

2021 FACT SHEET

GLOBAL HANDWASHING DAY

OUR FUTURE IS AT HAND-LET'S MOVE FORWARD TOGETHER

Global Handwashing Day (GHD) is a global advocacy day dedicated to increasing awareness about the importance of hand hygiene and triggering lasting change from the policy-level to community-driven action.

Using evidence to take action around this year's theme

The 2021 GHD theme is 'Our Future is at Hand - Let's Move Forward Together'. The unprecedented nature of the ongoing COVID-19 pandemic continues to highlight the critical role hand hygiene plays in disease transmission. Therefore, this year's theme is a call to action which asks us to leverage experiences during the COVID-19 pandemic in order to address the historic neglect of hand hygiene investments, policies, and programs once and for all. As we enter a new normal beyond COVID-19, the future state of hygiene is in our hands. A lot has been learned about promoting hand hygiene at scale, but much work is needed for the current momentum to be sustained. This fact sheet summarizes the latest evidence around hand hygiene and translates this into advocacy messages and programmatic actions to guide your future hygiene work.

What are the benefits of hand hygiene?

Handwashing with soap can reduce the transmission of a range of diseases:

- Handwashing can reduce diarrheal diseases by 30%.
- Handwashing can reduce acute respiratory infections by up to 20%.
- Handwashing plays an important role in reducing the transmission of outbreak-related pathogens such as cholera, Ebola, shigellosis, SARS and hepatitis E.
- Hand hygiene is protective against healthcare-associated infections and reduces the spread of antimicrobial resistance.
- Hand hygiene may contribute to the reduction of Neglected Tropical Diseases.





Handwashing is also likely to be key in the fight against COVID-19.

Handwashing with soap destroys the outer membrane of the virus and thereby inactivates it. Hand hygiene has the potential to interrupt several routes of COVID-19 transmission, such as removing the pathogen from contaminated hands before it is transferred to other people or surfaces or removing the pathogen from hands after they have come into contact with a contaminated surface or person. We still have limited evidence about the effect of handwashing in reducing COVID-19 infection. One study found that regular handwashing with soap can reduce the likelihood of COVID-19 infection by 36% and another found that handwashing before returning from outdoors and touching your face may reduce the chance of infection by 2–30%. Our state of knowledge on the effectiveness of COVID-19 remains poor because we are reliant on self-reported retrospective measures of behavior and because hand hygiene has always been promoted alongside other prevention measures during the pandemic, so it is difficult to assess its standalone affect.

The ability to regularly practice handwashing is also thought to contribute to improved wellbeing, dignity, educational fulfilment and productivity.

Key advocacy and action messages:

- Handwashing is key to reducing the burden of many diseases which pose chronic challenges to population health and development.
- Handwashing contributes to mitigating the transmission of COVID-19 and will remain an essential prevention measure while vaccines are being rolled out.
- Handwashing is a 'first-line' defense in preventing outbreaks and reducing the toll of both current and future pandemics.

What do we know about handwashing during the pandemic?

During the pandemic handwashing behavior increased globally. Handwashing rates continue to vary between countries, contexts and across the course of the pandemic. The graphs below show a) changes in self-reported rates of handwashing behavior across a select group of countries and b) frequency of self-reported handwashing across a select group of countries. Together this data indicates that handwashing continues to be harder to practice in many fragile settings or low-and middle-income (LMIC) countries. While self-reported measures of handwashing behavior may overestimate actual practice some of this reported increase in behavior is likely to have translated into increased actual practices, mimicking increases that we have seen in prior outbreaks.

