Priority Gender-Specific Indicators for WASH Monitoring Under SDG Targets 6.1 and 6.2:

RECOMMENDATIONS FOR NATIONAL AND GLOBAL MONITORING
Acknowledgements

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Recommended citation
## Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARISE</td>
<td>Agency, Resources, and Institutional Structures for Sanitation-related Empowerment</td>
</tr>
<tr>
<td>DHS</td>
<td>Demographic and Health Surveys</td>
</tr>
<tr>
<td>GLAAS</td>
<td>Global Analysis and Assessment of Sanitation and Drinking-water</td>
</tr>
<tr>
<td>iWISE</td>
<td>Individual Water Insecurity Experiences Scale</td>
</tr>
<tr>
<td>JMP</td>
<td>The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene</td>
</tr>
<tr>
<td>MHH</td>
<td>Menstrual Health and Hygiene</td>
</tr>
<tr>
<td>MICS</td>
<td>Multiple Indicator Cluster Surveys</td>
</tr>
<tr>
<td>MPNS</td>
<td>Menstrual Practices Needs Scale</td>
</tr>
<tr>
<td>SanQoL</td>
<td>Sanitation-related Quality of Life</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
</tr>
<tr>
<td>WASH</td>
<td>Water, Sanitation, and Hygiene</td>
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Introduction
1.1 Background

Established in 2015 to enable sustainable economic, social, and environmental development, the 2030 Sustainable Development Goal (SDG) Agenda prioritizes achieving gender equality and the empowerment of all women and girls across all 17 goals and associated targets.\(^1\) However, some SDGs lack gender-specific indicators—defined by UN Women as indicators that ‘explicitly call for disaggregation by sex and/or refer to gender equality as the underlying objective’—and therefore have been deemed ‘gender-blind’.

Despite seeking to ‘Ensure availability and sustainable management of water and sanitation for all,’\(^2\) SDG 6 does not have any gender-specific indicators and is one of the goals UN Women has identified as ‘gender blind’. As a result, our ability to understand the role that water, sanitation, and hygiene (WASH) conditions may have on enabling or hindering gender equality is limited. As noted by UN Women, there is a need to invest in gender data to inform water and sanitation policy.\(^3\) Gender-specific WASH indicators are urgently needed to ensure policymakers and other stakeholders have data to identify gender inequalities and to inform appropriate action. To that end, the UN-Water Integrated Monitoring Initiative for SDG 6 has embarked upon a ‘gender contextualisation’ of all SDG 6 global indicators.\(^4\)

Aligned with that effort, the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation, and Hygiene (JMP)—the global custodian of data on drinking water supply, sanitation, and hygiene under SDG targets 6.1 and 6.2 (Table 1)—is committed to identifying gender-specific indicators for WASH monitoring. Current reporting against indicators for targets 6.1 and 6.2 relies on data collected at the household-level, which is limiting. Household-level data both hides intra-household inequalities\(^5\) and excludes those who are unhoused.\(^6\) Individual-level data are needed to identify inequalities due to sex, age, disability, and other characteristics.

Emory University led a multi-year, multi-phase initiative to review opportunities for enhanced monitoring of gender under SDG WASH targets 6.1, 6.2, 6.a, and 6.b, and to identify priority gender-specific indicators for integration into national, regional, and global monitoring efforts. The priority gender-specific indicators recommended reflect the insights and inputs from an extensive number of experts and stakeholders with expertise in gender, WASH, and/or monitoring who provided feedback at various stages over the past several years.

This document presents recommendations on priority gender-specific indicators for WASH monitoring to complement existing indicators for SDG targets 6.1 and 6.2, which are reported by JMP. There may or may not be a separate set of recommendations for GLAAS in the future.

<table>
<thead>
<tr>
<th>Table 1. Sustainable Development Goal Targets 6.1 and 6.2 and Affiliated Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sustainable Development Goal 6:</strong> Ensure availability and sustainable management of water and sanitation for all.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Target 6.1:</th>
<th>Target 6.2:</th>
</tr>
</thead>
<tbody>
<tr>
<td>By 2030, achieve universal and equitable access to safe and affordable drinking water for all.</td>
<td>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</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator 6.1.1:</th>
<th>Indicator 6.2.1a:</th>
<th>Indicator 6.2.1b:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of population using safely managed drinking water services</td>
<td>Proportion of population using safely managed sanitation services</td>
<td>Proportion of population with a handwashing facility with soap and water available at home</td>
</tr>
</tbody>
</table>
1.2 Key Considerations

- This list of gender-specific indicators represents priorities for WASH monitoring under SDG targets 6.1 and 6.2. It is not a comprehensive list of all possible gender-specific indicators. Prioritization is necessary as countries already engage in extensive data collection and reporting for the SDGs and do not have the capacity to assess everything.

