

HAND HYGIENE FOR ALL INITIATIVE



Improving access and behaviour in health care facilities



Purpose of the brief

To provide insights into available strategies and approaches to hand hygiene improvement in health care facilities (HCFs) in support of the new **United Nations Children's Fund (UNICEF)/World Health Organization (WHO) Hand Hygiene for All Initiative**, including sustainable interventions. The brief draws on learning from legacy work and the current evidence base. It emphasizes the synergistic relationship between infection prevention and control (IPC) and water, sanitation and hygiene (WASH) in HCFs and summarizes how joint action and collaboration is essential for improvement in the context of the coronavirus disease (COVID-19) response and beyond.

Introduction and background

Access to quality health care for all is a human right. As clearly recognized by the United Nations (UN) Sustainable Development Goals 3.8 and 6, it is impossible to succeed in providing quality health care. Shockingly, many HCFs still lack WASH and, by default, cannot implement good IPC practices.

According to global estimates released in 2019 by WHO/UNICEF:

	1 in 4 facilities lack basic water¹
	1 in 5 facilities have no sanitation¹
	2 in 5 facilities have neither hand hygiene facilities at the point of care nor systems to segregate waste¹
	1 million of the 4.1 million maternal and neonatal deaths per year may be related to unhygienic birthing practices²

¹ WHO/United Nations Children's Fund. WASH in health care facilities. Global baseline report 2019. Geneva: World Health Organization. 2019 (https://www.who.int/water_sanitation_health/publications/wash-in-health-care-facilities-global-report/en/, accessed 17 July 2020).

² Blencowe H and Cousens S. Addressing the challenge of neonatal mortality. Trop Med Intern Health 2013; 18: 303–312. (<https://pubmed.ncbi.nlm.nih.gov/23289419/>, accessed 23 June 2020).

|| The scientific evidence overwhelmingly shows that appropriate hand hygiene is the single most effective action to stop the spread of infection ||

↓ 55%

Effective IPC measures could reduce health care-associated infections as much as by 55%³.

↑ 44%

Newborn survival rates could potentially increase by 44% when hand washing and clean birthing kits are in place².

In 2005, WHO launched the First Global Patient Safety Challenge **Clean Care is Safer Care** to which 142 countries pledged their commitment, thus allowing to initiate powerful actions to reduce infections occurring during health care delivery through the promotion of IPC measures and improvements in WASH⁴. Building on this strong foundation, the **SAVE LIVES: Clean Your Hands**⁵ global campaign was launched in 2009 by marking the first world hand hygiene day on 5 May and still continues with a different theme proposed each year. In 2003 and 2010, two monumental acknowledgements related to a safer world through improved hand hygiene were made both within and outside of health care and deemed essential to the realization of all human rights^{6,7}:

- 1. the right to water that is sufficient, safe, acceptable and physically accessible and affordable, and**
- 2. the right to adequate sanitation.**

Furthermore, the **2018 Global Call to Action on WASH in HCFs by the UN Secretary-General** has elevated this issue among all UN agencies, partners, and Member States.

Building upon the Global Call, all 194 WHO Member States unanimously approved a resolution on WASH in HCFs at the 2019 World Health Assembly⁸.

³ Schreiber PW, Sax H, Wolfensberger A, Clack L, Kuster SP. The preventable proportion of healthcare-associated infections 2005-2016: systematic review and meta-analysis. *Infect Control Hosp Epidemiol* 2018;39:1277–95.

⁴ Health care without avoidable infections. Geneva: World Health Organization; 2020 (<https://www.who.int/infection-prevention/publications/ipc-role/en/>, accessed 23 June 2020).

⁵ <https://www.who.int/infection-prevention/campaigns/clean-hands/en/>

⁶ General comment no. 15: the right to water. Geneva: Office of the United Nations High Commissioner for Human Rights; 20 January 2003 (<https://www.refworld.org/pdfid/4538838d11.pdf>, accessed 23 June 2020).

⁷ Sixty-fourth United Nations General Assembly. Resolution A/RES/64/292, July 2010. The human right to water and sanitation (<https://undocs.org/en/A/RES/64/292>, accessed 23 June 2020).

⁸ World Health Assembly (WHA 72). 2019. Agenda Item 6.6, Patient safety. Resolution on water, sanitation and hygiene in health care facilities. Geneva: World Health Organization; 2019 (http://apps.who.int/gb/ebwha/pdf_files/EB144/B144_R5-en.pdf).

The resolution calls on countries to strengthen WASH and IPC in HCF by establishing baselines and setting targets, embed WASH and IPC in key health programmes and budgets, and to regularly report on progress. These rights provide an important basis to comprehensively address WASH and IPC needs in HCFs.

