss and agree on the following:

a) Siting
Through consultation with users, choose an appropriate location to install the HWS where there are no barriers to prevent users accessing the kit. For preference, this should be a flat area that is well drained to avoid the pooling of stagnant water around the stand. It should be easily accessible for all users, including persons with disability. Finally, wherever possible, ensure the area is clear and not among trees or bushes to avoid physical harassment.

b) Refilling the tank
The tank is designed for low maintenance and infrequent refilling [one fill provides enough water for about 200 hand washes]. However, during a disease outbreak more frequent handwashing is required. Therefore, it is important to decide how the tank will be refilled and who will be responsible for this task. Options to consider include using paid workers or volunteers among the users to refill the water tanks on a rotational basis. Alternatively, the tank can be connected to an existing water source to reduce the burden of refill.

c) Soap
Soap is essential for effective hand washing. The HWS has 4-litre tank for soapy water, with two dispensing taps. It also has soap dishes and a loop to attach a string for holding bar soap. The use of soapy water is preferred as it is cheaper and not prone to misuse or theft compared to bar soap. See ‘How to make a soapy water solution’ in appendix.

d) Maintaining cleanliness
Keeping the kit and the area around the HWS clean is essential to ensuring regular use of the facility. The kit is made of easy-to-clean material, including push-up taps and smooth, water-repellent surfaces. Each of the two tanks has a plug at the base, which can be unlocked to clean it. Endeavour to wash the tank frequently. Also keep the surrounding area dry, i.e. minimize water spills. The water tank and mirror should also be wiped clean regularly and any debris and litter surrounding the station removed.

e) How to operate the tap
The tap has a small brass rod that can be pushed up to release water. Although the tap is made of an antimicrobial brass material and has a small touch point, it is still advisable to use the back of hand to push the tap to help reduce any contamination by users.

f) Identifying and mitigating risks
Ensure that users of the facility are not exposed to harm. Jointly identify with users any possible risks that might arise from use of the facility by children, girls, women, men, the elderly and persons with different abilities. Consider concerns regarding sexual harassment, minor accidents, distance to the station, height of the stand, and cultural diversity that might call for separate handwashing for men and women. Similarly, agree on preventative and mitigation measures to ensure no harm to users.
g) Monitoring functionality and users’ handwashing practices

Regular checking of the handwashing kit is important to ensure it is always functional and that users have constant access and the ability to use it. For example, check that the tank is refilled in a timely manner and that soap is always available. Check the water is draining properly and the area around the tank is not waterlogged. Check/observe handwashing practices – do people use soap for handwashing or water only? Do they scrub/wash for at least 20 seconds?

Installation of the handwash station

The Oxfam Handwash kit is easy and ready to assemble, and all the components are included in the kit.

It takes roughly 10 minutes to assemble the kit and another 2 hours to dig a drainage area and install the HWS. If you want to reuse the wastewater, a bucket can be used to collect it instead of letting it drain away (see demonstration video link here).

Step by step guide to assembling HWS

Each kit comprises the following components:

- 1 basin fitted with a drain pipe hole
- Reservoir 2-in-1 tank fitted with 4 taps, lid, drain, plugs, and 1 clean and 1 soapy water tank
- 3 powder-steel legs with threaded holes
- Drain pipe
- Fixings, bolts and washers
- Allen key

**STEP 1:** Attach the tank to the basin. Twist 90° to lock.
**STEP 2:** Turn upside down to fit legs. Attach each leg to the basin, fix with washer and bolt and tighten with allen key.

**STEP 3:** Fix drainpipe to the basin with the jubilee clip provided, attach pipe to the front leg with cable ties. NB: Drainpipe is made of clear hosepipe to easily identify any blockage.

**STEP 4:** Set the legs in a concrete base for stability and security of the HWS. This also helps to ensure it is level so that it drains properly. Set legs deeper to make the stand lower.