Big data show wide variations in adoption of hand hygiene measures in response to COVID-19



Big data confirm that daily frequency of handwashing varies widely across countries and over time

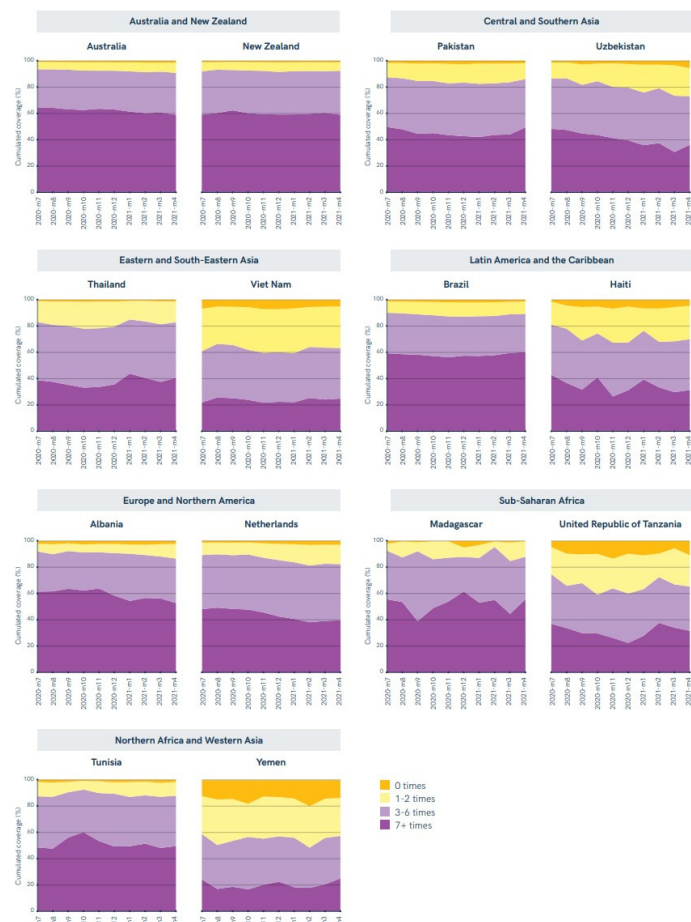


Image 1 (left): JMP data on the variation in handwashing behavior by country across the course of the pandemic.
Image 2 (right): JMP data on the reported frequency of handwashing by country over the course of the pandemic.

During the pandemic we also appear to be seeing more people using soap and sanitizer when cleaning their hands (as opposed to hand rinsing with water only) and this has been reflected in increased sales of these products. People are also washing their hands at new critical occasions related to COVID-19 transmission and in new, more public settings.



While handwashing continues to be practiced at an increased level, compared to before the pandemic, there are indications that behavior is already starting to decline. There are several reasons for this:

- We know from prior outbreaks that fear typically only acts as a short-term motivator for behavior and reliance on fear to drive behavior can have adverse consequences.
- Handwashing may be seen as less of a personal priority than other COVID-19 prevention measures as adherence is not always as visibly obvious (e.g. in comparison to mask use) and is more likely to be affected by other factors.
- The duration of the pandemic has caused fatigue related to messaging around prevention measures.
- As other preventative measures are scaled up (such as vaccination) perceived risk may decrease and measures like handwashing may be viewed as less essential.

Key advocacy and action messages:

- Handwashing rates have increased during the pandemic and now need to be sustained and supported.
- Handwashing practices have not increased equally, and people living in fragile settings or LMIC countries have continued to face barriers to handwashing during the pandemic.

What had been driving handwashing behavior during the pandemic?

Handwashing is influenced by a range of behavioral determinants – things that either enable practice or create barriers but which may vary by setting and circumstances.

