



GOAL 6

Ensure availability and sustainable management of water and sanitation for all

TARGET 6.2

By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations

Target overview

SDG monitoring

SDG target 6.2 is tracked by the following indicators:

- 6.2.1a: Proportion of population using safely managed sanitation services
- 6.2.1b: Proportion of population with a basic handwashing facility on premises

Broader monitoring context

Universal access to sanitation and hygiene are key determinants of child survival, maternal, and children's health, family wellbeing, and economic productivity. These are core socio-economic and health indicators and a central focus of UNICEF's efforts to ensure every child lives in a safe and clean environment (Strategic Plan pillar #4). To date UNICEF has primarily focused on extending access to basic services and strengthening national monitoring of inequalities in service levels.

UNICEF role in monitoring

The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) has been monitoring progress on drinking water and sanitation since 1990. The JMP uses service ladders, which capture progressive realization of universal access to safely managed sanitation services and enable benchmarking and comparison of progress across countries. The ladders build on the established improved/unimproved facility type classification, thereby providing continuity with MDG monitoring, and introduce additional criteria for SDG monitoring relating to the level of service provided to households. The JMP will continue to monitor all rungs on each ladder, with a particular focus on those that relate to progress towards SDG targets.

JMP service ladder for sanitation

SERVICE LEVEL	DEFINITION	SDG #
Safely managed	Use of improved facilities that are not shared with other households and where excreta are safely disposed of in situ or transported and treated offsite	SDG 6.2.1a
Basic	Use of improved facilities that are not shared with other households	SDG 1.4.1
Limited	Use of improved facilities shared between two or more households	
Unimproved	Use of pit latrines without a slab or platform, hanging latrines or bucket latrines	
Open defecation	Disposal of human faeces in fields, forests, bushes, open bodies of water, beaches or other open spaces, or with solid waste	

Note: improved facilities include flush/pour flush to piped sewer systems, septic tanks or pit latrines; ventilated improved pit latrines, composting toilets or pit latrines with slabs.



JMP service ladder for hygiene

SERVICE LEVEL	DEFINITION	SDG #
Basic	Availability of a handwashing facility on premises with soap and water	SDG 6.2.1b SDG 1.4.1
Limited	Availability of a handwashing facility on premises without soap and water	
No facility	No handwashing facility on premises	

Note: Handwashing facilities may be fixed or mobile and include a sink with tap water, buckets with taps, tippy-taps, and jugs or basins designated for handwashing. Soap includes bar soap, liquid soap, powder detergent, and soapy water but does not include ash, soil, sand or other handwashing agents.

It is important to note that 'hygiene for all' is multi-faceted and can comprise other behaviours, including menstrual hygiene and food hygiene. To date global monitoring has focused on access to drinking water, sanitation and hygiene at the household level. While household access remains the primary concern, international consultations recommended that future monitoring should also prioritise institutional settings, including schools, health care facilities and workplaces, where lack of access to WASH significantly impacts on the health, welfare and productivity of populations. The language of SDG Target 6.2 referring to 'universal access' and 'for all' further reinforces the importance of WASH in all settings, not only the household.

General information and resources

- UNICEF data: <https://data.unicef.org/>
- UNICEF Multiple Indicator Cluster Surveys (MICS): <http://mics.unicef.org>
- SDG indicators: <https://unstats.un.org/sdgs/>
- JMP website: <https://washdata.org>
- Brochure on WASH in the 2030 Agenda: <https://washdata.org/report/jmp-2017-wash-2030-agenda>
- Sanitation and Water for All: <http://sanitationandwaterforall.org/>

For further information, please contact the WASH focal point at the Data & Analytics Section at UNICEF HQ via: data@unicef.org



INDICATOR 6.2.1A

Proportion of population using safely managed sanitation services

Description

Definition and key terms

The Proportion of population using safely managed sanitation services is defined as the population using a basic sanitation facility which is not shared with other households and where excreta is safely disposed in situ or treated off-site.