- This list is meant to complement, not replace, indicators already in use for assessing progress under SDG targets 6.1 and 6.2. As stated in Table 1, SDG Targets 6.1 and 6.2 and related indicators focus on use of safely managed drinking water and sanitation services and access to a household handwashing facility with water and soap at home. Visualizations and definitions related to these indicators, which remain critical, are shown in Figure 1. The priority gender-specific indicators should be reported alongside these indicators.

- This list is meant to complement, not replace, any gender-specific indicators for WASH monitoring already in use by countries at national and sub-national levels or by other monitoring entities. Additional qualitative and quantitative data collection could provide additional and more nuanced information that these priority indicators are not designed to capture.

- The priority indicators identified are focused on the household context and the majority (14 of 15) require data collection at the individual level. This list does not include any indicators specific to institutions and other contexts (e.g., schools, healthcare settings, workplace). These settings are critical, and additional work is needed to identify gender-specific indicators for these settings.

- Some, but not all, of the recommended indicators can leverage existing data and data collection systems (e.g., data from Demographic Health Surveys (DHS) or Multiple Indicator Cluster Surveys (MICS)). For each indicator, it is made clear if existing data and data collection systems are available, as known (See ‘Data availability’ in the Indicator Information tables for each indicator). It is possible that there are other monitoring efforts that collect data on some of the indicators, which have not been noted in this document. It is recommended that those involved in monitoring assess what is already collected to determine what reporting already may be possible.

- Survey items are proposed for all recommended indicators. Some indicators have survey items that have been validated; all survey items from Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS) are assumed to have been previously validated. Other indicators do not have validated survey items. Indicators without valid survey items are no less of a priority. These indicators have been identified as conceptually important, and the lack of valid survey items represents a gap in existing knowledge and measurement. For indicators that lack validated survey items, further testing is needed and adaptation may be required. This document makes it clear which indicators have validated survey items and which have survey items that require further testing (See ‘Survey item validity’ in the Indicator Information tables for each indicator).
**Drinking water ladder**

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safely managed</td>
<td>Drinking water from an approved water source that is accessible on premises, available when needed and free from fecal and priority chemical contamination.</td>
</tr>
<tr>
<td>Basic</td>
<td>Drinking water from an improved source, provided collection time is not more than 30 minutes for a roundtrip including queuing</td>
</tr>
<tr>
<td>Limited</td>
<td>Drinking water from an improved source for which collection time exceeds 30 minutes for a roundtrip including queuing</td>
</tr>
<tr>
<td>Unimproved</td>
<td>Drinking water from an unprotected dug well or unprotected spring</td>
</tr>
<tr>
<td>Surface water</td>
<td>Drinking water directly from a river, dam, lake, pond, dream, canal or irrigation canal</td>
</tr>
</tbody>
</table>

Note: Improved sources include: piped water, boreholes or tubewells, protected dug wells, protected springs, rainwater, and packages or delivered water.

**Sanitation service ladder**

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safely managed</td>
<td>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</td>
</tr>
<tr>
<td>Basic</td>
<td>Use of improved facilities that are not shared with other households</td>
</tr>
<tr>
<td>Limited</td>
<td>Use of improved facilities shared between two or more households</td>
</tr>
<tr>
<td>Unimproved</td>
<td>Use of pit latrines without a slab or platform, hanging latrines or bucket latrines</td>
</tr>
<tr>
<td>Open defecation</td>
<td>Disposal of human faeces in fields, forests, bushes, open bodies of water, beaches or other open spaces, or with solid waste</td>
</tr>
</tbody>
</table>

Note: Improved sanitation 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.

**Handwashing ladder**

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td>Availability of a handwashing facility with soap and water at home</td>
</tr>
<tr>
<td>Limited</td>
<td>Availability of a handwashing facility lacking soap and/or water at home</td>
</tr>
<tr>
<td>No facility</td>
<td>No handwashing facility on premises</td>
</tr>
</tbody>
</table>

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

This priority list of gender-specific indicators is the culmination of a multi-year, multi-phase effort that commenced in 2020 and has involved extensive stakeholder engagement (Figure 2).