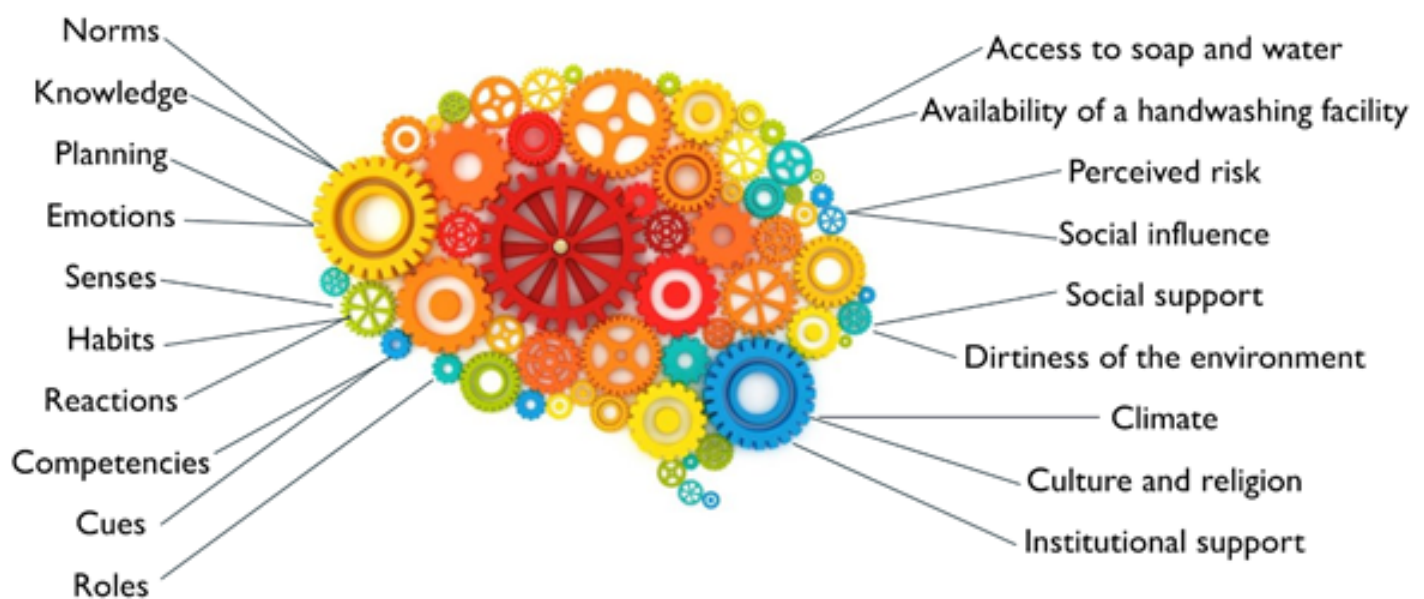



Image 3: Diagram depicting some of the determinants of handwashing behavior.



Over the course of the pandemic it appears that the strongest factors influencing behavior have been fear (sometimes resulting in a 2-fold increase in behavior), perceived vulnerability to the disease and perceived severity of the disease. It is possible that these findings are somewhat biased as in outbreaks it is common for these risk-related factors to be over-researched, while other determinants are overlooked. Some studies have indicated that the pandemic has made handwashing a more publicly visible behavior (e.g. through the availability of hand sanitizers and handwashing stations) and this has created new positive social norms or social support systems around handwashing. At the same time social judgement and shame has increased in cases where handwashing was not practiced. Other studies have shown that self-efficacy, perceived control, and intentions to wash hands also affected hygiene behavior during the pandemic.

Key advocacy and action messages:

- Increases in handwashing with soap have been driven by fear during the early stage of the pandemic, but fear-based changes are likely to be short-lived. There is therefore a need to use additional motives.
- There is now a window of opportunity to sustain behavior change by addressing a broader array of behavioral determinants.

What works to change handwashing behavior?

Handwashing behavior is notoriously hard to change. Despite increased work on hand hygiene during the pandemic, our understanding of what works to sustainably change behavior in relation to respiratory diseases, like COVID-19, and other diarrheal diseases remains imperfect.

Below we highlight some evidence-based recommendations for changing handwashing behavior.

1) Provision of information and health knowledge is not enough.

Common interventions to promote hand hygiene during the pandemic have included education and training on hygiene, development of guidelines on correct handwashing, modelling of the behavior, leaders/peers demonstrating the behavior, convincing people of the positive benefits of handwashing, increased handwashing infrastructure and provision of sanitizer. The majority of these focus on cognitive factors and assume that people will act 'rationally' if they know what to do, when to do it and why they are doing it. It is valuable for people to have this health-based information about handwashing, particularly in a time of uncertainty amid the emergency of a new pathogen. However, programs that focus only on hygiene education typically do not achieve sustained behavior change, and this appears to still be true during the pandemic as well. This is because most people know about handwashing and because hygiene behavior is influenced by a range of determinants.

