Safe Hand Hygiene
at Sanitation for Millions
Proper handwashing saves lives
Safe Hand Hygiene at Sanitation for Millions

Proper handwashing saves lives

Access to safe water and sanitation is a human right and safe hygiene is a basic prerequisite for the mitigation of health risks and pandemics. According to the Joint Monitoring Programme of the WHO and UNICEF, around 4.5 billion people worldwide still do not have access to safe sanitation. More than 600 million students do not have adequate toilets in their schools and 1.5 billion people have to rely on services in hospitals and clinics that lack basic sanitation. According to UNICEF, at least 1,000 children under the age of five die every day from diarrhea caused by contaminated drinking water, lack of safe sanitation and poor hygiene.

The global COVID-19 pandemic has exacerbated these development problems. The effects of the lack of safe water, sanitation and handwashing facilities on health, education as well as economic and social development are severe in many partner countries. The situation is particularly precarious in refugee hosting communities and puts people in times of the COVID-19 pandemic at a high risk. Vulnerable groups like women, children, elderly people, refugees, people with disabilities and poor households are most affected and in need of targeted assistance.

The worldwide COVID-19 pandemic requires fast action and prioritised attention to the WASH sector. Support and rapid interventions on water, sanitation and hygiene are currently indispensable in development cooperation and of crucial importance as a response to the global pandemic.

Sanitation for Millions’ Approach

Sanitation for Millions has assessed its interventions in the three partner countries Jordan, Uganda and Pakistan in the context of the COVID-19 pandemic and identified various WASH-related measures which represent an adequate and effective response to COVID 19 in particular and to pandemics and infection control in general.

Handwashing is one of the core activities carried out regarding safe hygiene. According to international research results, infections are transmitted in 80% of the cases by hands. Therefore, handwashing is one of the most efficient response to pandemics and for infection control since it removes germs, reduces health risks, prevents the spread of germs and pathogens to others and is not costly. Safe hand hygiene is relevant wherever you are, be it at work, at home, in school, or during recreational times and on travel.

Bearing this in mind, Sanitation for Millions has designed a concept on promoting a culture of hand hygiene which is based on four pillars:

1. **Strengthening the enabling environments** in the partner countries to assist fostering progress for safe hand hygiene. This comprises advocating for safe hand hygiene within policy frameworks and promoting accountability and monitoring mechanisms amongst policies and guidelines.

2. **Constructing handwashing facilities** at public places and public institutions where physical infrastructure is missing or needs rehabilitation. This comprises the construction of handwashing facilities as part of toilets as well as single wash basins and group handwashing facilities at places where people need to keep their hands clean and sanitized.
3. **Identifying and promoting best practices** by providing concepts, guidance, and resources to support improved handwashing. This comprises knowledge exchange and translation of knowledge into action and capacity building.

4. **Promoting and advocating for safe hand hygiene** to educate about the role handwashing plays in each area of human activities and to create awareness about the impacts and benefits of proper handwashing.

*Sanitation for Millions* follows a child- and gender-friendly, inclusive and equitable approach. This means that *Sanitation for Millions* constructs facilities and promotes activities that encourage safe hygiene practices which are adapted to the needs of the users (especially of girls and women, and persons with special needs) and are culturally appropriate and regard age-related needs (especially of minor children). As a response to the current emergency due to COVID19 pandemic, the adaptation to the local context, repair rehabilitation and adequate maintenance of the existing infrastructure for proper handwashing should be a priority for *Sanitation for Millions*.

**Proper Handwashing**

*Sanitation for Millions* advocates proper handwashing as defined by WHO¹:

**Step 1:**
Hold your hands under running water. If possible, adjust the temperature to a point where you feel comfortable. Lukewarm water is preferable.

**Step 2:**
Thoroughly apply soap to your palms as well as the back of your hands, your fingertips, the spaces between your fingers and your thumbs.

**Step 3:**
Spread the soap over your hands and rub them thoroughly for 20-30 seconds.

**Step 4:**
Rinse your hands with running water. Once again, the water should not be too hot. The cleaning process is a mechanical process, which is why step 2 & 3 are particularly important, as well as the time instructions.