During Phase 1 (the ‘review phase’; 2020-2021), Emory University conducted a literature review and developed a Conceptual Framework for Achieving Gender Equality and Equity in and from WASH, with specific relevance to SDG Targets 6.1, 6.2, 6.a, and 6.b (See Annex 1 for definitions of Conceptual Framework dimensions and Annex 2 for Conceptual Framework figure). Emory then searched for and collated data collection tools and data sources, and sorted individual survey items from those tools and data sources by dimensions of the Conceptual Framework, which resulted in an Inventory of Reviewed Tools and Coded Measures. The JMP, GLAAS, and Emory teams then jointly led a series of expert consultations to validate the Conceptual Framework and to assess opportunities and gaps for utilizing available tools and data for gender-specific WASH monitoring in relation to SDG Targets 6.1, 6.2, 6.a, and 6.b.. The Phase 1 final report, A Review of Measures and Indicators for Gender in WASH, summarizes the expert consultation recommendations, including a need to identify priority indicators.

During Phase 2 (the ‘prioritization phase’; 2022-2023), The JMP and Emory teams recruited and led a core team of gender, measurement, and/or WASH experts to support prioritization of gender-specific indicators for WASH monitoring, specifically focusing on prioritizing indicators to complement SDG Targets 6.1 and 6.2. The core team ranked dimensions of the Phase 1 Conceptual Framework to identify which dimensions should be prioritized for monitoring, and leveraging the Phase 1 Inventory to compile a list of potential indicators that could be used for monitoring the dimensions identified. The core team then deployed a survey to over 100 gender, measurement, and/or WASH experts to assess support for an initial list of potential indicators and analyzed quantitative and qualitative data from 70+ respondents representing various geographies and sectors to shorten and revise the list. A refined list of proposed gender-specific indicators was then posted for public comment. The core team incorporated public feedback before finalizing the list herein. Annex 3 includes the names of those who have contributed at various stages and provided their name for acknowledgement.

Figure 2. Phases and Activities Informing Prioritization of Gender-Specific WASH Indicators under SDG targets 6.1 and 6.2

Phase 1:
- **Review** to develop Conceptual Framework and assess opportunities for gender-specific WASH monitoring in relation to SDG Targets 6.1, 6.2, 6.a, and 6.b

  - Literature review and creation of Conceptual Model for Achieving Gender Equality and Equity in and from WASH
  - Inventory of tools and survey items sorted by dimensions of the model to assess what is available
  - Expert consultations to assess tools and survey items and identify gaps and future data collection opportunities
  - Final report to summarize process, synthesize learnings, and recommend next steps

Phase 2:
- **Prioritization** of gender-specific indicators for WASH monitoring under SDG targets 6.1 and 6.2

  - Ranking of dimensions of conceptual framework by core team to identify which should be prioritized for monitoring
  - Compiling and ranking potential indicators and survey items for monitoring the identified dimensions using phase 1 inventory
  - Survey deployed by core team to invited gender, measurement, and/or WASH experts to assess support for an initial list of indicators and further revise
  - Public open comment period on revised list of proposed gender-specific indicators
  - Finalization and dissemination of priority indicators for gender in WASH under SDG Targets 6.1 and 6.2
Priority Gender-Specific Indicators for WASH Monitoring under SDG Targets 6.1 and 6.2
### 2.1 Concise List of Priority Gender-Specific Indicators for WASH Monitoring