In the response to the COVID-19 pandemic, WHO, UNICEF, and other stakeholders called upon governments to place hand hygiene at the heart of strategies to protect patients, communities and health workers from the virus as a basic, doable and simple intervention.

On 1 April 2020, WHO issued a formal recommendation for all Member States to:

- 1. Provide universal access to public hand hygiene stations and make their use obligatory, and**
- 2. Improve access to and the practice of hand hygiene in HCFs⁹.**

To support the implementation of these recommendations, on 26 June 2020 WHO and UNICEF launched the new ***Hand Hygiene for All Initiative*** which aims to create a culture of hygiene by:

- 1. Reinforcing the importance of hand hygiene to reduce the spread of COVID-19 and other communicable diseases - within the context of the pandemic and beyond - through policies, regulation, innovation, private sector engagement, and behaviour change strategies.**
- 2. Calling to action international partners, national governments, the public and private sectors, the civil society and donors and financiers to accelerate progress on hand hygiene at the global, national and community levels.**

⁹ Recommendations to Member States to improve hand hygiene practices to help prevent the transmission of the COVID-19 virus. Geneva: World Health Organization; 2020 (<https://www.who.int/publications-detail/recommendations-to-member-states-to-improve-hand-hygiene-practices-to-help-prevent-the-transmission-of-the-covid-19-virus>, accessed 23 June 2020).



1. Hand hygiene at the heart of the core components for effective IPC programmes

IPC is an evidence-based and practical solution designed to prevent harm to patients and health workers at each and every single health care encounter by stopping the spread of infection through best practices. WHO has identified 8 core components that make IPC programmes impactful and effective¹⁰.

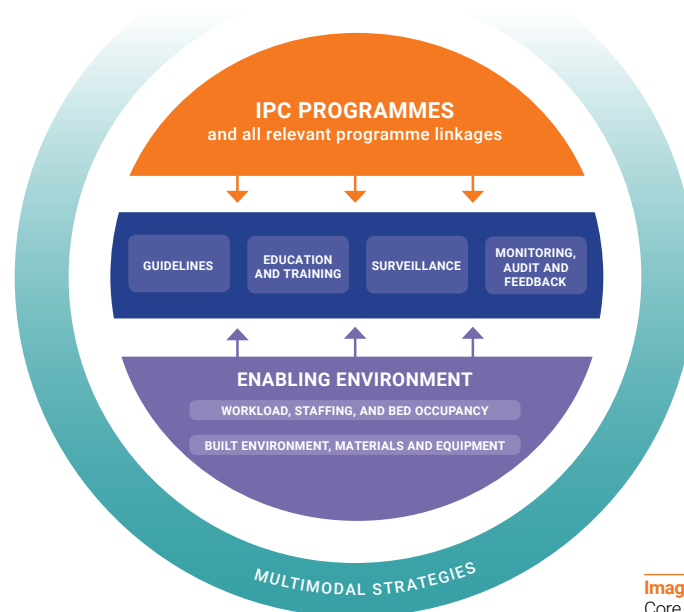
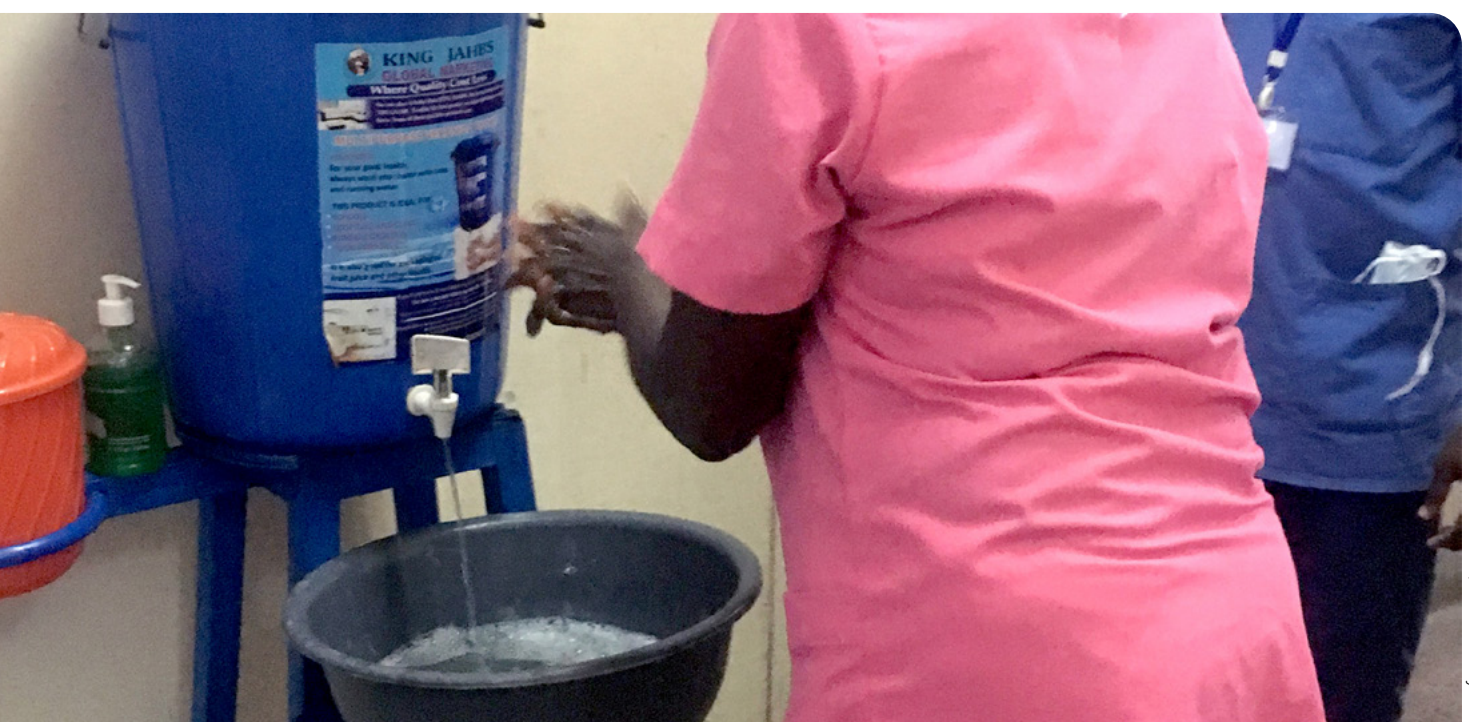