**Step 5:**
Dry your hands carefully with a clean “towel”² and do not forget the spaces between your fingers.

---

¹ [https://www.who.int/gpsc/5may/How_To_HandWash_Poster.pdf](https://www.who.int/gpsc/5may/How_To_HandWash_Poster.pdf)

² Clean, single-use paper towels are recommended by WHO. The best approach is to put a dispenser with disposable towels or tissues which can be easily collected in a bin after usage and disposed with municipal solid waste. Reusable towels might become an object of contamination and spread pathogens and therefore are not a good option in public places and where many people mingle. In public places alternatives to disposable towels should be considered to avoid wastage. Air drying with an air-drying system or by just shaking the hands dry is a feasible alternative.
Proper Hand Sanitizing

Performed correctly, the process of hand sanitizing will destroy all pathogenic germs causing diseases, which is particularly important in health care facilities and with regard to people in medical care.

The following must be taken into account:

- Sanitizers should contain at least 62% alcohol and should be approved by the national public health authorities. Sanitizers can be locally produced and there are guidelines available.\(^3\)
- The absorption time for sanitizers is usually about 30 seconds (do not dry off your hands in that time).
- Use at least 3 ml – that is approximately a palmful of the product in a cupped hand.
- Put the sanitizer in your dry palm and rub it on your palms and the back of your hands, do not forget your fingertips, the spaces between your fingers and your thumbs either. The whole process should take 20-30 seconds. Afterwards, do not rinse your hands with water.

Regarding the exceptional circumstances of the COVID-19 pandemic, it should be noted that while hand hygiene plays a crucial role in stopping the spreading of the virus, it does in no way replace the need for physical distancing and other precautionary measures such as wearing masks.

Hand Hygiene in Health Care Facilities

Hospitals and clinics need special care for hand hygiene. Health-care workers, hospital administrators, patients and visitors need to apply safe practices to reduce transmission and spreading of pathogenic microorganisms and to protect vulnerable people.

With regard to hand hygiene in health care facilities, Sanitation for Millions follows the recommendations of WHO.\(^4\) We promote that health care workers\(^5\) should follow the Five Moments for Hand Hygiene approach developed by the WHO to know the precise moments when proper hand hygiene is most crucial:

\[\text{https://www.who.int/gpsc/5may/Guide_to_Local_Production.pdf}\]


\(^3\) The entire staff in health care facilities including doctors, nurses, cleaners and other staff members
Advocacy for Safe Hand Hygiene

*Sanitation for Millions* sees advocacy and hygiene education as crucial for establishing effective hygiene practices. Our advocacy and education approaches are designed to help the target groups to get an understanding of the importance of safe hand hygiene and to be aware of the proper steps and techniques, as well as risks and impacts. *Sanitation for Millions* works with partners and incentivizes them to develop own ideas, tools, and messages to:

- advocate actions to promote and facilitate safe hand hygiene to the respective audience,
- integrate proper handwashing and/or hand sanitizing messages into existing advocacy campaigns and handwashing sessions in school,
- make handwashing a habit at all levels, and
- encourage others to advocate for safe hand hygiene and proper handwashing.

On the occasion of international days of action, such as the Global Handwashing Day⁶ or the World Toilet Day⁷, *Sanitation for Millions* launches or contributes to campaigns on safe hygiene and safe sanitation, adhering to the following criteria:

- **Targeted and action-orientation**: Advocacy seeks to influence a targeted audience to take a specific action, drafts appropriate messages and plans methodology (needs assessment, tools, messaging, etc.) to reach the selected audience.
- **Effectiveness**: Good advocacy requires thorough planning, coordination, and monitoring of results to understand its effectiveness.
- **Evidence-based**: Advocacy gives recommendations and drafts messages based on evidence generated through research and approved by credible organizations.
- **Partnership Approach**: Advocacy is most effective when different organizations, individuals, and other groups coordinate their activities and merge their target groups.

With regard to the specific risks of the COVID-19 pandemic, *Sanitation for Millions* emphasizes the fact that advocacy activities must apply a methodology that decreases the risk of COVID-19 transmission with clear hygiene rules while avoiding the gathering of large groups. In health care facilities, it is advisable that medical staff is trained to model proper handwashing behavior at the beginning of each consultation, explaining to patients how and when they should wash hands.