| TABLE 2: Priority Gender-Specific Indicators for WASH Monitoring Under SDG Targets 6.1 and 6.2 |
|---|---|
| **WATER SUPPLY** |  |
| **Thematic Area** | **Indicator** |
| Ability to Meet Basic Needs | W1. Proportion (%) of individuals who have experienced water insecurity in the last four weeks, by sex and age |
|  | W2. Proportion (%) of individuals who have worried in the last four weeks that they would not have enough water for all of their needs, by sex and age |
| Time & Labor | W3. Sex and age distribution of primary household water collector |
|  | W4. Average time primary water collector spends per day collecting drinking water, by sex and age |
|  | W5. Average time primary water collector spends per day collecting water for all household needs, by sex and age |
|  | W6. Average time children/adolescents spend per day collecting water for all household needs, by sex and age |
| Safety & Freedom from Violence | W7. Proportion (%) of individuals who felt unsafe collecting water in the last four weeks due to fear of being harmed or assaulted by someone, by sex and age |
|  | W8. Proportion (%) of individuals who believe that women and girls in their community face the risk of being physically harmed or assaulted when collecting water, by sex and age |
| **SANITATION** |  |
| **Thematic Area** | **Indicator** |
| Ability to Meet Basic Needs | S1. Proportion (%) of individuals who reported that the sanitation location they used most often in the last four weeks was clean, private, and safe, by sex and age |
| Safety & Freedom from Violence | S2. Proportion (%) of individuals who felt unsafe at the sanitation locations they used most often in the last four weeks due to fear of being harmed or assaulted by someone, by sex and age |
|  | S3. Proportion (%) of individuals who believe that women and girls in their community face the risk of being physically harmed or assaulted when accessing sanitation locations, by sex and age |
| **HYGIENE** |  |
| **Thematic Area** | **Indicator** |
| Ability to Meet Basic Needs | H1. Proportion (%) of individuals who reported that the bathing location they used most often in the last four weeks was private and safe, by sex and age |
| Safety & Freedom from Violence | H2. Proportion (%) of individuals who felt unsafe at the bathing location they used most often in the last four weeks due to fear of being harmed or assaulted by someone, by sex and age |
| **MENSTRUAL HEALTH** |  |
| **Thematic Area** | **Indicator** |
| Ability to Meet Basic Needs | MH1. Proportion (%) of individuals who menstruate who changed their menstrual materials in a space at home was clean, private, and safe during their last menstrual period, by age |
|  | MH2. Proportion (%) of individuals who menstruate who reported having enough menstrual materials to change as often as they wanted during their last menstrual period, by age |

The 15 priority gender-specific indicators recommended are presented in Table 2, by WASH category (water supply, sanitation, or hygiene). The thematic areas correspond to dimensions in the conceptual framework (Annex 2); framework dimensions are defined in Annex 1. Additional details about each indicator, including proposed survey items, are provided in Section 2.3 ‘Detailed Description of Priority Gender-Specific Indicators.’
2.2 Recommendations for Reporting on Priority Gender-Specific Indicators

Disaggregation by Sex and Age

Sex and age are considered the most basic types of demographic data, and their collection, analysis, and reporting are fundamental for gender statistics.\textsuperscript{11} Disaggregation by sex and age is therefore required across priority indicators to enable nuanced gender analysis.\textsuperscript{12}

\textbf{Sex-disaggregated data} enable understanding of differences by sex, which refers to the biological and physiological characteristics of being male, female or intersex and can also reflect differences by gender, which refers to the socially and culturally constructed roles, responsibilities, and expectations of women and men, and girls and boys.\textsuperscript{11} Importantly, this definition does not adequately acknowledge gender minorities, including people who are transgender among other identities.\textsuperscript{13}

\textit{Data on sex} are typically collected and reported based on the binary classification of male and female and may also include additional categories, for example “other designation” and/or “prefer not to say,” depending on the context. The appropriateness and feasibility of including categories beyond male and female should be assessed in each context, bearing in mind the purpose of the data collection, and how data will be protected and used. The proportion of populations reporting a sex designation beyond the binary tend to be small, therefore consideration needs to be given to how these data will be analyzed and presented in statistical tables and other products while ensuring privacy.

\textit{Data on age} should be captured in number of completed years since birth. Age data can be collected by asking the age of the person of interest, whether the respondent or someone for whom the respondent is answering, like their child. Collecting data on the date of birth also can be used to determine the actual age of the respondent or to verify the number of completed years reported. Date of birth can be collected by direct question(s) or by reference to a birth certificate, if one exists and is available to observe.

Use of completed years (which are integers) allow for various ways of grouping and categorization during analysis, based on analytic needs. Examples are below, though countries may wish to group and report age data differently, depending on national priorities:

- The current practice in MICS, DHS, and other demographic and health surveys is to report age and sex categories as follows: women and adolescent girls aged 15+; men and adolescent boys aged 15+; girls < 15 years; and boys <15 years.

- Aligned with the Convention on the Rights of the Child,\textsuperscript{14} UNICEF considers childhood to be from 0-17. This upper age range is aligned with the MICS Base Questionnaire for Children and Adolescents Age 5-17,\textsuperscript{15} which is a model with which other data collection efforts could align. Depending on the indicator of interest, UNICEF typically reports according to the following age categories for children: under 5 (early childhood); 5-9 (middle childhood); 10-14 (early adolescence) 15-17 (older adolescence; this range sometimes extends to age 19).