During the pandemic people have been struggling to navigate the 'infodemic' and some studies have indicated that complex messaging can actually have a negative impact on handwashing behavior. When information about hand hygiene is being shared, it's important to think about message framing. Communication which is positively framed and draws attention to new norms or emphasizes collective action and the 'social good' of handwashing may be more persuasive.

Key advocacy and action messages:

- Education focused programs which try to change behavior through sharing information alone will not change handwashing behavior.
- Handwashing promotion initiatives should assess all factors that may influence behavior and design programs which focus on addressing context-specific motivations, opportunities or barriers and creating an enabling physical and social environment for handwashing to take place.
- When communicating about handwashing use behavioral theory, draw attention to new norms, and emphasize that it is a behavior that is done to protect others as well as yourself.

2) Investing in desirable and convenient hygiene infrastructure and products is likely to result in the greatest change in practices.

For people to be able to practice hand hygiene, they need access to hand hygiene facilities that are conveniently located and easy to use. People are much more likely to wash their hands if they have soap and water present near the handwashing facility. However, globally access to handwashing facilities and products remains unequal and data about availability is limited to just 79 countries. The map below shows the availability of basic handwashing services globally.

In 2020, 71% of people had access to a basic handwashing facility. However, 2.3 billion people lacked basic services, including 670 million people with no handwashing facilities at all. Over half of these people (374 million) live in fragile contexts. Access to soap at a household level is also lower in these fragile contexts. Rates of change in access to handwashing facility has been slow, increasing by just 4% between 2015 and 2020 and requiring a 4-fold increase if we are to meet the Sustainable Development Goal (SDG) targets.

In 2020, 79 countries had estimates for basic hygiene services

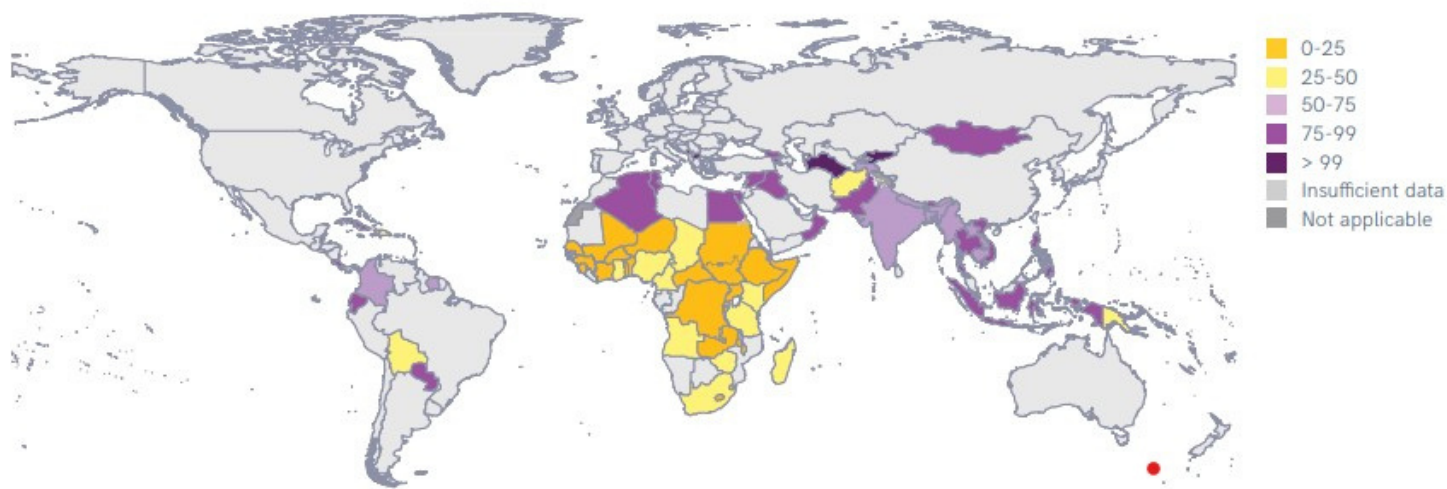


Image 4: Map showing the availability of basic hygiene services, developed by the JMP.