Image 1.
Core components for effective IPC programmes.

WASH provides the necessary infrastructure, materials and equipment enabling the implementation of appropriate IPC practices and behavioural change among health workers and the community. WASH has critical connections to the IPC core components. To visualize how important it is for all actors to recognize WASH in the role of achieving IPC going forward, Box 1 highlights how WASH forms the building blocks in relation to the IPC core components, and not just where hand hygiene is specifically noted.

¹⁰ Guidelines on core components of infection prevention and control programmes at the national and acute health care facility level. Geneva: World Health Organization; 2016 (<https://www.who.int/infection-prevention/publications/core-components/en/>, accessed 23 June 2020).



Box 1

WASH as building blocks for IPC in health care: a summary of key principles related to the IPC core components

- In the context of **IPC programmes**, the IPC team within a facility should have established links and communication mechanisms, in particular with those providing waste management, sanitation and water supply services.
- **IPC guidelines** should include reference to waste management, adequate access to safe water, a reliable electricity supply, sanitation and environmental cleaning.
- Building and continuously operating and improving the WASH infrastructure is a critical element of **multimodal strategies**, which have proven to be the most successful approach for implementing IPC interventions in health care.
- **IPC monitoring** should provide information on the existence and functioning of the WASH infrastructure, such as water and electricity supplies, toilets, and health care waste disposal and treatment¹¹.

To provide clean care, combat outbreaks, antimicrobial resistance and ongoing infections in health care, countries need to have effective IPC programmes and functioning WASH services in place.

To achieve strong, effective IPC programmes at the national and facility level, countries should have at least the **minimum requirements** in place¹² as these represent the starting point for providing basic protection and safety to patients, health workers and visitors, and to progressively fully establish all IPC core components.

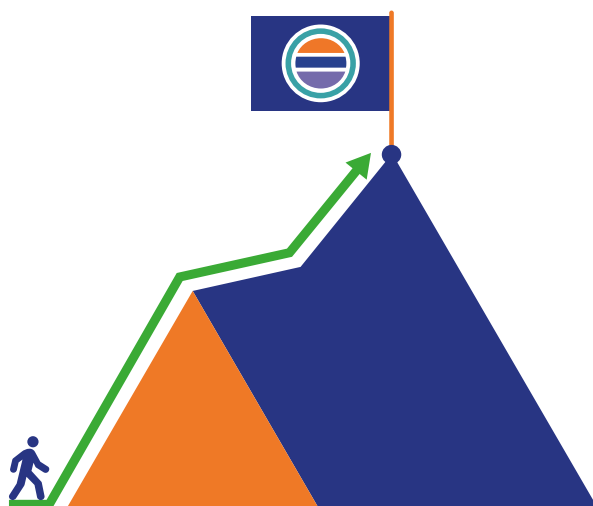


Image 2.

