COVID-19 WASH Responses by Governments, Water Utilities and Stakeholders in Middle East and North Africa (MENA) Countries

SUMMARY

This technical document presents an overview of initiatives that MENA countries and WASH stakeholders are implementing in the COVID-19 response to ensure WASH services for all. Ensuring good hygiene and appropriate WASH practices for everyone, everywhere, will help prevent transmission of the COVID-19 virus.

Initiatives were identified and mapped across all 21 MENA countries¹ and categorized into those that are aimed at securing water, sanitation, and hygiene for all, and those that seek to provide technical and financial support to utilities. In addition, illustrative specific examples of the country responses are outlined to showcase promising practices and for exchange of experiences.

Many response measures were found across the countries, with the majority of measures being led by national/central government, sometimes with close support from the United Nations, notably UNICEF. A strong focus of the initial response has been seen in the areas of hygiene promotion and Infection Prevention and Control (IPC), with UNICEF delivering messaging and WASH supplies at scale across the region. In non-Gulf states, a focus has also been ensuring continuity of WASH services and IPC in HCFs and isolation centers, and refugee and IDP camps, again often with support from UNICEF.

As the response continues and de-escalation begins in some countries, hygiene promotion and IPC will need to continue at scale with a focus on public spaces and will need to be matched in ambition with the assured availability of soap, water and handwashing facilities at scale, including in schools, where acceleration of WASH preparedness measures for safe school reopening may be required. Support to vulnerable groups including those in villages and small towns to access WASH services needs additional focus. In addition, parallel support needs to be extended both technically and financially to service providers in order to ensure the financial viability of utilities and the provision of those critical services. Finally, active coordination mechanisms and regional knowledge exchange and learning platforms need to be continued and strengthened, and used to ensure that vulnerable and disproportionately affected groups, including women, girls, refugees and migrant workers are not left behind in the design of the crisis response.

¹ Countries are selected based on UNICEF MENA Region countries https://www.unicef.org/mena/where-we-work
**Context**

COVID-19 is threatening all countries in the world, albeit to different extents and different ways. The epidemic has now spread to 216 countries and territories, and as of July 7, 2020, the World Health Organization (WHO) has reported 11,500,302 confirmed cases of COVID-19, with 535,759 confirmed deaths⁴. By June 15, MENA region had reported 614,286 cases and 14,422 deaths⁵.

The scale and scope of the crisis requires a wide and flexible, but also well-integrated, multi-sector approach that aims to both control the spread of COVID-19 and respond to the socio-economic impacts of the pandemic.

UNICEF’s integrated, multi-sectoral programmatic response to COVID-19 is described in the “Guidance Note on Programming Approaches and Priorities to Prevent, Mitigate and Address Immediate Health and Socio-economic Impacts of the COVID-19 Global Pandemic on Children” [1], in alignment with the “UN framework for the immediate socio-economic response to COVID-19” [2].

The contribution of WASH to the COVID-19 response is primarily by promoting good hygiene, and particularly, by ensuring frequent and proper handwashing with soap, which has been shown as one of the most important measures to control and prevent infection with the virus. Therefore, governments and WASH practitioners should work to enable and prioritize the provision of safe water, sanitation, and hygienic conditions for all during the COVID-19 outbreak, paying special attention to the needs of those in vulnerable situations and in health care facilities.

In recent months, all different WASH stakeholders in MENA region - governments and decision makers, regulators, utilities, civil society, and users - have implemented a number of response measures, initiatives, and actions to fight the pandemic. This note provides an overview of those initiatives, and, with the aim of sharing experiences and good practices, showcases illustrative examples from countries.

Response measures are structured in two different areas:

- **Measures to ensure access to a minimum daily volume of drinking water, basic sanitation and to enhance safe hygiene behavior for all – with a focus on the consumer (people and institutions),**

- **Measures to secure the continuity and affordability of WASH services and products – with a focus on the utilities.**

These two priority and strategic blocks have been repeatedly highlighted in UNICEF programming documents [3,4] and included in WASH sector guidance notes, such as those developed by the Global WASH Cluster [5,6]. In this regard, the structure of this note follows, and is aligned with, the UNICEF WASH Programming Framework for COVID-19 Response, as shown in Figure 1.

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By documenting and presenting specific measures and concrete initiatives launched by state and non-state entities and national and local levels, this note aims to serve as a reference to help inform response and de-escalation strategies in countries, in the face of COVID-19. Since there is wide variation from country to country, “context-specific” approaches must be adopted, however. In addition, implementing the response requires strong political will and commitment, the active participation of the regulators and utilities, proper collaboration and coordination between different sectors and stakeholders (e.g., education, social protection, health, etc.), and citizen engagement.

MENA Situation

Figure 2 shows the progression of daily cases and daily deaths for MENA region from March 9 to June 14 2020.

Figure 2: Weekly Covid-19 cases and associated deaths in the MENA region, March 9 to June 14 2020

The region was one of the first to report cases outside of Asia, with Iran emerging relatively early on as a country with escalating cases and deaths and as of June 2020 still has the highest confirmed cases and deaths. Cases have also risen significantly in some Gulf states, which now account for more than half of the cases in the region.

Although in many cases confirmed cases and deaths are relatively low compared to countries in other regions, a concern in the region is that there may be a significant level of undetected cases that could potentially overwhelm already stretched health services. There was growing concern about the implications of outbreaks spreading in vulnerable populations in camp settings and war torn countries, and especially Yemen, where the health system was already on the brink of collapse and dealing with the worst ever recorded Cholera outbreak, since 2016. Unfortunately, cases and deaths are now increasing there and have also been registered in refugee camps in Djibouti, Iraq, Lebanon, and State of Palestine.

Lockdown and curfew measures are quite widespread in the region, with some reports of development and humanitarian efforts being constrained as a result of an inability of actors to mobilize. Some countries are cautiously starting to relax confinement measures, however in some cases this has seen a spike in new cases, with weekly deaths on the rise after six weeks of declines.

UNICEF’s WASH response across the region aligns with the three pillars in Figure 1, and includes the following key initiatives:

1. Reaching people with critical WASH supplies (including hygiene items) and services
2. Providing healthcare workers within health facilities and communities with Personal Protective Equipment (PPE)
3. Training healthcare facility staff and community health workers in Infection Prevention and Control (IPC)

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Section largely based on
https://www.unicef.org/appeals/Novel%20Coronavirus_sitreps.htm
MENA Covid-19 WASH response mapping

The MENA Covid-19 WASH Response mapping was conducted intensively between April and May 2020 by Stockholm International Water Institute (SIWI). This initial response phase mapping covers response measures found from the beginning of the pandemic until 31st May 2020, and took the following approach:

- 21 countries searched and mapped
- All actor responses considered – Government, Utilities, Regulators, International Orgs, CSOs, Private Sector etc.
- 100% web-based search (no limitations to information sources used)
- Search languages: Arabic, French, English
- Classification of measures found in five target areas mentioned above (Figure 1), and also based on the following:
  - Initiative/measure led by national/central level state institution or national emergency taskforce
  - Initiative/measure led by sub-national/local level state institution, sub-national emergency taskforce, or NON-state actor

In terms of the information sources used for the initial web-based search and mapping, the following were the most common resources:

- Government websites (and social media)
- Water and sewerage utility websites (and social media)
- Humanitarian/development organization websites and Global WASH cluster and WASH and Health clusters at country level (including UNICEF SitReps)
- Google alerts using keywords, e.g.: water sanitation hygiene covid coronavirus “COUNTRY”
- General google searches

There are of course limitations with this approach, so the information has been validated and completed wherever possible, through engaging UNICEF Country Offices.

The following section highlights some good practices, linked to the relevant response target and measures as found in Table 1 from page 21, followed by an analysis and discussion of the results and conclusions.