- Other groupings that have been used include 0-17 (children), 10-19 (adolescents), and 15-24 (youth).
Additional Disaggregated Analyses

In addition to age, sex can intersect with myriad other social markers of identity and difference—including but not limited to gender identity, sexual orientation, disability status, income/wealth, caste, race, ethnicity, area of residence, religion, origin, nationality, and indigenous, marital, family, immigration, and HIV status—which can exacerbate inequality. Beyond sex and age, the Inter-Agency and Expert Group on Sustainable Development Goal Indicators notes that indicators should be further disaggregated, where relevant, by income, race, ethnicity, migratory status, disability status and geographic location, or other characteristics. Therefore, monitoring efforts also should strive to collect and report data that account for intersectionality, as is relevant and possible in each context. In order to perform analyses that account for intersectionality, specific planning is needed at both the data collection and analysis phases to ensure that estimates generated are reliable. While it is not possible to provide guidance on all potential markers of identity, below are considerations for gender identity and disability.

**Gender Identity**

Gender identity, which refers to a person’s internal perceptions of their own gender, may differ from the sex they were assigned at birth. While there is growing recognition of the importance of collecting data on gender identity, there are currently no international classification or standards for how to do so, posing challenges to data collection and comparative analysis. Still, disaggregating data by gender identity can help identify vulnerability and exclusion. For example, gender-diverse populations may feel more unsafe at sanitation or bathing facilities than gender-binary populations or have less access to needed menstrual hygiene materials.

Data on gender identity are not regularly collected and reported globally. While no standards exist, some countries have tested different approaches to capturing gender identity in household surveys and administrative data systems, including populations identifying as cis-gender, gender-diverse, female transgender, and male transgender.

The decision to collect data on gender identity must be weighed against the appropriateness and feasibility of doing so in each context due to the sensitivity and potential risks associated with collecting this information, particularly in countries where expressions of gender diversity are taboo or even criminalized. Further, as with data on non-binary sex identities, the proportion of the population reporting non-binary gender identities tends to be small, thus it is important to consider how these data will be used, presented, and disseminated while ensuring privacy.

**Disability status**

Disability refers to possible impairments, activity limitations, and participation restrictions that exist as a result of physical, mental, or psychological illnesses and environmental barriers (physical, social, cultural, or legislative), which interact to limit a person’s capabilities and participation in society.

Data on disability status is collected in the Disability Module in Demographic and Health Surveys and in the Adult Functioning Complementary Survey as part of Multiple Indicator Cluster Surveys. These survey questions are based on the Washington Group Short Set on Functioning (WG-SS), which captures difficulties seeing, hearing, communicating, remembering and concentrating, walking and climbing steps, washing and dressing, and communicating, including understanding and being understood. In 2016, UNICEF and the Washington Group on Disability Statistics also launched the Child Functioning Module, which is designed to estimate the percentage of children with functional difficulties in various domains at the population level, including hearing, vision, communication/comprehension, learning, mobility and emotions. Survey items from these existing tools can be included for data collection and analyses in other monitoring efforts.
2.3 Detailed Description of Priority Gender-Specific Indicators

WATER SUPPLY

THEMATIC AREA: Ability to Meet Basic Needs

W1. Proportion (%) of individuals who have experienced water insecurity in the last four weeks, by sex and age

Adoption and regular reporting of Water Indicator 1 (W1) will enable understanding of the proportion of individuals who have experienced water insecurity in the last four weeks, and if having experienced water insecurity varies by sex and age.

Water is necessary for health, well-being and development, yet people can experience water insecurity — problems with the availability, access, acceptability, safety, or reliability of water for basic daily needs—even when they have access to a household source. The JMP regularly reports on the proportion of the world’s population that uses a safely managed drinking water service (SDG indicator 6.1.1), but this indicator leverages household-level data, potentially hiding variability of individuals’ experiences within the household.

W1 assesses individual experiences of water insecurity in the last four weeks, intentionally extending beyond drinking water as the sole focus to cover a range of experiences with water. Reporting by sex and age is recommended, at a minimum, to understand disparities in water insecurity based on these characteristics. The four-week timeframe is recommended as shorter recall periods have been shown to be more accurate and enable collection at different times of the year, if feasible, to determine variability based on season or other temporal events.