Data about access to hygiene in health care facilities is also low, being available for just 71 countries. Of these only 50% have basic water access and 74% have hand hygiene services at points of care. A survey of more than a million women and girls found that access to hygiene services was listed among the top ways of improving health care.

Of the 107 countries which have data available on handwashing services in schools, only 57% provided basic handwashing facilities and 25% had no service (no facilities or no water at all). This means that 818 million students currently have nowhere to wash their hands.

During the COVID-19 pandemic the WHO released new recommendations and guidelines stipulating that hygiene facilities should be established at the entrance to all public and private commercial buildings (for use on entry and exit), at all major transport hubs (such as bus and train stations, airports, and seaports) and at markets, shops, places of worship, health care facilities and schools. Prior to the pandemic, hand hygiene facilities in public places had not been a priority for governments or the private sector. We do not have any global data on the availability of hand hygiene facilities in public locations. Despite the lack of prior learning on public handwashing facilities, the COVID-19 pandemic has sparked a wealth of local-level innovations around public handwashing stations.


We also have evidence that an enabling environment for handwashing can be supported by through cues or nudges that remind people to wash hands at key moments and by ensuring handwashing takes place in settings where it is observable as this tends to increase social pressure.



Image 5: Handwashing facility access over time, according to the JMP.

Key advocacy and action messages:

- Improved access to handwashing facilities is likely to have a long term impact on behavior.
- Investment in hygiene infrastructure and products must be accelerated in homes, schools, health care settings and public places. Doing this will require sustained financing, the leadership of governments, support of the private sector and community-level action.
- More data is needed about access to handwashing facilities globally.



3) Programs are likely to be more effective and acceptable if they use behavior change theory and a systematic process for program design.

During outbreaks actors often compromise on the program design process. Using a behavior change theory to guide program design reduces our reliance on past experience and biases and is critical for ensuring that programs are well targeted, resource efficient and more effective. Over the course of the pandemic response organizations have been so driven to act that they don't take sufficient time to learn from communities. This can result in populations becoming disengaged and bored with hygiene promotion programs because they don't seem relevant to their experiences of the pandemic. Rapid assessments or even short periods of learning from communities are critical for developing acceptable, relevant and context-adapted programs. During crises, it is also particularly important to share information between actors and to learn from and engage populations throughout the project design and implementation.

Key advocacy and action messages:

- Use a behavior change theory to guide your program design.
- Always take time to learn from communities prior to program design in order to understand the factors influencing handwashing behavior and then repeatedly throughout implementation to facilitate program adaptation.

4) Meaningful behavior change is not cheap, quick or easy.

Hygiene promotion has been identified as one of the most cost-effective public health interventions in general and for COVID-19 prevention. While evidence is limited it is thought that hygiene promotion can bring a return of \$2 - \$6 for every \$1 invested. However, cost-effectiveness data is often misinterpreted by donors and implementers alike and this commonly results in hygiene programs being deprioritized in relation to other aspects of WASH and underfunded. Hygiene promotion should not be thought of as a one-off event but rather an adaptive process that gets revised and adjusted in order to support sustained change. This is because achieving sufficient 'dose' seems to be a critical factor which can make or break a handwashing promotion program. The easiest way to conceptualize 'dose' is to think about an analogy of a vaccine. Some vaccines are effective after only one dose but for many vaccines a person needs more than one injection in order for the vaccine to be most effective. Similarly, most behavior change programs need to interact with target populations on multiple occasions, over an extended period of time, in order to be effective. Handwashing programs also seem to be successful when they target multiple delivery channels. Ideally program implementers should consider combining mass media strategies with interpersonal techniques which reach the target population at the community and household level.