Country responses and learning

ENSURING ACCESS TO SAFE WATER, ADEQUATE SANITATION AND HYGIENE SERVICES FOR ALL

1. Intensify behavior change population-wide initiatives and awareness-raising campaigns for hand washing at the household and in institutions

   Handwashing with clean water and soap is one of the most basic and effective measures against the COVID-19 [3,7]. But doing it requires access to clean and reliable water, a handwashing facility with soap and handwashing knowledge and practice. The current outbreak of COVID-19

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5 Limitations include i) the lack of publicly available information on the internet in some cases, ii) the dynamic and rapidly evolving situation leading to an outdated snapshot mapping of the response.

6 UNICEF Country Offices that participated in the validation exercise: Egypt, Iran, Iraq, Jordan, Libya and State of Palestine.
threatens desired behavior change and increases the following risks:

- lack of appropriate hand hygiene knowledge and inadequate handwashing behavior, and
- misinformed people due to presence of fake news or inadequate awareness raising about
- the importance of handwashing and other hygiene practices.

To promote more frequent and regular hand hygiene, governments are setting up emergency measures in three main areas:

- Develop hygiene messages tailored to the country context and improve the communication of accurate information, using multiple delivery channels (digital, handouts, awareness sessions, mass media, onsite campaign), and including targeted messaging for key stakeholders and at-risk groups. This might include identifying and training community leaders (including religious leaders) in prioritized rural areas to promote proper handwashing (and other IPC measures) in their respective communities and participation in monitoring.

- Launch population-wide handwashing campaigns, including in pre-schools, schools, health facilities, pharmacies, local women's organizations, youth organizations, refugee and internally displaced persons' (IDPs) camps, migrant shelters and transit centers, detention facilities, orphanages and public spaces, to improve the continuity of preventive practices among children, at-risk groups, and the general public.

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**BOX 2. INTERNATIONAL ORGANIZATION FOR MIGRATION (IOM) REACH MIGRANTS WITH HYGIENE AND IPC GUIDANCE IN LIBYA, EGYPT, AND IRAQ**

In **Libya**, IOM ensured information on prevention of COVID-19 to be provided in Detention Centres (DCs) for migrants, management and staff as well as the Libyan Coast Guards at the disembarkation points (DPs).

In **Egypt**, IOM has activated its 'communication corridors' with migrant community leaders to ensure 24/7 circular exchanges.

In **Iraq**, IOM has set up remote management mechanisms with displaced community leaders in camps and informal settlements and is scaling hygiene promotion and health awareness where access has been enabled.

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**BOX 1. UNICEF SUPPORTS NATIONAL RISK COMMUNICATION AND COMMUNITY ENGAGEMENT (RCCE) STRATEGIES AND CAMPAIGNS ACROSS THE REGION**

UNICEF have taken a leading role in the majority of countries in the region in the development and implementation of national RCCE strategies, in support of national government and often partnering with WHO.

Through these RCCE strategies and campaigns, directly and indirectly through national platforms, by 24th June 2020, UNICEF had reached over 190 million people with Risk Communications and Community Engagement (RCCE) messages on COVID-19 prevention.
UNICEF is supporting prominent community and religious leaders in at least seven countries in the region (Algeria, Djibouti, Jordan, Oman, Sudan, Syria, and Yemen) to help reinforce good hygiene practices.

In Sudan, UNICEF trained 104 Imams in West & Central Darfur on key messages to prevent COVID-19. In Kassala, 24 Mosques shared awareness messages in 9 localities, to promote essential practices, reaching a total of 2,640 individuals. In Sennar, 413,502 people were reached through announcement made by mosques.

In Syria, UNICEF reached over 4 million people with information materials and supported the Ministry of Awqaf (religious endowment) in engaging with 1,000 religious leaders to disseminate prevention messages through 3,600 religious institutions.

In Yemen, religious leaders have continued awareness sessions, cumulatively reaching 3.6 million people in about 5,000 mosques.

2. Strengthen infection prevention and control (IPC) at the household and in institutions

Infection prevention and control (IPC) measures are essential both at household level and in institutions, in particular in health care facilities and in schools. They are aimed at limiting human

BOX 4. UNICEF COMBATS MISINFORMATION ACROSS THE REGION

UNICEF together with partners and in support of government is proactively supporting the systematic monitoring and management of COVID-19 misinformation in at least ten countries in the region (Djibouti, Egypt, Iraq, Jordan, Lebanon, Oman, SoP, Tunisia, UAE and Yemen).

Through the Iraq WASH Cluster, UNICEF plays a role in combating misinformation in camp settings. Guidance for avoiding misinformation in camp settings is provided to all WASH partners. It is recommended that they exclusively use the WHO and Health Cluster developed COVID-19 messages and information resources, available in English, Arabic and Kurdish. For partners planning to implement mass media campaigns, such as radio, social media, television or text messages, all campaigns should be coordinated through the Health, WASH, and CCCM clusters to prevent spreading of misinformation or duplication, ensure synchronization of messages, and facilitate coordination with government messaging.

In UAE, UNICEF conducted an orientation session with the Child Advisory Council of the Supreme Council for Women and Childhood. The discussion covered misinformation related to COVID-19 amongst other topics, with a focus on children, adolescents, and young people.
to human transmission and protect individuals from exposure to COVID-19 by breaking infection transmission pathways through water, sanitation, and good hygiene. There are a number of situations that need to be addressed:

- lack of handwashing infrastructure or poor access to basic hygiene and disinfection products (soap, alcohol-based hand rubs), and

- essential institutions (e.g., health care facilities, schools, isolation centers, prisons etc.) with no continued access to safe and sufficient water and basic sanitation.

To improve IPC, a number of key interventions have been adopted by countries:

- Promote IPC measures at the household, such as cleaning and disinfecting surfaces, isolating people with symptoms and people at a higher risk, and not sharing personal items such as glasses, cutlery, towels, etc. with special attention to confined households and most vulnerable groups.

- Ensure that handwashing infrastructure is available, safe, accessible, and functional where and when needed, including the rehabilitation and construction of new handwashing stations (either for handwashing with soap and water or for hand rubbing with an alcohol-based hand rub) in exposed collective sites and public spaces, such as refugee and IDP camps, schools, healthcare facilities, markets, prisons, transport locations, etc. The quantity and usability of the hand hygiene stations should be adapted to the type (e.g. young children, elderly, women, those with limited mobility) and number of users to better encourage use, reduce waiting time and guarantee physical distancing [7].

**BOX 5. HANDWASHING IN PUBLIC SPACES IN DJIBOUTI, IRAQ, AND SUDAN**

**In Khartoum, Sudan,** Twenty portable handwashing facilities are now accessible for homeless persons in seven locations in the Sudanese capital as part of the International Organization for Migration’s (IOM) emergency response to COVID-19.

**In Djibouti,** to support the intensification of handwashing practices, UNICEF are pursuing its support to the Ministry of Decentralization, the City Council and local communities’ authorities to expand handwashing stations with soap and sanitizers in more public spaces and in the most vulnerable areas of the cities (Djibouti and regions).

**In Iraq,** UNICEF supported a total of 140 public hand washing facilities were provided and installed at heath care facilities, in local markets near HCFs and other public places in high risk areas within Baghdad, Najaf, Babil and Basrah. These places are used by over 50,000 people including around 23,000 children.
Ensure the availability (e.g., by promoting local production) and affordability of hygiene products (soap, domestic bleach, menstrual hygiene materials, etc.) and household-based water treatment products (chlorine tablets, filters, etc.), through direct distribution, cash-based interventions, or market control mechanisms; with specific focus on confined households and areas of high incidence with vulnerable groups, slums, exposed collective sites and public spaces.