**STEP 5:** Dig a soakaway pit to channel wastewater or provide a container to collect it.

**Key features**
- The handwashing station’s tripod legs ensure that persons using a wheelchair or crutches or with physical impairments can easily manoeuvre to use it.
- Tripod legs can be adjusted to accommodate the average height of adults and children in the community. The height can be adjusted by burying the legs deeper, cutting them to the required height or mounting them on a raised concrete platform.
- The tanks have soapy water and clean water symbols embossed on them so that people with impaired sight can identify them by feel and thus use the facility effectively.
- The push-up brass taps conserve water so less frequent water fetching and refilling is required.
- Footsteps can be installed on the ground for ease of locating the handwashing station from key locations, such as the toilet or homestead. See appendix for footprint stencils to create footprint paths.
- There are flat surfaces on the four sides of the tank to put information, education and communication materials (see appendix for sample stickers).
Possible risks that might arise from use of the device, and their mitigations

Common risks associated with similar hardware are safety of the users, security of the handwashing kit components, gender concerns (due to the wrong positioning of the kit), and cultural considerations with regard to usage.

**Gender and cultural concerns**

Together with the users, analyse the risk of sexual harassment at the handwashing area. Is the kit positioned in an area that would expose users, especially children, boys, girls and women, to sexual harassment? Does the culture of the users require separate handwashing kits for women and men? If the answer is yes, engage the users’ community further on mitigation measures and siting of the HWS.

**Health and safety concerns**

These arise mainly from the risk of mosquitoes breeding in any puddles forming around the HWS. However, this is not likely to be a big problem because the tap is designed to prevent water wastage.

Prevent mosquito breeding by digging a soakaway pit. Fill with stones and direct the waste pipe for wastewater filtration into the soakaway.

Alternatively, channel the wastewater into container with a cover and ensure it is emptied away from the handwashing area when it is full.

The touchpoints of the taps are made of brass: a material that resists the growth of microorganisms.

**Some handwashing promotional materials**

Findings from field tests show that the HWS has a lot of aesthetic appeal that draws people to it and to use it. However, in trials where promotional approaches like Mum’s Magic Hands were used to further promote the use of the device and sustain handwashing practice, the frequency of handwashing was higher.

Mum’s Magic Hands was developed by Oxfam and Unilever after extensive research on handwashing practices, motivators and barriers. The research concluded that nurture and affiliation are powerful drivers that promote handwashing amongst mothers. A suite of interactive materials was developed, including a storyboard. This approach, which builds on strong community engagement, is highly recommended.

Visit the link to find the materials on **Mum’s Magic Hands**.
Some promotional posters

Below are some promotional posters to use alongside the handwash stations. Full resolution files can be found [here](#).

Appendix: How to make a soapy water solution

Soapy water is comparatively cheaper than common bar soaps on the market but has the same effect on the removal of germs and dirt from hands. It is also less likely to be taken away from the HWS than bar soap.

**Items required to make soapy water**

- Detergent soap powder
- Water
- 4+ litre container, such as a large plastic bottle

**To make 4 litres of soapy water**

- Add 40g of detergent soap powder to 4 litres of water in the container.
- Mix until dissolved.
- Pour into the soapy water tank.

NB: Use the common detergent soap powder that is available on the market.
Footprint stencil
Please use this stencil to create footprint paths

Resources
Oxfam Handwashing Stand in the Equipment Catalogue
Oxfam Handwashing Stand Installation Guide A4
The Future of Handwashing – Oxfam Brochure
Handwashing stand project summary – Video by Joel Trotter
Full project story, blog, and presentation video by Foyeke Tolani at Elrha.org
Blog on hygiene practice sustainability by Foyeke Tolani

Handwashing instructions
Please print out handwashing instructions below and apply to the handwashing station

1. Push first tap up with the back of your hand to dispense soap and second tap for water
2. Create lather and rinse
3. Dry hands with towel or air dry