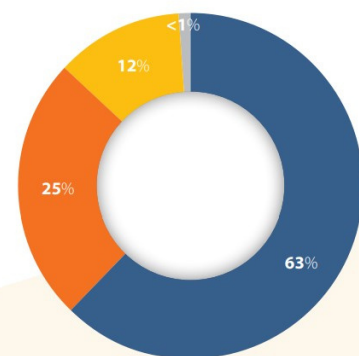
Key advocacy and action messages:

- Effective hygiene programs are not cheap and require investments from governments and donors to strengthen staff capacity on behavior change.
- Hygiene programs should be delivered over an extended period and combine a range of delivery channels such as mass or social media strategies and interpersonal techniques which reach the target population at the community and household level.

5) Community-level action needs to be supported by policy and financing.

At the moment the responsibility for facilitating hand hygiene falls primarily on the shoulders of households and communities. For example, results from five countries show that household expenditure on hygiene is likely a significant portion of all household WASH expenditure. In contrast, hand hygiene has been historically overlooked within national policies in comparison to water and sanitation and underfunded. Data on policy planning and financing remains limited but from available data only 9% of countries having costed national hygiene plans that are sufficiently funded and the majority of these do not outline plans that would achieve national or SDG targets. Furthermore, only 10% of countries with plans have sufficient human resources to implement these.

● Drinking-water ● Sanitation ● Hygiene ● Unallocated



Source: GLAAS 2018/2019 country survey, 2020 TrackFin/WASH accounts data (unpublished).

Figure 4: WASH expenditure, by service type (n=16, US\$ 8.4 billion)

Image 6: Substantially less is spent on hygiene in comparison to water and sanitation according to the GLAAS Report.

The percentage of household WASH expenditures on hygiene in five countries ranges from 11% to 74%.

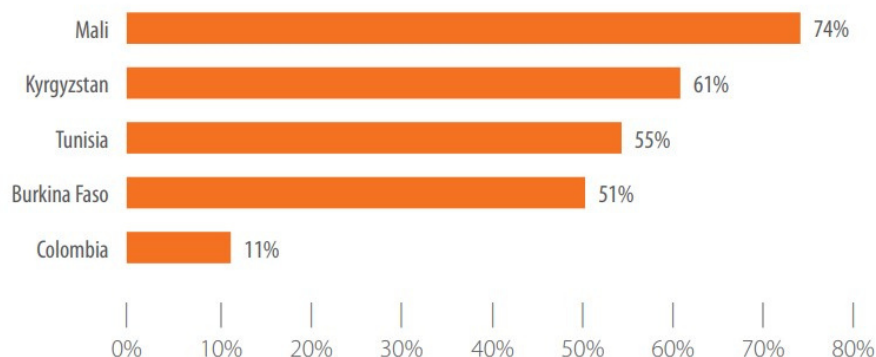


Image 7: Across 5 countries, household expenditure on soap, water and hygiene facilities comprises a substantial proportion of people's income, according to the GLAAS Report.

COVID-19 has reminded decision-makers about the importance of hand hygiene, but systems may need to be reimagined to build resilience against future outbreaks and sustain a culture of hand hygiene. This may include structural reforms within governments and institutions; enhancing the institutional, regulatory and legal foundations for hygiene access and hygiene promotion; implementing inclusive hygiene programming at scale, integrating hygiene programming across various sectors; and monitoring and enforcing hygiene requirements in public and private commercial settings, including schools and health care facilities.

Key advocacy and action messages:

- In order to meet SDG targets and prevent future outbreaks and pandemics, investment in hand hygiene must increase.
- All countries should ensure a costed national strategic plan or roadmap is in place to drive progress towards SDG-aligned national hygiene targets.
- Communities and organizations must advocate to governments and other decision makers to fund and resource hygiene to a level that will allow achievement of the SDGs and access to hand hygiene for all.



Learn More

Visit the Global Handwashing Day [website](#) for more Global Handwashing Day resources. For a full list of references for this fact sheet, visit [here](#).