## Box 6.
**UNICEF Distributes Hygiene Supplies at Scale in Lebanon, State of Palestine and Syria**

UNICEF has supported the procurement and distribution of hygiene supplies on a large scale in at least four countries in the region including Lebanon, State of Palestine, and Syria and as of 24th June 2020, has reached a total of over 7.4 million people across the region.

In Syria, a total of 1.6 million soap bars are being procured by UNICEF through multiple channels: an agreement was reached with WFP to include soap in their monthly food distributions targeting 3.4 million people.

## Box 7.
**UNICEF Ensures WASH Services in Health Care Facilities and Isolation Centres Across the Region**

UNICEF is ensuring the continuity of WASH services in HCF and isolation centres in at least 11 countries in the region (Djibouti, Egypt, Jordan, Lebanon, Libya, Morocco, SoP, Sudan, Syria, Tunisia, and Yemen) in various ways.

As of 24th June 2020, UNICEF had trained over 5,000 HCF staff and community health workers in IPC and provided almost 155,000 healthcare workers with PPE.

UNICEF has supported assessments of the WASH situation in HCFs and isolation centres in Libya, Lebanon, Sudan, and Syria.

In Syria, UNICEF is supporting the rehabilitation of WASH facilities in 15 health centres identified as potential quarantine/isolation centres, while ensuring WASH supplies to cover the needs of 1,000 health centres for the next two months.

In Djibouti, UNICEF is supporting the set-up of WASH services (water supply and sanitation infrastructures) in government quarantine sites that will host over 600 migrants returning from Gulf state.

Secure the continuity of water and sanitation services in health care facilities (HCF) and isolation/quarantine centers, including the implementation of the eight practical steps to Improve and Sustain WASH in Health Care Facilities [8] or the use of the WASH FIT tool to assess the quality of WASH services in HCF. Key practices for Infection Prevention Control (IPC) and WASH in HCF include hand hygiene, environmental cleanliness, medical equipment processing, and healthcare waste management [9].
Secure water and sanitation services in schools following the reopening of education centers, including i) enforcing regular handwashing with soap and clean water at age-appropriate hand washing stations (or hand sanitizers dispensers), ii) managing excreta (feces and urine) safely, and iii) implementing regular cleaning and disinfection of school facilities, especially bathrooms and toilet facilities [4,5].

BOX 8.
UNICEF SUPPORTS WASH PREPAREDNESS PLANNING FOR SCHOOL REOPENING ACROSS THE REGION

Recently, more UNICEF support for planning school reopening WASH preparedness measures is being seen, in at least six countries in the region (Djibouti, Egypt, Iran, Jordan, Morocco and Tunisia).

In Iran, UNICEF is supporting the government with rehabilitation/construction of new hand washing stations at schools in deprived and most vulnerable areas mostly affected by COVID-19.

Promoting improved cleaning and disinfection in public spaces and high-risk areas (e.g., public fountains, recreational areas, mosques, etc.)

3. Preserve the ability of all people, including the most vulnerable, to meet their basic needs in relation to water and sanitation.

A combination of policies, regulations and field interventions are needed to maintain - and where possible, increase - coverage of basic services and protect the needs of the most vulnerable groups. Specifically, priority must be given to those measures that guarantee that all people have access to drinking water and sanitation, either through centralized solutions or other non-conventional alternatives. There are a number of situations that need to be addressed:

- quarantined population with no access to drinking water or sanitation services,
- disconnection from services due to lack of income and/or unpaid bills, and
- families regressing to open defecation due to inaccessibility of previous public toilets or resistance to share toilets under the pandemic.

A number of measures are currently in place to address these situations, and particularly to:

- Guarantee that all people have access to a minimum amount of safe and clean water, regardless of the conditions of confinement. Initiatives might range from banning utilities from cutting off water supply services to immediate reconnection of all households disconnected because of their inability to pay. Service providers should also expand the water system or adopt alternative supply approaches, including emergency solutions, for those households with no piped connection and those living in vulnerable conditions, such as migrant workers, displaced people and homeless. Utilities should also work on demand management through promotion of water conservation and rational use by users to ensure that if there is an increase in demand, there is still enough water to meet the minimum needs of all.

BOX 9.
WATER SUPPLY CUTS SUSPENDED IN ALGERIA, LEBANON, MOROCCO, OMAN, SAUDI ARABIA, AND TUNISIA

States, municipalities and water utilities have confirmed that there will be a temporary suspension of water supply cuts during the crisis in Algeria, Lebanon, Morocco, Oman, Saudi Arabia and Tunisia.
GUARANTEEING ACCESS TO WATER IN TUNISIA AND YEMEN

In Tunisia, on an exceptional basis, it was decided to reconnect the water supply to those who failed to pay the bills, and to give them a month from the date of the water replenishment to settle their conditions.

In Yemen, The King Salman Humanitarian Aid and Relief Center (KSRelief) continues to carry out water and environmental sanitation projects in various parts of war-torn Yemen.

From April 30 to May 6, 301,000 liters of drinking water were pumped into tanks in Al-Khokha district in Hodeidah. Over 90,000 liters of drinking water were pumped into tanks in different directorates of Hajjah governorate benefiting 5,600 people.

MEETING INCREASED WATER DEMAND IN JORDAN, LEBANON, STATE OF PALESTINE, QATAR, SYRIA, AND TUNISIA

A number of countries across the region are taking steps to meet increasing demand by increasing quantity of water supplied, increasing efficiency through leakage reduction, and also trying to manage demand by promoting water conservation behaviors by consumers.

In Syria, USAID and UNICEF have both increased the volumes of water they provide beneficiaries in order to meet increased demand due to extraordinary handwashing measures. In Jordan, demand for domestic water demand surged by an additional 40% in the early stages of the response and in Lebanon, it was agreed to increase service hours to meet increased demand.

In Tunisia, SONEDE is doing an awareness campaign on water saving, whilst in Qatar, the Qatar General Electricity and Water Corporation “KAHRAMAA” represented by the National Program for Conservation and Energy Efficiency “Tarsheed” launched a number of awareness programs during the holy month of Ramadan, within the campaign “Stay at Home and Act Sustainably”, which are prepared within the plans and goals of “Tarsheed” to increase awareness of the efficient use electricity and water for the residential sector. A brochure has also be produced and is available on the website.

Provide basic sanitation to all households without toilet facilities, preventing them from practicing open defecation. Ensure availability and free access to public toilets for key workers - people whose jobs are vital to public health and safety during the coronavirus lockdown -, and homeless people.
BOX 12.
SANITATION FOR VULNERABLE PEOPLE IN LIBYA, STATE OF PALESTINE AND SYRIA

To ensure vulnerable people can meet their sanitation needs during times of lockdown, a few good examples can be found, in Syria, SoP and Libya:

In Syria, 235,380 people received new latrines (most of the existing public/community latrines are overcrowded due to an inadequate number of latrines)

In SoP, partners are in the process of desludging 150 cesspit and septic tanks to vulnerable households.

Ensuring that there are specific measures aimed at addressing the needs of women and girls in relation to water, sanitation and hygiene (e.g., sanitation facilities in isolation centers with gender sensitive safety measures and privacy, targeted awareness raising on handwashing and hygiene promotion, ensuring menstrual hygiene and health management, sex-disaggregated data are considered in WASH response plans)

BOX 13.
UNICEF SUPPORTS WOMEN AND GIRLS TO MEET THEIR WASH NEEDS IN DJIBOUTI, EGYPT, JORDAN, LIBYA, STATE OF PALESTINE AND SYRIA

As the response has progressed, more focus has been placed on meeting the needs of women and girls:

In Egypt, UNICEF reached 43,331 adolescent girls and boys and 1,111 were engaged through the social media site of the National Girls’ Empowerment Initiative “Dawwle” to raise awareness on gendered impacts of COVID-19 using human interest stories and facilitated digital peer to peer support.