Minimum versus full requirements to achieve effective IPC programmes.

WASH is represented in the IPC core component 8 (Built environment, materials and equipment for IPC), which recommends that patient care activities should be undertaken in a clean and/or hygienic environment that facilitates practices related to the prevention and control of infection. This includes all elements related to the WASH infrastructure and services, as well as the availability of appropriate IPC materials and equipment. The minimum requirements for core component 8 are summarized in Box 2.

¹¹ Core questions and indicators for monitoring WASH in health care facilities in the Sustainable Development Goals. Geneva: World Health Organization/UNICEF; 2018 (https://www.who.int/water_sanitation_health/publications/core-questions-and-indicators-for-monitoring-wash/en/, accessed 23 June 2020).

¹² Minimum requirements for infection prevention and control programmes. Geneva: World Health Organization; 2019 (<https://www.who.int/infection-prevention/publications/core-components/en/>, accessed 23 June 2020).

Box 2

Minimum requirements for IPC Core component 8 - Built environment, materials & equipment for IPC.

FACILITY LEVEL	WATER	HAND HYGIENE	SANITATION	OTHER INFRASTRUCTURE
PRIMARY CARE	<ul style="list-style-type: none"> Water always available from a source on the premises. 	<ul style="list-style-type: none"> Hand hygiene facilities always available at the point of care/toilets (alcohol-based hand rub and/or water, soap and towels) 	<ul style="list-style-type: none"> Minimum 2 toilets, one for patients and one for staff, equipped with menstrual hygiene products. Waste management, including waste bins, storage and treatment. 	<ul style="list-style-type: none"> Space for cohorting/isolation Adequate natural ventilation Space for decontamination of reusable medical devices Sufficient and appropriate IPC supplies (that is, personal protective equipment, mops, detergent, etc.).
SECONDARY AND TERTIARY CARE	<ul style="list-style-type: none"> Water always available on the premises and piped, at a minimum to high risk wards. 		<ul style="list-style-type: none"> Min 2 improved sanitation facilities for outpatients and 1:20 for inpatients All equipped with menstrual hygiene products 	<ul style="list-style-type: none"> Adequate single isolation rooms Adequate natural or mechanical ventilation. Reliable power and electricity, at a minimum to high-risk areas Adequate space for decontamination of medical devices Sufficient IPC supplies.

These standards draw upon a more comprehensive, but still minimal set of WASH services that should be in place in all HCFs¹³. These include aspects of water quality and quantity, including for cleaning, bathing, drinking, handwashing, sanitation, safe health care waste management, and vector control. Furthermore, more recent WHO guidance on drinking water, sanitation and health care waste provide a strong basis for improving and regulating WASH in HCF¹⁴⁻¹⁶.

Evidence on hand hygiene supports all the core components and underpins core component 5 (that is, using “multimodal strategies” for effective IPC interventions) in particular¹⁷.

¹³ Essential environmental health standards in health care. Geneva: World Health Organization; 2008 (https://apps.who.int/iris/bitstream/handle/10665/43767/9789241547239_eng.pdf?sequence=1&isAllowed=y, accessed 15 June 2020).

¹⁴ Guidelines for drinking-water quality, 4th edition, incorporating the 1st addendum. Geneva: World Health Organization; 2017 (https://www.who.int/water_sanitation_health/publications/drinking-water-quality-guidelines-4-including-1st-addendum/en/, accessed 15 June 2020).

¹⁵ Safe management of wastes from health-care activities / edited by Y. Chartier et al. – 2nd ed. Geneva: World Health Organization; 2014. (https://www.who.int/water_sanitation_health/publications/wastemanag/en/, accessed 5 August 2020)

¹⁶ Guidelines on sanitation and health. Geneva: World Health Organization; 2018. (https://www.who.int/water_sanitation_health/publications/guidelines-on-sanitation-and-health/en/, accessed 5 August 2020).

¹⁷ Evidence of hand hygiene as the building block for infection prevention and control. Geneva: World Health Organization; 2017 (<https://www.who.int/infection-prevention/tools/core-components/evidence.pdf?ua=1>, accessed 23 June 2020).

There are two strong hand hygiene recommendations

made in the WHO guidelines on the core components of IPC programmes¹⁰, as critical evidence on hand hygiene formed a large part of their development.