Key terms:

- 'Improved' sanitation facilities include: flush or pour flush toilets to sewer systems, septic tanks or pit latrines, ventilated improved pit latrines, pit latrines with a slab, and composting toilets.
- Safely disposed in situ; refers to cases in which the contents of pit latrines or septic tanks are not emptied, and the faecal wastes remain in the ground, with pathogens dying off over time. Another possibility is that when storage pits and tanks become full, the contents are emptied and buried in a covered pit, without being transported off premises. In both cases the wastes would be considered as "safely managed" for SDG reporting.
- Emptied and treated offsite; when septic tanks or pit latrines are emptied, the wastes should be transported to an appropriate facility for treatment and disposal. If there are records showing that de-sludging trucks have delivered waste collected from a given population to appropriate treatment plants, or have discharged sludge into sewers which reach such treatment plants, these wastes can be considered as safely managed. In the absence of data on treatment, it is assumed that excreta emptied from septic tanks and latrines is not safely managed.
- Wastewater treated; households with sewer connections are classed as using safely managed sanitation services if the excreta are effectively contained and transported through sewer lines to treatment plants providing at least a secondary level of treatment.

National data sources

The percentage of the population using safely managed sanitation services can be calculated by combining data on the proportion of the population using different types of improved sanitation facilities with estimates of the proportion of faecal waste which is safely disposed in situ or transported and treated off-site.

Household surveys and censuses: Questions about access to drinking water and sanitation are routinely included in most household surveys in low and middle income countries. Surveys and censuses provided the great majority of data used for tracking the WASH MDGs, and will continue to be at the heart of SDG reporting. Household surveys and censuses can provide information on types of basic sanitation facility, the location of the facility, and whether or not it is shared. These data underlie the sanitation ladder, including open defecation, which is explicitly mentioned in target 6.2.

National Management Information Systems (MIS):

Administrative and regulatory data provide information that cannot always be measured through household surveys, particularly on the levels of service (including management and treatment of excreta). In several high-income countries, where information on the use of basic services is not collected in household surveys, data can be drawn from administrative records.

In many low- and middle-income settings, incomplete data on excreta management in on-site systems is the most challenging data gap for monitoring this indicator. Important gaps also exist for sewer systems, such as the amount of excreta that is lost in transport, and the amount of excreta that bypasses treatment plants or is discharged without receiving at least secondary treatment.

Data collection innovation

The JMP has been actively advancing measurement methodologies for WASH in the SDG era.

Household: The JMP collaborated with the UNICEF Multiple Indicator Cluster Survey (MICS) programme to develop and test new questions and indicators which fill data gaps regarding sanitation services, starting with the sixth round of MICS surveys. New questions were developed and standardized that collect information from households on emptying of on-site sanitation facilities, as well as the number of households with "sewer connections" that discharge to open drains, and should not be counted as safely managed.

Schools: The JMP has published Core questions and indicators for monitoring WASH in Schools in the Sustainable Development Goals.

Health facilities: A series of JMP-convened working groups and expert reviews has resulted in a harmonized set of generic core indicators and questions. Additional modules are being developed to address additional WASH requirement in specific service areas (e.g. delivery rooms).

Using the indicator

Interpretation

The indicator "proportion of the population using safely managed sanitation services" goes beyond the concept of "improved" facilities, used to track progress towards the MDG target. To be considered "safely managed", the facility must be 1) an improved source, 2) not shared with other households, and 3) the excreta produced should either be treated and disposed of in situ, or be stored temporarily and then emptied, transported and treated off-site, or be transported through a sewer with wastewater and then treated off-site.

The new indicator is much more ambitious than the MDG indicator. This results in relatively sparse estimates at present. While almost all countries have data on access to basic WASH services (SDG 1.4),



service-level data required to estimate “safely managed sanitation services” are less widely available. Where estimates can be produced, baselines will be considerably lower in most countries.

Thus, it is important to assess country performance looking at all rungs on the sanitation ladder. If the excreta from improved sanitation facilities are not safely managed, then people using those facilities will be classed as having a basic sanitation service (SDG 1.4). People using improved facilities that are shared with other households will be classified as having a limited service. The JMP will also continue to monitor the population practising open defecation, which is an explicit focus of SDG target 6.2.

Disaggregation

Disaggregation by place of residence (urban/rural) and socioeconomic status (wealth) is possible for nearly all countries for basic services and may be possible for safely managed services in future. Disaggregation by other stratifiers of inequality (subnational region, gender, education, disadvantaged groups, etc.) is possible in some countries but these are generally not available from administrative sources. Wherever possible sanitation services will also be disaggregated by the JMP by service level (including no services, basic, and safely managed services) following the sanitation ladder.