In Jordan, UNICEF have supported establishment of quarantine areas (separated by gender and accessible for people with disabilities), including latrines and showering areas in Azraq camp and King Abdullah Park.

Implement existing and/or innovative financing mechanisms and instruments to assist vulnerable families in paying their water bills, through e.g., subsidy systems, bill cancellation, debts rescheduling and remission, exemption of reconnection charges to distribution networks, or others. Establish and guarantee a minimum daily amount of water for all (ensuring that the Minimum Standards for both water quantity and quality are met [10], and taking into account an increase in consumption due to improved hygiene and the confinement situation of many people in their homes).
BOX 14.
WATER AND SEWERAGE BILL RELAXATION IN BAHRAIN, MOROCCO, AND UAE

In a number of countries, states and municipalities are taking measures to relax payments of water and sewerage bills:

In Bahrain, for all individuals and businesses, the government of the Kingdom of Bahrain will pay Electricity and Water Authority bills for the months of April, May and June of this year, including fixed administrative fees and municipal fees, which should not exceed the amount of the bills of the same months of the year 2019. Similar measures have been adopted in UAE.

In Egypt, Morocco and Oman, measures have been taken to allow delayed payments.

SECURING THE CONTINUITY AND AFFORDABILITY OF WATER, SANITATION AND HYGIENE SERVICES, WHILE ENSURING THE FINANCIAL SUSTAINABILITY OF UTILITIES

4. Secure the continuity, affordability and quality of water and sanitation services as well as proper waste management practices.

In the pandemic situation, water and sanitation are essential services for the entire population. Therefore, keeping water supplies safe and safely managing wastewater and fecal waste need to be secured by setting minimum standards for accessibility, availability, quality, continuity, and equity.

Governments are asked to promote public policy measures in the WASH sector to ensure the continuity of services, with special attention to poorest and vulnerable segments of population. Sector partners are urged to support governments to prepare budgets and implementation plans for priority response and recovery measures, and to periodically monitor WASH services access and prices, and propose corrective actions when needed. Equally important, governments need to endure appropriate waste management and treatment, including of medical, household, and other hazardous waste, as an essential public service. The aim is to ensure:

- proper maintenance of WASH infrastructure avoiding gaps in service provision, as well as deterioration or collapse of services,
- regular supply of electricity supply to utilities,
- regular supply of water and wastewater treatment chemicals, as well as stable prices of basic equipment, spare parts, and consumables, and
- that there are no secondary impacts upon health and the environment due to disrupted water supply, wastewater, or poor waste management.

A number of measures are currently in place to address these risks, and particularly to:

- Secure the continuity of services, by keeping water supplies safe (protection from source to consumer), and managing wastewater and fecal waste safely (at every point of the sanitation chain) [11]. Carry out regular and preventive maintenance on all critical equipment, avoiding deterioration or collapse of these essential services as a secondary effect of outbreak. Increase testing and monitoring of residual chlorine at strategic points in the distribution network and specifically for key users, such as health care facilities, nursing homes and schools. In addition, water and sanitation systems should be able to meet an increase in demand, and infrastructure extension to non-connected areas should be planned for, if possible.
ENSURING SAFE WATER SUPPLY AND WASTEWATER TREATMENT ACROSS THE REGION

Many state actors, municipalities and utilities across the region are taking proactive and intensified measures to ensure the proper operation of water and wastewater treatment plants and networks, including in Algeria, Jordan, Morocco, State of Palestine, Saudi Arabia, Tunisia, and UAE.

In Jordan, Tafila Water Department emergency and maintenance cadres have dealt with about 120 malfunctions in the main and subsidiary drinking water lines, and have been maintained to reduce water losses and leakage, stressing the stability of water supply operations.

In Syria, efforts are being taken to ensure disinfection, intensifying bacteriological monitoring of water quality, storing and routinely evaluating water treatment material, and to ensure that no water source is used before installing and operating disinfection devices with a UPS power supply to continue the disinfection process during a power outage.

In UAE, the number of sample examination sites in the Sharjah city network has been increased to 55 sites in order to continuously monitor the water quality in the network.

In Morocco, a letter from the Ministry of the Interior, addressed to local authorities, prohibits the use of wastewater before it has undergone treatment following the possible presence of traces of SARS-CoV-2 genomes from the stools of affected people.

CONTINUITY OF WATER DURING BLACKOUTS IN ALGERIA

The Algerian Water Authority has put in place an effective system to cope with any emergency that could cause fluctuations in the supply of drinking water. It also declared to ensure coordination with Sonelgaz company (electricity and natural gas distribution) in the event of a break in the supply caused by electrical failure, while providing additional generators.

Advocate for, sustain and strengthen and diversify supply chains (e.g. by promoting local production) for essential water and wastewater treatment products, chemicals, spare parts and consumables, to ensure increased availability and continuity of supply.

KEEPING WATER SAFE IN ALGERIA AND STATE OF PALESTINE

The Algerian Water Authority is taking measures to ensure water quality, including through ensuring adequate stocks for more than 6 months of water treatment materials.

In SoP, the Palestinian Water Authority and partners have ensured availability of adequate disinfectants and fuel for seawater desalination plants for three months.

Provide appropriate personal protective equipment (PPE e.g., gloves, safety goggles, face shields or masks, etc.) to sanitation workers with risk of exposure to excreta (including informal workers) [12] and to cleaning agents in health care facilities, while promoting increased hand hygiene.
The majority of states have introduced proactive measures to protect the health of key water and sewerage industry workers, including provision of PPE, training, sterilization of workspaces:

In Sudan, the Khartoum State Water Authority will provide means of transportation that take workers from homes to their work sites, thus reducing their risk of infection.

UNICEF Jordan has supported the Ministry of Water and Irrigation (MWI) with the immediate purchase of essential PPEs for workers of water and wastewater facilities.

In SoP, Norwegian Refugee Council has supported the protection of 1500 staff at 400 water and sewerage operational sites and offices with hygiene and disinfection materials as well as protective clothing.

5. Provide technical and financial support to utilities.

Water and sanitation services cannot be secured at the cost of financial sustainability of service providers. Indeed, water utilities, small service providers and rural water community-based organizations need technical and financial assistance to manage services safely and sustainably. There is otherwise the risk of:

- the bankruptcy of service providers, or
- lack of adequate means, resources, and capacities to reach vulnerable populations and non-connected or dispersed households.

The following initiatives are currently in place to address these risks, and particularly to:

- Ensure that utilities (urban and rural) receive continuous support and technical advice in relation to the issues of administration, planning, operation and maintenance, etc. Launch and/or promote networking and collaborative platforms between local authorities and utilities for the exchange of information, the sharing of good practices, cross-learning processes, etc.

BOX 19.

STRENGTHENING COVID-19 WASH RESPONSES BY LEARNING FROM EACH OTHER: REGIONAL LEARNING PLATFORMS

There has been an increasing number of regional and sub-regional webinars for experience sharing and technical assistance to WASH stakeholders and organizations across the region:

The Union for the Mediterranean (UfM) and the Institut Méditerranéen de l’Eau (IME) are hosting a series of extraordinary webinars for water utilities to exchange views and share good practices and plans for the water emergency response to the pandemic as well as to give policy recommendations on how to move forward. UfM is launching a study on the impact of COVID-19 on the water sector, and will support the implementation of the recovery strategy by providing a platform for policy dialogue and up-scaling of exemplary projects.