Construction of Handwashing Facilities

*Sanitation for Millions* has constructed different kinds of handwashing facilities, considering its interventions as a contribution to the Sustainable Development Goals (especially SDG 6.2 and SDG 6.3), and hence strives for access to sustainable sanitation and hygiene for all in the respective partner countries.

Following the principle “Only build what can be maintained”, *Sanitation for Millions* aims at long-term functionality of the sanitation and handwashing infrastructure. *Sanitation for Millions* complies with international or national standards, aiming at the best possible solutions in terms of safe hand hygiene and

---

⁶ The Global Handwashing Day takes place on the 15 October of each year. The global campaign which was established in 2008 by the Global Handwashing Partnership (GHP) is dedicated to raising awareness of handwashing with soap as a key factor in disease prevention.

⁷ World Toilet Day (WTD) is an official United Nations international observance day celebrated on 19 November to inspire action to tackle the global sanitation crisis (SDG6.2). UN Water is the official convener of World Toilet Day. The goal is to inform, engage and inspire people to take action towards achieving SDG 6.2.
sustainability. Sanitation for Millions is supported by the GIZ construction unit that is carrying out the technical and budgetary supervision of all construction measures within GIZ.

In all construction measures, Sanitation for Millions follows an equitable and inclusive approach and implements facilities adapted to users’ special needs, taking age, gender, physical handicaps, or cultural aspects into account. The provision of handwashing facilities goes hand in hand with hygiene education and behavior change measures to ensure safe handwashing practices. Each sanitary or handwashing facility needs an operation and maintenance concept including the clear assignment of person(s) responsible.

As a new aspect due to COVID-19, the adaptation of the handwashing concept towards pandemic response and infection control is to be factored in each design and construction. Maintenance and supply, such as refilling of soap, hand sanitizers or towels, require an established protocol with clear accountabilities (e.g. budget assigned for essential supplies and spare parts). This comprehensive approach increases acceptance and ownership amongst the users and ensures the availability of proper hand hygiene.

Overall, handwashing facilities should be appropriate for the targeted users (e.g. at schools, health care facilities, public places, public transport stations, offices, etc.). Construction shall be based on locally available construction materials and spare parts. Robustness and longevity of construction materials shall be considered in design features and procurement. Handwashing facilities which are not meant for dispensing drinking water have to be clearly marked as such. The handwashing facility needs regular water supply, accommodation of soap and towels and at best a container or tank to collect the used water. The amount of space required for a handwashing station should be considered, especially in urban contexts and in risk-prone areas (e.g. floods), and handwashing facilities should be strategically located. In terms of cost-efficiency of the construction of a sanitary or handwashing facility and effectiveness to achieve safe hand hygiene following criteria shall be taken into account for design and construction:

a) **Affordability:** The facility shall be affordable for the institution where it is constructed. This requires an available budget which can cover such investments in the long run and operation and maintenance in the short run.

b) **Accessibility:** Facilities shall be constructed according to the needs of the users and consider height, physical handicaps or gender.

c) **Acceptability:** Design and materials shall be accepted by the so-called operator (e.g. schools) and responsible bodies (e.g. public authorities).

d) **Attractiveness:** The facility shall be attractive to the user and facilitate safe (hand) hygiene by applying an appealing and robust design.

---

8 For Sanitation for Millions, sustainability is defined in accordance with the globally agreed SDGs, especially SDG 6.2, since the SDGs are universally applicable to all countries. It also comprises the social, economic and environmental dimensions of sustainability and is encompassing two elements: a) sustainable sanitation (system approach towards safe sanitation and hygiene) and b) sustainability of the measures implemented (longevity and impact).

9 Uncontrolled drainage of wastewater can pose a health risks (attraction to germs and other disease vectors) and accordingly the disposal of the used water needs a deliberate and feasible solution.