The validated and abbreviated individual water insecurity experiences (IWISE-4) scale can be used for collecting data for this indicator. The IWISE-4 scale, which has four survey items, has been validated among nationally representative samples of adults from 31 low- and middle-income countries. Data for all four survey items need to be collected to generate a score. The score is used to determine if an individual experienced water insecurity in the last four weeks and to report against the indicator. All four survey items have the same response options, and each survey item also may be reported on separately. Data should be collected at the individual level and information about respondent sex and age also should be collected to report as recommended.
## Indicator Information

<table>
<thead>
<tr>
<th>Definition</th>
<th>The proportion of individuals who have experienced water insecurity in the last four weeks, based on self-report and disaggregated by respondent sex and age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Number of individuals categorized as having experienced water insecurity in the last four weeks, as determined by having a score ≥4 based on responses from the four required IWISE-4 survey items</td>
</tr>
<tr>
<td>Denominator</td>
<td>Total number of individuals who provided responses to all four IWISE-4 survey items</td>
</tr>
<tr>
<td>Preferred data source type</td>
<td>Self-reported data from a nationally representative survey \</td>
</tr>
<tr>
<td>Scale validity</td>
<td>Proposed IWISE-4 scale has been validated \</td>
</tr>
<tr>
<td>Data availability</td>
<td>Data with four-week recall period are not available as of publication date \</td>
</tr>
<tr>
<td>Future data collection</td>
<td>Plans for future data collection at scale are unknown \</td>
</tr>
</tbody>
</table>

## Proposed Survey Items:

1. **In the last four weeks, how often did you worry that you would not have enough water for all of your needs?**
2. **In the last four weeks, how often did you have to change schedules or plans because of problems with water?**
3. **In the last four weeks, how often were you NOT able to wash your hands after dirty activities because of problems with water?**
4. **In the last four weeks, how often did you NOT have as much water to drink as you would have liked?**

### Response options for all four survey items:
- Never (0 times )
- Rarely (1-2 times)
- Sometimes (3-10 times)
- Often (11-20 times)
- Always (more than 20 times).

## Measurement and Data Collection Notes:

The proposed survey items comprise the abbreviated version of the Individual Water Insecurity Experiences Scale (IWISE-4).28 This four-survey item scale was validated and deployed in 31 countries using a 1-year recall period.27 Based on expert feedback, including those who developed the scale, a 1-month recall period was selected for this indicator for recall reliability and to enable assessment at other times of year, as possible. A 4-week recall period was validated for a similar measure, the Household Water Insecurity Experiences Scale (HWISE),29 which was designed by the same team. Asking about the previous four weeks was noted to be less ambiguous for respondents than asking about the previous month. These survey items were designed and validated to be relevant for all contexts, so enumerators should probe if needed to elicit responses.29,30

## Analysis Notes:

Responses to all four IWISE-4 survey items are required to generate a water insecurity score. The response options are scored as follows: ‘never’ = 0; ‘rarely’ = 1; ‘sometimes’ = 2; and ‘often’ and ‘always’ both = 3. Scores are a simple sum of responses across all four survey items, with a possible range of 0-12. A score of ≥4 on the IWISE-4 indicates that an individual experienced water-insecurity.27,29
To be counted in the numerator for this indicator, the respondent must have a score ≥4, which is the accepted threshold to indicate that the individual experienced water insecurity in the last four weeks. If “Don't know” or “not applicable” or other similar options are also included, these should be coded as ‘missing’ and if any of the four survey item responses are missing, a score cannot be generated for that individual. The denominator includes all who responded to each of the four survey items, excluding those with missing data for any of the four survey items (e.g., those who indicated ‘I don’t know’, refused to answer, or provided any response other than the indicated response options.) However, the scale was designed to be applicable to all audiences, so the enumerator should probe if the respondent chooses anything other than one of the recommended response options.30

Data should be disaggregated and reported by sex and age. See Section 2.2 ‘Recommendations for Reporting on Priority Gender-Specific Indicators’ for age category guidance.
W2. Proportion (%) of individuals who have worried in the last four weeks that they would not have enough water for all of their needs, by sex and age

Adoption and regular reporting of indicator W2 will enable understanding of the proportion of individuals who have worried in the last four weeks that they would not have enough water for all their needs, and if this experience varies by sex and age.

Indicator W1 uses the four scale survey items from the IWISE-4 to assess individual experiences of water insecurity in the previous four weeks. However, when the number of survey items needs to be limited, indicator W2, which uses only one survey item from the IWISE-4, could be used to assess worry related to not having enough water for meeting all needs (including, but not limited to, drinking water).  

As with indicator W1, data should be collected at the individual level and information about respondent sex and age should be collected to report as recommended.