Other sub-regional webinars have been held on ’Water Security and Coronavirus Disease (Covid-19)’, hosted by UAE University’s National Water Centre and a and extraordinary meeting of the undersecretaries of the Ministries of Electricity and Water of the Gulf Cooperation Countries (GCC) member states to discuss the coronavirus pandemic. The meeting discussed measures taken by the countries to reduce the spread of the coronavirus, the challenges and lessons learnt from this crisis and to exchange views on how the electricity and water sectors should deal with this crisis and to exchange views on how the electricity and water sectors should deal with the coronavirus pandemic and exchange expertise and unify response efforts.

- Ensure that utilities (urban and rural) receive financial assistance to secure services' continuity and proper operation and maintenance. Support utilities to managing and monitoring liquidity risk, preventing them from
suffering cash flow crisis due to delays or non-payment of bills, increased operation, and maintenance costs, etc. Pilot ICT based innovations, blended finance mechanisms, etc., since they might emerge as appropriate solutions for the short and mid-term. Develop business plans to analyze economic viability of the utility in the short and mid-term.

☐ Create and implement new funding instruments to improve, rehabilitate and expand water and sanitation infrastructure, covering specific needs caused by the pandemic. These mechanisms can come from own governmental funds or with the support from multilateral organizations.

☐ Establishing multi-actor emergency coordination mechanisms, including international and multilateral organizations and other actors.

Results and analysis

Since March 2020, MENA countries have taken proactive measures in response to the COVID-19 emergency. A summary of the findings can be seen in Table 1 from page 21. More than half of the countries were found to be implementing over a third of the recommended response activities.

Map 1: Map showing total number of recommended response measures found by country, where response measures were led by any actor at national or local level (out of 43 recommended response measures)

Where evidence of recommended response measures were found, more often than not, national/central government were found to be actively leading the response, sometimes with close support from the United Nations, including UNICEF, and including through national emergency taskforces.

Map 2: Map showing total number of recommended response measures found by country, where the initiative/measure was led by a national/central level state institution or a national emergency taskforce (out of 43 recommended response measures)

In terms of response target areas, target one (hygiene promotion) was found to have a very high level of activity, followed by target 2 (IPC), with targets 3 (ensuring basic WASH needs), 4 (WASH service continuity) & 5 (support to water utilities) having significantly lower activity (see Table 1 from page 21 and the maps on page 19).

A preliminary analysis of actions initiated by all 21 countries shows substantial activity in the following areas:

☐ Almost all governments have been taking action to implement hygiene promotion and IPC at scale, targeting households, often with the support of community and religious leaders, and many have been proactively tracking and combating misinformation and fake news. These measures are often taken with the support of UNICEF and other partners
such as WHO. As of 24th June 2020, UNICEF had reached over 190 million across the region with messaging on prevention.

- In non-Gulf states particularly, more of a focus has been seen at local levels in terms of ensuring continuity of WASH services in HCFs, isolations centres and refugee and IDP camps; and the provision of hygiene supplies at scale to vulnerable households, often with support from UNICEF, or other UN agencies. As of 24th June 2020, UNICEF had reported reaching over 7.4 million across the region with WASH supplies, almost 155,000 healthcare workers with PPE and having trained over 5,000 health workers in IPC.

- Some countries were found to be taking proactive steps to guarantee water for those less able to access and afford services, by providing a minimum amount of water to meet basic needs, free of charge in some cases.

- Some countries were also found to be proactively ensuring correct operation of piped water supplies by protecting the safety and security of water and sewerage utility workers, increasing infrastructure maintenance, enhancing disinfection and water quality monitoring, and securing alternative and emergency power supplies, all ensuring business continuity.

- As the response has progressed, there have been more and more regional and sub-regional platforms active, with WASH stakeholders sharing experiences to assist in strengthening country responses.

Based on the mapping and analysis, potential gaps in the responses might include the following:

- Although hygiene promotion and IPC are being implemented at scale, often with support from UNICEF, the hygiene supplies such as soap and infrastructure such as temporary handwashing facilities needed to put positive behaviors into practice do not currently seem to match at the same scale, and commodity prices for soap are increasing in some cases. There is scope therefore to scale up the monitoring of market prices for hygiene commodities, taking corrective action where needed, increasing the distribution of hygiene commodities to those who cannot afford them and for installing temporary handwashing facilities during the de-escalation phase of the response, as critical measures to prevent a second surge in cases.

- Outside of cities and refugee and IDP camp settings, little evidence was found of extending support with water trucking or new/extended water services to communities, small towns and rural areas not connected to centralized water supplies.

- With regard to sanitation, beyond ensuring effective operation of sewerage and wastewater treatment in some limited cases, very little was found for measures relating to supporting decentralized sanitation for vulnerable groups not connected to the sewerage network. Targeted support could be needed to ensure that households are able to afford fecal sludge services to ensure off-grid toilets remain functional.

- A general lack of technical and financial support to water and sewerage utilities in the short and medium term is seen, with almost nothing found. As utilities potentially find themselves with increasing water demand on one hand and the inability to fully cost recover on the other,
they could face a potential crisis in the medium to longer term if technical and financial support is not scaled up soon.

- Measures prohibiting the disconnection of water supply to users and enforcing the reconnection of previously disconnected users were not found to be widespread.

- Related to that, subsidies for bill payments are neither widespread nor reaching those most in need, as the measure was found to be most common in richer Gulf states. Governments in non-Gulf states could consider ways to partially or fully cover water and sewerage bills for the most vulnerable unable to afford, whilst also ensuring cost recovery for the utilities.

- With few exceptions, no significant measures were found for promoting water-saving and efficiency, despite the likely increase in demand due to confinement and extraordinary handwashing and IPC activities. It is likely that during the de-escalation and recovery phases of the crisis, that utilities will need to scale up work on reducing leakage and promoting water conservation by consumers.

- Although there are some positive examples of considering the specific needs of women and girls in the response, measures found were usually championed by the UN and were usually limited to distribution of dignity kits including female hygiene products. There is potentially scope for governments and actors to do more and integrate gender into the design of the response and subsequent de-escalation phases.

- Measures in support of WASH preparedness for school reopening have recently started to pick up, usually with support from UNICEF, but are still often at planning stages, so efforts may need to be accelerated in this area.

- Certain sections of society may be at risk of being forgotten in the response, including migrant workers in camps in Gulf states, with little evidence found of interventions targeting these vulnerable groups and settings.

- Alarming, there are a number of examples of the continuation of weaponizing of water despite the COVID-19 situation. Advocacy efforts should continue to try and reduce the prevalence of this behavior.

Conclusions

As the response continues and de-escalation begins in some countries, with societies re-opening, albeit cautiously, with physical distancing measures, attention and measures will need to be adjusted slightly.

Hygiene promotion and IPC will need to continue at scale with a shift in focus to public spaces and will need to be matched in ambition with the assured availability of soap, water, and handwashing facilities at scale. Continuation of UNICEF’s huge efforts to date in RCCE and IPC, including mass distribution of WASH supplies will be essential to meet this need.

An accelerated effort on planning for and implementing WASH preparedness measures for safe school reopening with support from UNICEF may be required, including both hygiene promotion and IPC measures as well as strengthening of infrastructure and services. These measures will help a lot to prevent a second wave of cases and deaths.

Support to vulnerable groups to affordably access WASH services will need additional focus, with parallel support extended both technically and
financially to utilities in order to make it possible, through targeted state subsidies, efficiency gains through reducing leakage and promoting water conservation behaviors in users.

Finally, active multi-sector coordination mechanisms\(^7\) and regional and sub-regional knowledge exchange and learning platforms need to be continued, and strengthened, and these platforms can be used to ensure that vulnerable and disproportionately affected groups, including women, girls, refugees and migrant workers are not left behind in the design of the response.