10 For more details, please cross-check the standards of WHO and UNICEF:
https://www.who.int/water_sanitation_health/publications/wash_standards_school.pdf
http://apps.who.int/iris/bitstream/10665/43767/1/9789241547239_eng.pdf?ua=1
Construction of Handwashing Facilities: Best Practices

Uganda

Sanitation for Millions Uganda is promoting the WASHaLOT 3.0 as part of safe hand hygiene in schools. WASHaLOT 3.0 is a prefabricated group washing facility originally designed by the GIZ - Fit for School programme that can accommodate up to 10 users at the same time. In Uganda, the technology was first piloted in 5 schools in Kampala in 2017. Due to the positive feedback by the partners and improved hand hygiene by the pupils Sanitation for Millions has provided altogether 120 WASHaLOTs 3.0 to all 79 public schools under Kampala Capital City Authority (KCCA) and to four institutions in Apac Municipality. The biggest advantage of WASHaLOTS 3.0 is that it can be manufactured at low costs and is easy to install at schools with a school ground. The success of the instalment of WASHaLOT 3.0 by Sanitation for Millions has raised interest of other organisations and GIZ programmes to continue the upscale to other schools of the country like in the refugee settlement and host communities in Arua, and other development partners working with Gulu district in northern Uganda and KCCA.

© GIZ: James Kiyimba

Pakistan

Sanitation for Millions Pakistan installs sanitary units including group handwashing facilities in primary and secondary schools in Balochistan as part of its approach to provide safe sanitation and hygiene. Concurrently, handwashing sessions and hygiene education are integrated in the day-to-day school life so that students apply proper handwashing practices and are familiar with safe hand hygiene practices.

© GIZ: Gul Ghutti

Jordan

Sanitation for Millions Jordan sanitary units including handwashing facilities at eight mosques in Mafraq Governorate / Northern Jordan to provide safe sanitation and hygiene. The objective is to facilitate access to barrier-free safe sanitation and hygiene for the local communities by providing both infrastructure and guidance for the provision of safe hand hygiene. Currently only about 5% of the mosques in Jordan have barrier-free access, and no mosques have special bathrooms for physically disabled persons, while about 40% of the mosques do not have washrooms for women. The approach of Sanitation for Millions makes access to safe hygiene more inclusive and more widely accessible. Barrier-free access facilitated that physically disabled people now can enter mosques for prayer. It provides them with separated sanitary units equipped with resources for proper hand hygiene and enabled them to also use the community gardens for recreational activities.

© GIZ: Philipp Breu
Advocacy and Hygiene Education: Best Practices

Uganda

School Competitions

The Toilets Making the Grade (TMG) school competition, developed by and conducted in cooperation with the German Toilet Organization (GTO) in Uganda and Pakistan, has fostered improved sanitation and hand hygiene practices in all participating schools. The objectives of the competitions are to improve school environments as well as to become a model school in terms of cleanliness and hygiene. Through the establishment of sustainable practices for safe hand hygiene such as the adoption of handwashing routines, cleanliness campaigns for hygienic sanitary facilities and awareness creation amongst pupils and teachers the situation in schools has widely changed.

Schools have developed their own strategies and tools, and for example regarding handwashing, schools have created and introduced rhythmical handwashing compositions to arouse an emotional response towards the practice of handwashing. Another example are poems on handwashing that were composed and are recited during breaks to animate the students for proper adopting sustainable practices. Besides, a poem on handwashing was composed and is recited during breaks to animate the students for proper adopting sustainable practices. Innovativeness, creativity and collaboration amongst all stakeholders of a school on identifying solutions to the safe sanitation and hygiene challenges at their school was key to promoting safe hand hygiene practices. Simply applicable and scalable ideas came through the TMG committees that had been set up to ensure that the most effective and inexpensive solutions are integrated in the everyday school activities to become routines over time. Provision of TMG guiding materials and the continuous engagement with the school management to further appreciate and understand the impact of TMG upon their schools was another success factor that has finally led to a hand hygiene movement in all participating schools.

School Management

Sanitation for Millions Uganda has provided training to the school management of the various schools on monitoring and self-assessment of their WASH status which is a basis for evidence-based planning to improve the overall school sanitation system. This methodology led to an improvement of the WASH infrastructure and contributed to health and hygiene education of pupils changing their hygiene practices to a betterment.