### Indicator Information

<table>
<thead>
<tr>
<th>Definition</th>
<th>The proportion of individuals who reported having worried about having enough water for all their needs in the last four weeks, based on self-report and disaggregated by respondent sex and age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Number of individuals who reported worrying rarely, sometimes, often, or always about having enough water for all their needs in the last four weeks</td>
</tr>
<tr>
<td>Denominator</td>
<td>Total number of individuals who provided a response to the survey item</td>
</tr>
<tr>
<td>Preferred data source type</td>
<td>Self-reported data from a nationally representative survey</td>
</tr>
<tr>
<td>Survey item validity</td>
<td>Proposed IWISE-4 scale has been validated</td>
</tr>
<tr>
<td>Data availability</td>
<td>Data with four-week recall period are not available as of publication date</td>
</tr>
<tr>
<td>Future data collection</td>
<td>Plans for future data collection at scale are unknown</td>
</tr>
</tbody>
</table>

### Proposed Survey Item

1. **In the last four weeks, how often did you worry that you would not have enough water for all of your needs?**

   **Response options:**
   - [ ] Never (0 times)
   - [ ] Rarely (1-2 times)
   - [ ] Sometimes (3-10 times)
   - [ ] Often (11-20 times)
   - [ ] Always (more than 20 times).

### Measurement and Data Collection Notes:

The proposed survey item is from the Individual Water Insecurity Experiences Scale (IWISE-4). This survey item was validated as part of the scale, which was deployed in 31 countries using a 1-year recall period. Based on expert feedback, including those who developed the scale, a 1-month recall period was selected for the indicator for recall reliability and to enable assessment at other times of year, as possible. A 4-week recall period was validated for a similar measure, the Household Water Insecurity Experiences Scale (HWISE), which was designed by the same team. Asking about the previous four weeks was noted...
to be clearer for respondents than asking about the previous month. This survey item was designed and validated to be relevant for all contexts, so enumerators should probe if needed to elicit responses.

**Analysis Notes:**
To be counted in the numerator for this indicator, the respondent must have responded ‘rarely (1-2 times),’ ‘sometimes (3-10 times),’ ‘often (11-20 times),’ or ‘always (more than 20 times).’ If “Don't know” or “not applicable” or other similar options are also included, these responses should be coded as ‘missing’ and excluded from further analysis. The denominator includes all who responded to the survey item, excluding those with ‘missing’ data.

Data should be disaggregated and reported by sex and age. See Section 2.2 ‘Recommendations for Reporting on Priority Gender-Specific Indicators’ for age category guidance.
**WATER SUPPLY**

**THEMATIC AREA: Time and Labor**

**W3. Sex and age distribution of primary household water collector**

Adoption and regular reporting of indicator W3 will enable understanding of which household members bear the burden of water collection, specifically for households that do not have access to a drinking water source in their dwelling or in their yard or plot, and how this responsibility may vary by sex and age.

For those who lack a source of water within their dwelling or just outside in the household yard or plot, water collection is labor- and time-intensive and can lead to musculoskeletal problems, injury, pain, fatigue, compromised safety, and missed social, economic, and educational opportunities. Analyses using data from 41 countries found there to be an increased relative risk of child death when adults are engaged in water collection, reduced uptake of antenatal care when women and girls collect water, and increased odds of diarrheal disease when children collect water. The responsibility of collecting water is a gendered activity, which is largely borne by women and girls. Gender-specific indicators for assessing water collection roles among adults and children have been called for as crucial for measuring progress in the WASH sector.

While the 2023 JMP report did note who in the household is primarily responsible for household water collection, this indicator has not been reported regularly, limiting current understanding of trends over time, variability across geographies, and changes that may result from climate change, which is expected to exacerbate water scarcity and associated water collection time and labor. Survey items already in use by MICS7 and DHS8 Household Questionnaires, and the data these items already have generated, can be leveraged for reporting on this indicator. These survey items should remain in MICS and DHS Household Questionnaires, and adopted as needed by other data collection efforts, to enable regular reporting in the future.
## Indicator Information