\(^7\)Global Wash Cluster (GWC) which is made of 77 full and associated members and Sanitation and Water for All (SWA) which has +200 partners with the support of UNICEF and ICRC call for immediate collective and strategic action by national governments, service providers, partners and donors to rapidly and effectively coordinate response efforts.
MENA regional maps showing Covid-19 WASH response measures taken by countries

Map 3: Total number of recommended response measures found by country, where response measures were led by any actor at national or local level (out of 43 recommended response measures)

Map 4: Total number of recommended response measures found by country, where the initiative/measure was led by a national/central level state institution or a national emergency taskforce (out of 43 recommended response measures)

It should be noted that whilst the contents of this summary table are based on a systematic and comprehensive mapping of publicly available secondary information, validated through UNICEF CO’s wherever possible, it should not be assumed to provide a fully complete picture of the responses in the countries, as the earlier noted limitations explain i) there was found to be lack of publicly available information on the internet in some cases, ii) the dynamic and rapidly evolving situation unavoidably leads to a rapidly outdated snapshot mapping of the response.
Map 5. Number of measures adopted by countries in Target Area 1 for hygiene promotion (out of 3 recommended measures)

Map 6. Number of measures adopted by countries in Target Area 2 for Infection Prevention and Control – IPC (out of 9 recommended measures)

Map 7. Number of measures adopted by countries in Target Area 3 for ensuring basic WASH needs (out of 12 recommended measures)

Map 8. Number of measures adopted by countries in Target Area 4 for ensuring continuity of WASH services (out of 11 recommended measures)

Map 9. Number of measures adopted by countries in Target Area 5 for technical and financial support to water utilities (out of 8 recommended measures)
### Table 1: Measures adopted by MENA countries during the WASH response to the COVID-19 pandemic

Initiatives/Measures led by national/central level state institution or national emergency taskforce are represented by **X**

Initiatives/Measures led by sub-national/local level state institution, sub-national emergency taskforce, or NON-state actor are represented by **X**

<table>
<thead>
<tr>
<th>Measure / Initiative / Activity</th>
<th>Actors Involved</th>
<th>Timeframe</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoting behavior change population-wide initiatives and awareness-raising campaigns for hand washing at the household and in institutions</td>
<td>Central government / Local government / Civil society / NGOs / Media / Private sector</td>
<td>Immediate, short- and medium-term</td>
<td>X X X X X X X X X X X X X X X X</td>
</tr>
<tr>
<td>Identifying and training community leaders in prioritized rural areas to promote proper handwashing (and other IPC measures) in their respective communities and participation in monitoring.</td>
<td>Central government / Local government / Civil society / NGOs / Media</td>
<td>Immediate, short- and medium-term</td>
<td>X X X X X X X X X X X X</td>
</tr>
<tr>
<td>Fighting disinformation campaigns and fake news, ensuring people are able to access reliable information.</td>
<td>Central government / Local government / Civil society / NGOs / Media / Private sector</td>
<td>Immediate, short- and medium-term</td>
<td>X X X X X X X X X X X X</td>
</tr>
<tr>
<td>Promoting IPC measures at the household, such as wearing masks, cleaning and disinfecting surfaces, isolating people with symptoms and people at a higher risk, and not sharing personal items such as glasses, cutlery, towels, etc. Special attention to confined households and most vulnerable groups. Make content available in the different languages used in countries, and use nudging techniques to encourage good practices.</td>
<td>Central government / Local government / Civil society / NGOs / Media / Private sector</td>
<td>Immediate, short- and medium-term</td>
<td>X X X X X X X X X X X X</td>
</tr>
<tr>
<td>Rehabilitating or constructing new handwashing stations in exposed collective sites and public spaces, including schools, health care facilities, markets, prisons, transport locations and other public places. The quantity of hand hygiene stations should consider the number of users to better encourage use, reduce waiting time and guarantee physical distancing.</td>
<td>Central government / Local government / Civil society / NGOs / Media / Private sector</td>
<td>Immediate, short- and medium-term</td>
<td>X X X X X X X X X X X X</td>
</tr>
</tbody>
</table>

**Note:**

9 Measures found online up to 31st May 2020 are included in the table along with measures reported by UNICEF CO’s directly to SIWI through the CO outreach and validation exercise. It should be noted that whilst the contents of this summary table are based on a systematic and comprehensive mapping of publicly available secondary information, validated through UNICEF CO’s wherever possible, it should not be assumed to provide a fully complete picture of the responses in the countries, as the earlier noted limitations explain i) there was found to be lack of publicly available information on the internet in some cases, ii) the dynamic and rapidly evolving situation unavoidably leads to a rapidly outdated snapshot mapping of the response.
<table>
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<th>Actors Involved</th>
<th>Timeframe</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensuring the availability of basic products for family hygiene (soap, hand sanitizing gels, menstrual hygiene products, toilet paper, etc.) and domestic water treatment (chlorine tablets, water filters, etc.), either through direct distribution, cash-based interventions or market control mechanisms (e.g., by controlling prices fluctuations for WASH commodities).</td>
<td>Government / Private sector</td>
<td>Immediate</td>
<td>ALB AFG BGD CYP DNK EEP FSM GMB GUM HGU HRK ISL JOR KAG KHM KOS KOR LAC LBN LKM LIB MDT MHL MMR MRT MSR MUS NGR NPL OMN PHL PNG PRK PUS QAT ROF SAO SGP SLB STP SUR TGO TKB TJK TKM TUR UMO UY K ZMB</td>
</tr>
<tr>
<td>Promoting domestic water treatment if there is no access to safe drinking water (e.g. boiling water, chlorine tablets, filters, etc.) and proper handling and storage of treated water in households with no piped connection.</td>
<td>Central government / Local government / Civil society / NGOs / Media / Private sector</td>
<td>Immediate, short- and medium-term</td>
<td>ALB AFG BGD CYP DNK EEP FSM GMB GUM HGU HRK ISL JOR KAG KHM KOS KOR LAC LBN LKM LIB MDT MHL MMR MRT MSR MUS NGR NPL OMN PHL PNG PRK PUS QAT ROF SAO SGP SLB STP SUR TGO TKB TJK TKM TUR UMO UY K ZMB</td>
</tr>
<tr>
<td>Introducing measures for water-saving and efficiency.</td>
<td>Central government / Local government / Civil society / NGOs / Private sector / Users</td>
<td>Immediate, short- and medium-term</td>
<td>ALB AFG BGD CYP DNK EEP FSM GMB GUM HGU HRK ISL JOR KAG KHM KOS KOR LAC LBN LKM LIB MDT MHL MMR MRT MSR MUS NGR NPL OMN PHL PNG PRK PUS QAT ROF SAO SGP SLB STP SUR TGO TKB TJK TKM TUR UMO UY K ZMB</td>
</tr>
<tr>
<td>Conducting rapid assessments(^{10}) of the WASH situation in health care facilities, securing the continuity and quality of water and sanitation services (24(\times)7) in health care facilities, including engaging in frequent hand hygiene using appropriate techniques, implementing regular cleaning and disinfection practices with chlorine-based products, and safely managing health care waste. Adopt alternative and decentralized mechanisms, if needed.</td>
<td>Utility</td>
<td>Immediate</td>
<td>ALB AFG BGD CYP DNK EEP FSM GMB GUM HGU HRK ISL JOR KAG KHM KOS KOR LAC LBN LKM LIB MDT MHL MMR MRT MSR MUS NGR NPL OMN PHL PNG PRK PUS QAT ROF SAO SGP SLB STP SUR TGO TKB TJK TKM TUR UMO UY K ZMB</td>
</tr>
<tr>
<td>Securing the continuity and quality of water and sanitation services in isolation centers and in social care institutions (for elderlies, disabled, homeless, childcare centers, etc.), including engaging in frequent hand hygiene using appropriate techniques and implementing regular cleaning and disinfection practices.</td>
<td>Utility</td>
<td>Immediate</td>
<td>ALB AFG BGD CYP DNK EEP FSM GMB GUM HGU HRK ISL JOR KAG KHM KOS KOR LAC LBN LKM LIB MDT MHL MMR MRT MSR MUS NGR NPL OMN PHL PNG PRK PUS QAT ROF SAO SGP SLB STP SUR TGO TKB TJK TKM TUR UMO UY K ZMB</td>
</tr>
<tr>
<td>Ensuring the availability, quality and continuity of water, sanitation and handwashing services in schools, using unconventional mechanisms if necessary, in preparation of schools’ reopening.</td>
<td>Utility / Ministry of Education</td>
<td>Immediate, short- and medium-term</td>
<td>ALB AFG BGD CYP DNK EEP FSM GMB GUM HGU HRK ISL JOR KAG KHM KOS KOR LAC LBN LKM LIB MDT MHL MMR MRT MSR MUS NGR NPL OMN PHL PNG PRK PUS QAT ROF SAO SGP SLB STP SUR TGO TKB TJK TKM TUR UMO UY K ZMB</td>
</tr>
<tr>
<td>Promoting improved cleaning and disinfection in public spaces and high-risk areas (e.g., public fountains, recreational areas, schools, public places, institutions offices, etc.)</td>
<td>Local government</td>
<td>Immediate, short-term</td>
<td>ALB AFG BGD CYP DNK EEP FSM GMB GUM HGU HRK ISL JOR KAG KHM KOS KOR LAC LBN LKM LIB MDT MHL MMR MRT MSR MUS NGR NPL OMN PHL PNG PRK PUS QAT ROF SAO SGP SLB STP SUR TGO TKB TJK TKM TUR UMO UY K ZMB</td>
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</table>