1

The first recommendation from Core Component 8

is that materials and equipment to perform appropriate hand hygiene should be readily available at the point of care. An appropriate infrastructure including the HCF building and the availability of safe water and sanitation facilities according to international and national standards is an essential requirement.

2

The second recommendation from Core Component 6

stipulates that hand hygiene monitoring and feedback should be a key performance indicator at the national level. Acquiring data and providing timely feedback are critical elements of any effective strategy. They can help to tailor a strategy so that gaps identified can be addressed, thus promoting the ideal behavioural change, that is, sustained hand hygiene by frontline health providers. Similarly, aspects of the infrastructure need to be addressed in order to achieve the standards being monitored. Resources on WASH in HCFs support this step and efforts to align standards should allow the recommendations for obligatory hand hygiene stations to be addressed, as outlined in the improvement strategy.



2. Translating guidelines into actions: WHO's strategy and global campaigns on hand hygiene and WASH in HCFs

WHO's Multimodal hand hygiene improvement strategy (MMIS) and global campaign

Over the last 15 years, WHO has promoted a MMIS and a global campaign to engage and support countries and facilities worldwide to achieve comprehensive enhancement of hand hygiene practices in health care.

What is the meaning of "multimodal"? It means that multiple elements, all essential and complementary, must be put in place as part of interventions to achieve outcome improvements and optimal hand hygiene behavioural change.

The MMIS has proven to be highly effective, leading to a significant improvement of key hand hygiene indicators, a reduction of health care-associated infections and antimicrobial resistance, and substantially helping to stop outbreaks.

For these reasons, it is actively encouraged to support the two specific core components' recommendations to be addressed at this critical and opportune time in relation to hand hygiene and improved WASH in HCFs.

The WHO MMIS includes five critical elements to be implemented at the facility level in an integrated manner (Box 3).

Box 3

Element of the MMIS	Description
System change (build it)	Achievement of continuous availability of the necessary infrastructure, materials and equipment to effectively perform hand hygiene at the point of care. This includes the reliable and uninterrupted provision of alcohol-based hand rub at the point of care, continuous supplies of safe, clean water, soap, single-use towels, and an adequate number of functioning sinks.
Education (teach it)	Clinical staff, patients and visitors should undergo tailored education and practical training about the importance of hand hygiene to better understand when and how it should be performed. Education should also address all other health workers, including hospital administrators, cleaning personnel and community health workers.
Monitoring and feedback of hand hygiene indicators (check it)	Regular monitoring and evaluation (ideally using standardized tools) of hand hygiene infrastructures (location of facilities at the point of care, consumption of soap and alcohol-based hand rubs), including knowledge of and compliance with best practices. Providing regular feedback to health workers and senior management using local data is a very powerful approach to raise awareness and achieve improvement of practices.
Reminders in the workplace/communications (sell it)	Posters, stickers, visual and vocal prompts, etc., can continually prompt and remind health workers about the importance of hand hygiene and the indications when to perform it. They also help to involve patients and their visitors and inform them of the level of care they should expect from health workers with regards to hand hygiene.
Institutional safety climate (live it)	Creating an organizational environment that prioritizes high compliance with hand hygiene to achieve patient and health worker safety. At the institutional level, this should include the allocation of resources for hand hygiene programmes and clear messages of support for hand hygiene from leaders within the institution, setting benchmarks or targets, and having hand hygiene champions. At an individual level, the aim is to ensure that health workers identify hand hygiene as a priority that reflects their commitment to do no harm to patients. Partnering with patients and patient organizations to promote hand hygiene may also promote a climate of patient safety, but should be undertaken sensitively and in close consultation with key stakeholders, including health workers and patient representatives.

Alcohol-based hand rubs are the preferred method for hand hygiene as they offer a broad antimicrobial spectrum, are highly effective, well tolerated by the skin, and can be made available at the point of care, thus overcoming key behavioural barriers to compliance in health care. Supplies, clean water and facilities for handwashing are also needed for specific uses in HCFs. Hospitals in low-middle-income countries face the challenge of securing a reliable and sustainable supply of alcohol-based hand rub. However there are many countries that have successfully established local ABHR production within their facility using the WHO recommended formulations¹⁸. It is imperative that a facility makes alcohol-based hand rub of an adequate quality continuously available and at the point of care.

A wide range of implementation **resources and tools** (see also Annex) are available to support countries and represent a framework for implementing the hand hygiene MMIS and developing a locally-adapted plan for hand hygiene promotion.

Through the **SAVE LIVES: Clean Your Hands** global campaign⁵, every year on and around 5 May, WHO renews its support to countries and facilities worldwide and promotes innovation to achieve improvements in hand hygiene practices in health care.