The continuous capacity building approach to school management and all other stakeholders gave credibility to the Sanitation for Millions approach to further promote and support own WASH-related initiatives and safe hand hygiene. All stakeholders had the same understanding on safe hygiene and jointly embraced innovations that targeted schools’ improvements.
Pakistan

Celebration of Global Handwashing Day

Sanitation for Millions Pakistan annually celebrates the Global Handwashing Day to increase awareness and understanding about the importance of safe hand hygiene and to foster a culture of handwashing. The activities for the global handwashing days are targeted at students of primary, secondary and high schools of Balochistan since students have proven to be the champions for changing unsafe practices. By celebrating the Global Handwashing Days, Sanitation for Millions has sensitised a wide range of affiliated WASH stakeholders outside schools such as community representatives, government officials and parents to participate and adopt safe hand hygiene practices. It is estimated that more than 100,000 people have been reached so far.

The messages and the handwashing guidance are communicated during the celebration through tabloo, dramas, theatre plays and speeches that sensitise the different target groups on health issues and safe (hand) hygiene practices. Conducting the events in a playful way has turned out to be entertaining and amusing which motivated many of the students to conduct the various handwashing activities. This also encourages the young students to learn from the seniors and the seniors also feel proud of acting as role models for the others.

Establishment of WASH Clubs

Sanitation for Millions has re-established WASH Clubs in schools in Balochistan where hygiene issues and cleanliness are discussed amongst students and safe hand hygiene is promoted. The leaders of the WASH Clubs ensure that all classes have one day a week for group handwashing and school toilet cleaning. The activities are supervised by the school teachers. This practise has changed the students’ behaviour so much that now cleaning hands serves for both recreation and hygienic education. Students have shown improved handwashing habits not only after toilet visits but before and after lunch breaks as well.

Theatre Plays on handwashing and personal hygiene

Sanitation for Millions Pakistan conducted theatre performances by trained artists on handwashing and personal hygiene in schools. This proved to be very effective since the artists conveyed their messages in a humorous way and school children paid good attention to their performances. The teachers also provided a good feedback on the overall behaviour of the kids and saw behaviour change as a result of this measure.
Jordan
Training of Trainers (Waithats)

Sanitation for Millions has designed workshops to train female preachers (Waithats) as trainers on safe hygiene and sanitation. 100 Waithats from the Ministry of Awqaf, Islamic Affairs and Holy Places (MoIA) attended the workshops on “Sanitation and Hygiene promotion” carried out by Sanitation for Millions in Amman, Irbid and Mafraq Governorates and learned about safe hygiene and handwashing practices. This capacity building measures have enabled the Waithats to integrate the knowledge acquired at the workshops in their everyday work to guide and train people on proper hygiene practices and to apply safe hand hygiene in everyday life.

Production of Guidebook on Hygiene from an Islamic perspective

Sanitation for Millions designed a concept for a guidebook on safe hygiene from an Islamic perspective. The guidebook includes the topic of safe hand hygiene, referencing both WHO standards as well as Islamic principles on the issue. Additionally, methods on interactive games are included for mentors/trainers on how to practice proper hand hygiene, using creativity to achieve safe hand hygiene amongst children and adolescents. 1400 copies were distributed by MoIA so far.

Scouts’ activities

Sanitation for Millions designed a 3-day workshop for building capacities and know-how of young boys and girls scouts on the topic of safe sanitation and hygiene in alignment with the concept of the global sustainability goals (SDG6). The workshops have been complemented by virtual summer camps, in which safe hand hygiene practices are trained and promoted. Hygiene education and awareness creation measures were included which will then be transferred to schools and places of worship.

© GIZ: Heba Ababneh

© Information and Communication Commission of the Jordanian Association of Boy Scouts and Girl Guides

Published by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Registered offices Bonn and Eschborn, Germany
Sanitation for Millions (S4M)
Dr. Bärbel Schwaiger
S4M@giz.de

Author Sanitation for Millions
As at October 2021

GIZ is responsible for the content of this publication.

On behalf of Federal Ministry for Economic Cooperation and Development (BMZ)
Division Division 103 – Water, sanitation, hygiene

Postal address of BMZ offices
BMZ Bonn
Dahlemannstraße 4
53113 Bonn, Germany
T +49 228 99 535 - 0
F +49 228 99 535 - 3500

BMZ Berlin
Stresemannstraße 94
10963 Berlin, Germany
T +49 30 18 535 - 0
F +49 30 18 535 - 2501
poststelle@bmz.bund.de
www.bmz.de