\(^{10}\) One particular methodology proposed for this purpose is the Water, Sanitation and Hygiene for Health Care Facilities Improvement Tool (WASH FIT): www.washfit.org
### 3. Preserve the ability of all people, including the most vulnerable, to meet their basic needs in relation to water and sanitation

<table>
<thead>
<tr>
<th>Measure / Initiative / Activity</th>
<th>Actors Involved</th>
<th>Timeframe</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying priority intervention areas, supporting national multi-sector mapping of those areas most at risk from COVID-19 (&quot;hotspots&quot;)(^1)</td>
<td>WASH stakeholders</td>
<td>Immediate</td>
<td>(\times)</td>
</tr>
<tr>
<td>Not cutting off the water supply to households who are unable to pay bills, under any circumstances.</td>
<td>Utility</td>
<td>Immediate</td>
<td>(\times)</td>
</tr>
<tr>
<td>Immediately reconnecting free of charge all households disconnected for non-payment that do not currently receive water services.</td>
<td>Utility</td>
<td>Immediate</td>
<td></td>
</tr>
<tr>
<td>Ensuring a minimum daily volume of drinking water for all vulnerable households or not connected to the mains network, through infrastructure expansion and/or unconventional solutions (e.g. distribution of water to households or at specific community points, trucks, kiosks, etc.), respecting physical distancing (at least, one-meter distance between taps).</td>
<td>Utility</td>
<td>Immediate</td>
<td>(\times)</td>
</tr>
<tr>
<td>Ensuring provision of services to all segments of population(^12) living outside a home.</td>
<td>Municipality</td>
<td>Immediate</td>
<td>(\times)</td>
</tr>
<tr>
<td>Ensuring that there are specific measures aimed at addressing the needs of women and girls in relation to water, sanitation and hygiene (e.g., sanitation facilities in isolation centers with gender sensitive safety measures and privacy, targeted awareness raising on handwashing and hygiene promotion, ensuring menstrual hygiene and health management, sex-disaggregated data are considered in WASH response plans)</td>
<td>Central government/ local government/ civil society/ NGOs/ media/ private sector</td>
<td>Immediate, short- and medium-term</td>
<td>(\times)</td>
</tr>
<tr>
<td>Establishing, maintaining and/or extending (in collaboration with social protection services) the financial instruments needed to facilitate service payments, particularly for vulnerable households; implementing subsidy systems, social bonus, freezing bill collection, writing off debts for non-payment, exempting households from reconnection costs, postponement of tariff adjustments, etc.</td>
<td>Government / Utility</td>
<td>Immediate, medium-term</td>
<td>(\times)</td>
</tr>
</tbody>
</table>

\(^1\) Mapping vulnerability based on 1) multiple risk factors for maintaining basic preventive hygiene and physical distancing (population density, average age, percentage living in the informal economy and day-to-day income, etc.); and 2) multiple risk factors in the context of partial/total confinement and current and potential outbreaks of COVID-19 and other diseases. Areas of high population density and low coverage of WASH services must be especially considered, both at the household and at the community level (few public toilets, etc.), with cases of COVID-19. The presence of health care facilities, markets, nursing homes, prisons, juvenile detention facilities and centers of agglomeration of people with special needs in relation to water and sanitation should also be considered.

\(^12\) Homeless people, people in shelters, nursing homes, refugee/returnee centers, juvenile detention facilities, detention centers, etc.
<table>
<thead>
<tr>
<th>Measure / Initiative / Activity</th>
<th>Actors Involved</th>
<th>Timeframe</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluating the possibility of introducing a free minimum basic consumption for families anticipating an increase in consumption due to better hygiene and the confinement of many people to their homes.</td>
<td>Government / Utility</td>
<td>Immediate, short-term</td>
<td>X</td>
</tr>
<tr>
<td>Providing non-centralized basic sanitation solutions (e.g. compact toilets, latrine emptying and fecal sludge management, etc.), using when needed unconventional technologies, to all households not connected to the sewerage system, in order to prevent open defecation.</td>
<td>Municipality or local government / Utility</td>
<td>Medium-term</td>
<td>X X X</td>
</tr>
<tr>
<td>Ensuring that public or community bathrooms are open, available and accessible free of charge to people who do not have them at home and/or are doing essential work outside. Guarantee that public toilets are properly maintained, cleaned and disinfected daily.</td>
<td>Municipality or local government / Utility</td>
<td>Immediate, short-term</td>
<td>X</td>
</tr>
<tr>
<td>Guaranteeing access to electricity and communications for users so they can communicate with service providers and authorities, receive information, make online payments, etc.</td>
<td>Government / Private sector</td>
<td>Immediate</td>
<td>X X X</td>
</tr>
<tr>
<td>Establishing communication channels between utilities and users, such as dedicated webpages for COVID-19, hotlines, etc. Real-time information collection and advice (queries or concerns consumers may have about bills or service).</td>
<td>Utility</td>
<td>Immediate</td>
<td>X X X X X X X X X X X X</td>
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</tbody>
</table>

4. **Guarantee the continuity, affordability and safety of water and sanitation services**