In collaboration with the IPC programme at Geneva University Hospitals (Switzerland), WHO proposes a different theme every year as the campaign focus, as well as promotional and technical tools and activities to be conducted locally and internationally. The annual campaign addresses a wide range of audiences in the health sector, ranging from IPC professionals to all frontline staff, senior managers, health leaders and patients and their families. In the context of the campaign, WHO has conducted eight global surveys on hand hygiene and other IPC indicators.

As of 4 May 2020:

**SAVE LIVES
CLEAN YOUR HANDS**

23,564
facilities

182
countries

14 million
staff

5.4 million
beds

WASH in HCFs

WHO and UNICEF, together with over 100 partners, have committed to support countries in implementing the World Health Assembly resolution and the 2018 Global Call to Action on WASH in HCFs by the UN Secretary-General. One year after the resolution, 38 countries have made progress on implementing the resolution, especially on updating national standards, establishing baselines and empowering the health workforce. This global vision and associated targets guide future efforts and WHO and UNICEF have established a global portal (www.washinhcf.org) to share tools and experiences, and stimulate commitments and further action.

¹⁸ Guide to local production: WHO-recommended handrub formulations. Geneva: World Health Organization; 2015. (<https://www.who.int/infection-prevention/tools/hand-hygiene/handrub-formulations/en/>, accessed 5 August 2020).

Vision

Every HCF has the necessary and functional WASH services and practices in order to provide quality essential health services for everyone, everywhere.

JMP* service ladders for monitoring basic WASH services in health care facilities

	WATER	SANITATION	HYGIENE	WASTE MANAGEMENT	ENVIRONMENTAL CLEANING
BASIC SERVICE	Water is available from an improved source ¹ on the premises.	Improved sanitation facilities ² are usable, with at least one toilet dedicated for staff, at least one sex-separated toilet with menstrual hygiene facilities, and at least one toilet accessible for people with limited mobility.	Functional hand hygiene facilities (with water and soap and/or alcohol-based hand rub) are available at points of care, and within five metres of toilets.	Waste is safely segregated into at least three bins, and sharps and infectious waste are treated and disposed of safely.	Basic protocols for cleaning are available, and staff with cleaning responsibilities have all received training.
LIMITED SERVICE	An improved water source is within 500 metres of the premises, but not all requirements for basic service are met.	At least one improved sanitation facility is available, but not all requirements for basic service are met.	Functional hand hygiene facilities are available either at points of care or toilets but not both.	There is limited separation and/or treatment and disposal of sharps and infectious waste, but not all requirements for basic service are met.	There are cleaning protocols and/or at least some staff have received training on cleaning.
NO SERVICE	Water is taken from unprotected dug wells or springs, or surface water sources; or an improved source that is more than 500 metres from the premises; or there is no water source.	Toilet facilities are unimproved (e.g. pit latrines without a slab or platform, hanging latrines, bucket latrines) or there are no toilets.	No functional hand hygiene facilities are available either at points of care or toilets.	There are no separate bins for sharps or infectious waste, and sharps and/or infectious waste are not treated/disposed of safely.	No cleaning protocols are available and no staff have received training on cleaning.

* WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene

Targets

Basic services

- By 2022, 60% of all HCFs worldwide and in each of the Sustainable Development Goals' regions have at least basic WASH services.
- By 2025, 80% have basic WASH services.
- By 2030, 100% have basic WASH services.¹⁹

Higher service levels

- By 2022, higher levels of service are defined and monitored **in countries where universal basic WASH services have been achieved already.**
- By 2030, higher levels of WASH services are achieved universally in **80% of these countries.**

WHO/UNICEF guidance on practical actions that countries can take to achieve universal access to WASH in HCFs provides an important framework to guide efforts and track progress¹⁹.

¹⁹ WHO/UNICEF. WASH in health care facilities: practical steps to achieve universal access to quality care. Geneva: World Health Organization; 2019 (https://www.who.int/water_sanitation_health/publications/wash-in-health-care-facilities/en/, accessed 17 July 2020).

WHO/UNICEF guidance indicates eight practical steps which are based on a distillation of “what works” in over 30 countries. Specific steps include defining national roadmaps and setting targets, establishing and implementing national standards, engaging communities, and conducting operational research and learning.