Common pitfalls

While the SDG targets are ambitious the first priority in many low income countries is to end open defecation and achieve universal access to basic sanitation services. Many countries have large data gaps with respect to the safe management and of excreta and indicator definitions have not yet been standardized making it difficult to compare across countries. While most countries have data on treatment of wastewater from sewer connections, relatively few have data on emptying and treatment of excreta from on-site sanitation systems. Regulatory data is often limited to public sewer systems in urban areas which typically only serve a small proportion of the total population. For the purposes of global monitoring sanitation facilities that are shared with other households do not count as basic or safely managed services but in some countries national standards permit limited sharing.

Monitoring and reporting

National monitoring

National statistics offices, Ministries of water, sanitation, health, environment and/or regulators of water and sanitation services.

Global monitoring

Agencies: WHO and UNICEF (WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene)

Process: The JMP maintains a database with nearly 5000 censuses, surveys and administrative records identified through extensive searches of published data and consultation with countries. The JMP uses a standard international classification to estimate access to type of source for each country, separately in urban and rural areas, by fitting a regression line to a series of data points from household surveys and censuses. The JMP then estimates the population using services that meet each of criteria for safely managed services. The population data used by the JMP, including the proportion of the population living in urban and rural areas, are those routinely updated by the UN Population Division. All JMP estimates undergo rigorous country consultations facilitated by WHO and UNICEF country offices. Often these consultations give rise to in-country visits, and meetings about data on drinking water, sanitation and hygiene services and the monitoring systems that collect these data. The JMP is evaluating the use of alternative statistical estimation methods as more data become available.

Timing: New country, regional, and global estimates are published every two years. Baseline SDG estimates were published in July 2017 and will be updated in 2019.

Discrepancies with national estimates: JMP estimates are based on national sources of data approved as official statistics. Differences between global and national figures arise due to differences in indicator definitions and methods used in calculating national coverage estimates. In some cases national estimates are based on the most recent data point rather than from regression on all data points as done by the JMP. In some cases national estimates draw on administrative records of infrastructure coverage rather than the nationally representative surveys and censuses used by the JMP which collect information directly from households.

Key resources

Indicator information and cross-country comparable estimates:

- UNICEF Data: <https://data.unicef.org/topic/water-and-sanitation/sanitation/>
- JMP website: <https://washdata.org>
- JMP 2017 update and SDG baselines: <https://washdata.org/report/jmp-2017-report-final>
- SDG metadata: <https://unstats.un.org/sdgs/metadata/>

Tools and measurement guidance:

- Core questions for monitoring WASH in schools: <https://washdata.org/report/jmp-2016-core-questions-and-indicators-monitoring-wins-0>
- Core questions for monitoring WASH in healthcare facilities: <https://washdata.org/report/jmp-2016-core-questions-and-indicators-monitoring-winhcf>
- SDG6 monitoring initiative: <http://www.sdg6monitoring.org/news/integrated-monitoring-guide-sdg-6>
- MICS6 tools (household questionnaire): <http://mics.unicef.org/tools>



INDICATOR 6.2.1B

Proportion of population with a basic handwashing facility on premises

Description

Definition and key terms

Proportion of population with a basic handwashing facility on premises is defined as the population living in households that have a handwashing facility on premises with soap and water available.

Key terms:

- A handwashing facility is a device to contain, transport or regulate the flow of water to facilitate handwashing. Handwashing facilities may be fixed or mobile and include a sink with tap water, buckets with taps, tippy-taps, and jugs or basins designated for handwashing.
- Soap includes bar soap, liquid soap, powder detergent, and soapy water but does not include ash, soil, sand or other handwashing agents that may be used in some cultures but are less effective than soap.
- Water should be available at or close to the handwashing facility and may include running water from a tap, or container with a tap, and stored water that is transferred when needed from a container, bucket, basin or jug to facilitate handwashing.

National data sources

Household surveys: Observation of a handwashing facility with soap and water available has been a standard component of the MICS and DHS since 2009. To collect these data, the surveyor visits the handwashing facility and observes if water and soap are present. Depending on the country, surveys collecting these data may be conducted every 3-5 years, or possibly at more frequent intervals.