<table>
<thead>
<tr>
<th>Measure / Initiative / Activity</th>
<th>Actors Involved</th>
<th>Timeframe</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying critical intervention areas (“hotspots”) in the utility’s service area to prioritize COVID-19 response interventions.</td>
<td>Utility</td>
<td>Immediate</td>
<td>X</td>
</tr>
<tr>
<td>Conducting regular monitoring WASH supplies and services access and prices, and take corrective measures when needed.</td>
<td>Central &amp; local government / Users / Private sector / Utility</td>
<td>Immediate, short- and medium-term</td>
<td>X X X X</td>
</tr>
<tr>
<td>Ensuring proper operation of drinking water systems at all stages (protection from source to consumer). Planning preventive maintenance tasks at all critical points of the system (e.g. intake, pipelines, in the treatment plant and in the distribution network). Monitoring residual chlorine at specific key points and for strategic users (e.g., health care facilities, nursing homes and schools).</td>
<td>Utility</td>
<td>Immediate</td>
<td>X X X X X X X X X X X X</td>
</tr>
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13 Criteria for identifying these areas include (but are not limited to) areas of high population density with low coverage of WASH services at both the individual and community levels (few public toilets, etc.) with cases of COVID-19. The presence of health care facilities, markets, nursing homes, prisons, juvenile detention centers and other places where there are many people in need of access to water and sanitation should be taken into account.
<table>
<thead>
<tr>
<th>Measure / Initiative / Activity</th>
<th>Actors Involved</th>
<th>Timeframe</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensuring proper operation of the sewerage system and non-centralized sanitation solutions at every point of the sanitation chain: emptying of latrines and septic tanks and transport, treatment and final disposal of fecal sludge.</td>
<td>Utility</td>
<td>Immediate</td>
<td>X X</td>
</tr>
<tr>
<td>Expanding infrastructure and extending coverage of water and sanitation services to unconnected areas.</td>
<td>Utility</td>
<td>Short- and medium-term</td>
<td>X X</td>
</tr>
<tr>
<td>Securing access to energy / electricity for utilities, to ensure the operation of water and sanitation services.</td>
<td>Electricity company</td>
<td>Immediate</td>
<td>X</td>
</tr>
<tr>
<td>Advocating for reliable regional and national WASH supply chains, while sustaining, strengthening and diversifying the supply chains of all products and materials needed to operate water and sanitation services (disinfectants, chemicals, spare parts), ranging from rural small-scale systems to urban, large-scale systems. This might include support to local production, market assessments for WASH commodities, exemptions for sanctions or special clearances for materials and equipment based on humanitarian need.</td>
<td>Private sector / Utility</td>
<td>Immediate, short- and medium-term</td>
<td>X</td>
</tr>
<tr>
<td>Ensuring availability and access to appropriate personal protective equipment (PPE) for sanitation workers with risk of exposure to excreta or cleaning agents in health care facilities. Adoption of other protection measures, including remote working and duty roster, body temperature measurements, reduction of visits to consumers, etc. Developing protocols in cases of contagion among operational personnel.</td>
<td>Utility / Private sector</td>
<td>Immediate</td>
<td>X X X X X X X X X X X X</td>
</tr>
<tr>
<td>Distributing personal protective equipment (PPE) to informal sanitation workers.</td>
<td>Government or local government / Informal utility</td>
<td>Immediate</td>
<td></td>
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<tr>
<td>Ensuring proper waste management, at all stages: collection, separation, transportation, processing and treatment, and disposal. Promote good practices for quarantined households (separate collection in bio-medical waste collection units, burned with no human contact, etc.)</td>
<td>Local government</td>
<td>Immediate, short- and medium-term</td>
<td>X X X X X X X</td>
</tr>
<tr>
<td>Introducing online payment services if they do not already exist.</td>
<td>Utility</td>
<td>Short-term</td>
<td>X X</td>
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5. **Provide technical and financial support to utilities**

Providing technical assistance to utilities for management, financing, planning, operation and maintenance, etc. Supporting the creation/updating and implementation of emergency response plans or contingency plans.

<table>
<thead>
<tr>
<th>Measure / Initiative / Activity</th>
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<th>Timeframe</th>
<th>Countries</th>
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</thead>
<tbody>
<tr>
<td>Providing technical assistance to utilities for management, financing, planning, operation and maintenance, etc. Supporting the creation/updating and implementation of emergency response plans or contingency plans.</td>
<td>Government / Strategic partners</td>
<td>Immediate, short- and medium-term</td>
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<tr>
<td>Measure / Initiative / Activity</td>
<td>Actors Involved</td>
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<tr>
<td>Activating special funds to guarantee the operation of services, and to improve, upgrade and expand water and sanitation infrastructure to meet the specific needs caused by the pandemic.</td>
<td>Government / Financial institutions</td>
<td>Immediate, short- and medium-term</td>
<td>ALB</td>
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<td>Ensuring urban utilities and small-scale operators receive the necessary financial support and supplies (including personal protective equipment) to guarantee the proper operation of services.</td>
<td>Government / Financial institutions</td>
<td>Immediate, short- and medium-term</td>
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<td>Ensuring rural and community operators (both formal and informal) receive the necessary financial support and supplies (including personal protective equipment) and technical assistance to ensure continuity of service.</td>
<td>Government or local government</td>
<td>Immediate, short- and medium-term</td>
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<td>Promoting correct monitoring of utilities and middle to small-scale operators. Developing a simple monitoring system to facilitate early detection of service delivery failures and promote corrective actions.</td>
<td>Government / Regulators / Utilities’ associations</td>
<td>Immediate, short- and medium-term</td>
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<td>Establishing a coordination platform and/or communication channels between government and utilities/operators and their associations for the exchange of experiences, good practices, crossover learning processes, etc. Real-time information collection and advice (queries, concerns about technical, financial, legal, and administrative issues).</td>
<td>Government / Utilities</td>
<td>Short- and medium-term</td>
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<td>Developing business plans to analyze economic viability of the utility in the short and mid-term.</td>
<td>Government / Financial institutions</td>
<td>Short- and medium-term</td>
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<td>Establishing multi-actor emergency coordination mechanisms, including international and multilateral organizations and other actors.</td>
<td>Government / Strategic partners</td>
<td>Immediate, short- and medium-term</td>
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References


8. World Health Organization (WHO) Water, sanitation and hygiene in health care facilities: practical steps to achieve universal access 2019, 70.


15. Preliminary mapping of country initiatives. Consolidated list, as per 5 May 2020.

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This technical note has been written by Robin Ward, Ricard Giné PhD, Antoine Delepiere and Alejandro Jiménez PhD, with contributions from Said Sadat and Ali Karnib PhD. All authors and contributors are from SIWI - Stockholm International Water Institute.
About the Series

UNICEF’s water, sanitation and hygiene (WASH) country teams work inclusively with governments, civil society partners and donors, to improve WASH services for children and adolescents, and the families and caregivers who support them. UNICEF works in over 100 countries worldwide to improve water and sanitation services, as well as basic hygiene practices. This publication is part of the UNICEF WASH Learning Series, designed to contribute to knowledge of good practice across UNICEF’s WASH programming. In this series:

**Discussion Papers** explore the significance of new and emerging topics with limited evidence or understanding, and the options for action and further exploration.

**Fact Sheets** summarize the most important knowledge on a topic in few pages in the form of graphics, tables and bullet points, serving as a briefing for staff on a topical issue.

**Field Notes** share innovations in UNICEF’s WASH programming, detailing its experiences implementing these innovations in the field.

**Guidelines** describe a specific methodology for WASH programming, research or evaluation, drawing on substantive evidence, and based on UNICEF’s and partners’ experiences in the field.

**Reference Guides** present systematic reviews on topics with a developed evidence base or they compile different case studies to indicate the range of experience associated with a specific topic.

**Technical Papers** present the result of more in-depth research and evaluations, advancing WASH knowledge and theory of change on a key topic.

**WASH Diaries** explore the personal dimensions of users of WASH services, and remind us why a good standard of water, sanitation and hygiene is important for all to enjoy. Through personal reflections, this series also offers an opportunity for tapping into the rich reservoir of tacit knowledge of UNICEF’s WASH staff in bringing results for children.

**WASH Results** show with solid evidence how UNICEF is achieving the goals outlined in Country Programme Documents, Regional Organizational Management Plans, and the Global Strategic Plan or WASH Strategy, and contributes to our understanding of the WASH theory of change or theory of action.

Readers are encouraged to quote from this publication but UNICEF requests due acknowledgement. You can learn more about UNICEF’s work on WASH here: [https://www.unicef.org/wash](https://www.unicef.org/wash)