8 Practical steps

1 CONDUCT
SITUATION
ANALYSIS AND
ASSESSMENT



2 SET TARGETS
AND DEFINE
ROADMAP



3 ESTABLISH NATIONAL
STANDARDS AND
ACCOUNTABILITY
MECHANISMS



4 IMPROVE
INFRASTRUCTURE
AND MAINTENANCE



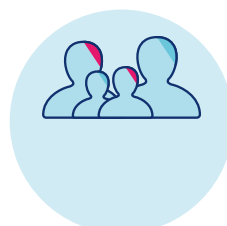
5 MONITOR
AND REVIEW
DATA



6 DEVELOP
HEALTH
WORKFORCE



7 ENGAGE
COMMUNITIES



8 CONDUCT
OPERATIONAL
RESEARCH AND
SHARE LEARNING



At the facility level, WASH improvements and ongoing operation and maintenance are guided by the Water and Sanitation for Health Facility Improvement Tool (WASH FIT)²⁰. WASH FIT builds upon water and sanitation safety planning and is an incremental, risk-based approach to assessing, prioritizing, and continuing to make WASH improvements. It covers four main areas (water, sanitation, health care waste and hygiene) and is based on existing WHO drinking water¹⁴, sanitation²¹ and environmental health²² standards. It has been implemented in over 30 countries and has recently been adapted to focus on key elements relevant to COVID-19, including water supply and soap for hand hygiene. All the training materials, together with hundreds of other resources, can be found on the global WASH in HCF knowledge portal (www.washinchf.org).

WHO and UNICEF have conducted joint training on WASH FIT implementation in the context of COVID-19 and beyond, for over 500 partners. The two organizations continue to offer technical support to countries to implement the WASH FIT.

²⁰ WHO/UNICEF. Water and sanitation for health facility improvement tool. Geneva: World Health Organization; 2018 (https://www.who.int/water_sanitation_health/publications/water-and-sanitation-for-health-facility-improvement-tool/en/, accessed 17 July 2020).

²¹ Guidelines on sanitation and health. Geneva: World Health Organization; 2018 (https://www.who.int/water_sanitation_health/sanitation-waste/sanitation/sanitation-guidelines/en/, accessed 17 July 2020).

²² Essential environmental standards in health care. Geneva: World Health Organization; 2008 (https://www.who.int/water_sanitation_health/publications/ehs_hc/en/, accessed 17 July 2020).

3. What collaboration looks like on the ground – the story of Ghana

Improving the quality of care requires WASH and IPC to be prioritized at all levels of a health system. Ghana presents a compelling story of how WASH and IPC moved from being low to high priority, both nationally and across its health facilities. Policies were outdated and health workers often did not understand the importance of IPC practices like hand hygiene, appropriate use of personal protective equipment, and proper environmental cleaning. In 2016, 30% of facilities across Ghana did not have access to basic water services²⁴ and even if hand hygiene was understood, performing it was almost impossible. These gaps in WASH and IPC resulted in high rates of health care-associated infections (for example, 19% of babies born at the hospital had sepsis and jaundice²⁴), as well as longer hospital stay, loss of productivity, increased health costs, patient and family suffering, and even death.

Improvement efforts involved a multimodal approach, including engagement by national health authorities and investment in training, the development of IPC champions, improved infrastructures, including ensuring soap availability and the local production of hand sanitizer, and measurement and feedback.

These nationally-driven changes were supported by development partners and led to what has been described as a transformational change at the health facility level, greatly improving outcomes for patients and the population. In recent months, building on previous efforts, Ghana has worked to further strengthen WASH and IPC as part of its preparedness and response efforts in the context of COVID-19. Using a multimodal approach, hand hygiene infrastructures and practices continue to be the focus of attention. HCF staff have been further trained on WASH, IPC, safe burials and waste management. At the lowest level of facilities (community-based service delivery locations for primary health care), water has been made available.

|| Ghana understands the importance of WASH and IPC and its relationship to patient safety and quality ||

The Ghana story shows the understanding of the importance of WASH and IPC and its relationship to patient safety and quality and that - improving the process of care through better hand hygiene is a matter of quality.

There has been recognition that all actors in the health arena must commit to prioritizing IPC and WASH in the health infrastructure and overall quality in service delivery for improvements to be sustainable. Indeed, the national quality strategic plan includes indicators on WASH and IPC and the health facility regulatory agency verifies that facilities have these services in place before they can be accredited. In addition, the infrastructure unit of the ministry of health has oversight to ensure compliance.

²⁴ Hand hygiene – a driver of quality care. Geneva: World Health Organization; 2019 (<https://www.who.int/news-room/feature-stories/detail/hand-hygiene-a-driver-of-quality-care>, accessed 22 September 2020).