Data collection innovation

To overcome the data gap for high-income countries for future reporting on SDGs 1 and 6, the JMP will develop a suitable proxy for the availability of handwashing facilities in the home, drawing on data that are more likely to be available for high-income countries, such as the availability of piped water supplies, hot water, showers or bathrooms on premises. The JMP has also collaborated with MICS to develop and test new questions on menstrual hygiene management for inclusion in the women's questionnaire.

Using the indicator

Interpretation

Hygiene refers to the conditions and practices that help maintain health and prevent spread of disease. Handwashing with soap is a very cost-effective intervention for disease prevention. The presence of soap and water at a designated place is used a proxy for handwashing behaviours, having been found to be more accurate than other proxies such as self-reports of handwashing practices.

Households that have a handwashing facility with soap and water available on premises will meet the criteria for a basic hygiene facility. Households that have a facility but lack water or soap will be classified as having a limited facility, and distinguished from households that have no facility at all. In some cultures, ash, soil, sand or other materials are used as handwashing agents, but these are less effective than soap and are therefore counted as limited handwashing facilities.

International consultations among WASH sector professionals identified handwashing with soap and water as a top priority in all settings, and also as a suitable indicator for national and global monitoring, but one indicator does not encompass the spectrum of hygiene essential for good public health. 'Hygiene for all' is multi-faceted and comprises other behaviours, including menstrual hygiene and food hygiene.

Disaggregation

Disaggregation by place of residence (urban/rural) and socioeconomic status (wealth) is standard in MICS and DHS surveys. Because these survey programmes collect these data at the household level, it is infeasible to accurately measure intra-household inequalities such as sex, age, or disability.

Common pitfalls

Presence of a handwashing station with soap and water does not guarantee that household members consistently wash hands at key times, but has been accepted as the most suitable proxy for use in household surveys. National standards for handwashing vary, for example some countries exclude mobile facilities, include local handwashing agents, or require handwashing facilities to be located inside the dwelling. In a small number of cases households refuse to give enumerators permission to observe their facilities.



Monitoring and reporting

National monitoring

National statistics offices, Ministries of water, sanitation, health, environment

Global monitoring

Agencies: WHO and UNICEF (WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene)

Process: The JMP maintains a database with comparable survey estimates identified through extensive searches of published data and consultation with countries. Linear regression is used to estimate basic handwashing facilities, drawing on data on the population with handwashing facilities, soap and water observed at home. The small number of households that do not give permission to observe their facilities are excluded from estimates. All JMP estimates undergo rigorous country consultations facilitated by WHO and UNICEF country offices. Often these consultations give rise to in-country visits, and meetings about data on drinking water, sanitation and hygiene services and the monitoring systems that collect these data. The JMP is evaluating the use of alternative statistical estimation methods as more data become available.

Timing: New country, regional, and global estimates are published every two years. Baseline SDG estimates were published in July 2017 and will be updated in 2019.

Discrepancies with national estimates:

JMP estimates are based on national sources of data approved as official statistics. Differences between global and national figures may arise due to differences in definitions. The JMP approach is to use linear regression to estimate basic handwashing facilities for a common reference year across countries with available data, whereas national estimates would typically be based on the most recent survey data point.

Key resources

Indicator information and cross-country comparable estimates:

- UNICEF Data: <https://data.unicef.org/topic/water-and-sanitation/hygiene/>
- JMP website: <https://washdata.org>
- JMP 2017 update and SDG baselines: <https://washdata.org/report/jmp-2017-report-final>
- SDG metadata: <https://unstats.un.org/sdgs/metadata/files/Metadata-06-02-01.pdf>

Tools and measurement guidance:

- Core questions for monitoring WASH in schools: <https://washdata.org/report/jmp-2016-core-questions-and-indicators-monitoring-wins-0>
- Core questions for monitoring WASH in healthcare facilities: <https://washdata.org/report/jmp-2016-core-questions-and-indicators-monitoring-winhcf>
- SDG6 monitoring initiative: <http://www.sdg6monitoring.org/news/integrated-monitoring-guide-sdg-6>
- MICS6 tools (household questionnaire): <http://mics.unicef.org/tools>