4. The way forward

In the context of current efforts of the **Hand Hygiene for All** initiative to improve hand hygiene access and practices in health care, the following key actions (5-year timeline) are proposed:

Global level

- Review and map what major stakeholders, such as the World Bank, other UN partners and non-governmental organizations, are doing in HCFs in terms of HCFs design and WASH provision.
- Identify key indicators for hand hygiene in HCFs in the context of outbreaks (short-term).
- Conduct evidence reviews on critical hand hygiene topics, such as determinants of health workers' behaviour (short- and medium-term).
- Continue to update and share data on access to WASH in HCFs (WHO/UNICEF Joint Monitoring Programme)²⁵ and in implementing practical steps to improve WASH in HCFs (medium- and long-term) through reporting on the World Health Assembly resolution.
- Update the hand hygiene implementation tool package (short- and medium-term).
- Update global hand hygiene guidelines (medium- and long-term).
- Make smartphone/tablet applications/tools available for point-of-care hand hygiene improvements and monitoring (short- and medium-term), including through WASH FIT.
- Support countries to achieve improvements in hand hygiene access and behaviour in health care facilities (short-, medium- and long-term).
- Complete a global investment case and provide costing tools for planning and improving WASH in HCFs, including hand hygiene (short- and medium-term).
- Work with innovators to design cost-effective hand hygiene facilities for HCFs in low-cost settings (short- and medium-term).
- Expand collaborative activities/efforts to other streams of work, such as antenatal care. For example, take advantage of antenatal care to promote hand hygiene during antenatal visits.

²⁵ WHO/UNICEF JMP. 2020 (<https://www.washdata.org>, accessed 22 September 2020).



Country level

- Define a comprehensive approach across teams to address IPC, using hand hygiene as the entry point, as a key component to improve quality of care at facility and community level.
- Assess the implementation of hand hygiene in a representative sample of all types of HCFs (including primary care and long-term care facilities) in the context of the WHO minimum requirements for IPC programmes (short- and medium-term).
- Create action and budget plans to make hand hygiene accessible at the point of care and in toilet facilities in all HCFs as part of wider WASH improvements in infrastructure and supplies procurement (short- and medium-term).
- Conduct a market scoping exercise on the most cost-effective approach to make alcohol-based hand rubs available in all HCFs (short- and medium-term).
- Make necessary system changes (both WASH infrastructure and supplies procurement improvements) to make hand hygiene available at the point of care (short- and medium-term) and in toilets.
- Invest in health workers' capacity development on hand hygiene and IPC in HCFs as part of a MMIS and create hand hygiene programmes in all acute care facilities at the very least (short- and medium-term).
- Work with implementation research teams to develop models for working with expectant mothers to promote hand hygiene also in home settings (medium- and long-term).
- Monitor hand hygiene indicators at least in all acute care facilities (short- and medium-term) and across the health system (medium- and long-term). Other indicators for consideration include health care-associated infections, antimicrobial resistance, bed occupancy rates, staff to bed ratios, functionality of WASH services and adherence to hygiene protocols.

Annex

Table of resources

IPC core Component	WASH in HCF practical step	Importance	Key tools
1. IPC programmes	2. Set targets and define roadmap	Includes an intersectoral taskforce; gives clear direction on the way forward	<ul style="list-style-type: none"> • IPC facility implementation manual • IPC national implementation manual • Water, sanitation and hygiene in health care facilities • Practical steps to achieve universal access to quality care
2. IPC guidelines	3. Standards	These guide implementation and monitoring efforts and accountability mechanisms (for example, regulations)	<ul style="list-style-type: none"> • Guidelines on core components of infection prevention and control programmes at the national and acute health care facility level • Minimum requirements for infection prevention and control programmes • Essential environmental health standards in health care • WHO guidelines on hand hygiene in health care
3. IPC education and training	6. Health workforce empowerment	WASH FIT IPC training package	<ul style="list-style-type: none"> • WASH FIT training package • IPC e-Learning training package • IPC training modules
4. Health care-associated infection surveillance and 6. Monitoring	5. Monitoring	WHO/UNICEF core indicators Hand hygiene self-assessment indicators IPC assessment framework	<ul style="list-style-type: none"> • Hand hygiene self-assessment framework • Water and sanitation for health facility improvement tool (WASH FIT) • IPC facility assessment tool • IPC national assessment tool
5. Multimodal implementation strategies	8. Operational research	Understand outcomes/impacts of efforts and how to improve	<ul style="list-style-type: none"> • IPC facility implementation manual • IPC national implementation manual • Hand hygiene starter kit
8. Built environment	4. Improve infrastructure and maintenance	Linked to WASH FIT, as well as sanitation, health care waste and drinking water guidelines	<ul style="list-style-type: none"> • Water and sanitation for health facility improvement tool (WASH FIT)