<table>
<thead>
<tr>
<th>Definition</th>
<th>Among households that do not have a main drinking water source in their dwelling or in their yard or plot (collect water 'elsewhere'), the proportion of primary water collectors who are a woman, man, girl, or boy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Four different proportions are needed. Categories are suggested below based on JMP 2023 reporting, though national monitoring bodies should use category formulations most relevant to their context.</td>
</tr>
<tr>
<td></td>
<td>• To determine proportion who are women: Number of households with the main drinking water source 'elsewhere' for which the primary water collector is a woman (includes women and adolescent girls age 15 and over)</td>
</tr>
<tr>
<td></td>
<td>• To determine proportion who are men: Number of households with the main drinking water source 'elsewhere' for which the primary water collector is a man (includes men and adolescent boys age 15 and over)</td>
</tr>
<tr>
<td></td>
<td>• To determine proportion who are girls: Number of households with the main drinking water source 'elsewhere' for which the primary water collector is a girl (includes girls under age 15)</td>
</tr>
<tr>
<td></td>
<td>• To determine proportion who are boys: Number of households with the main drinking water source 'elsewhere' for which the primary water collector is a boy (includes boys under age 15)</td>
</tr>
<tr>
<td>Denominator</td>
<td>Total number of households with the main drinking water source 'elsewhere' and that have indicated who usually goes to collect drinking water for the household</td>
</tr>
<tr>
<td>Preferred data source type</td>
<td>Data from a nationally representative household-level survey</td>
</tr>
<tr>
<td>Survey item validity</td>
<td>Proposed survey items have been validated</td>
</tr>
<tr>
<td>Data availability</td>
<td>Data are available for many countries from DHS and MICS Household Questionnaires</td>
</tr>
<tr>
<td>Future data collection</td>
<td>Future data collection is planned in many countries via DHS8 and MICS7 Household Questionnaires</td>
</tr>
</tbody>
</table>

### Proposed Survey Items

1. **What is the main source of drinking water for members of your household?**

   **Response options:**
   - Piped into dwelling
   - Piped to yard/plot
   - Piped to neighbor
   - Public tap/standpipe
   - Tube well or borehole
   - Protected well
   - Unprotected well
   - Protected spring
   - Unprotected spring
   - Rainwater
   - Tanker truck
   - Cart with small tank
   - Surface water (river/dam/pond/stream/canal/irrigation channel)
   - Bottled water
   - Other [Specify]

2. **Where is that [drinking water] water source located?**

   **Response options:**
   - In own dwelling
   - In yard/plot
   - Elsewhere

3. **Who usually goes to this source to collect the water for your household?**

   **Response options:**
   Insert name to link to sex and age data collected earlier in survey. If sex and age of individual named not previously collected, questions about sex and age should be added.
Measurement and Data Collection Notes:
These survey items have been regularly used for data collection by DHS and MICS Household Questionnaires, nationally representative household surveys that have been validated and administered at scale, and are included in the current versions of these surveys (DHS8 Household Questionnaire and MICS7 Household Questionnaire).

In the DHS and MICS Household Questionnaires, the survey item about where the water source is located is only answered by those who do not say their main source is piped into their dwelling or piped into the yard/plot. Further, the survey item about who usually goes to the water source to collect the water is only answered by those who indicate that their water source is located ‘elsewhere’ (not in own dwelling or in own yard/plot). The survey item about who usually goes to the source for water collection is linked in both the MICS7 and the DHS8 Household Questionnaires to sex and age data by entering the name of household member. Those engaged in monitoring who are not using DHS or MICS need to include survey items that assess the sex and age of the water collector identified. The survey item about who usually collects water follows another question in the DHS8 and MICS7 Household Questionnaires about the water source for other uses, and in the future should be refined to specify the drinking water source (not ‘this source’), to prevent respondent confusion about the source queried. The response only allows for a single person to be identified. Neither the indicator nor the items is able to capture all who are engaged in water collection in the household, just who is identified as usually engaged.

Analysis Notes:
The proportion should only be calculated among those households that indicate their drinking water source is located ‘elsewhere’ and therefore do not have a water source in the dwelling or in the yard/plot. To populate the numerators, the survey items that capture the names, sex, and ages of household members need to be used in combination with the survey item that identifies the usual water collector.

Data should be disaggregated and reported by sex and age. See Section 2.2 ‘Recommendations for Reporting on Priority Gender-Specific Indicators’ for age category guidance.
W4. Average time primary water collector spends per day collecting drinking water, by sex and age

Adoption and regular reporting of indicator W4 will enable understanding of the time burden that primary collectors bear each day collecting drinking water for the household, and how that burden varies by sex and age.

Water collection is known to be time consuming as those collecting must travel to and from a water point and gather water, which may involve time to wait in line, pump, dig, haul, or conduct other related activities. This time burden can lead to opportunity costs, potentially impacting individual’s engagement in social, educational, and income-generating activities or impeding upon their domestic responsibilities, leisure, or rest. Where comparable data are available, women and girls have been shown to spend more time than men and boys engaged in water collection, suggesting that women and girls face greater opportunity costs than men and boys.

Time burden associated with water collection may be exacerbated during dry seasons, droughts, or other disruptions such as political instability or conflicts, and due to seasonal shifts resulting from climate change. As the time burden required for water collection increases, water collection increasingly falls on women, and children of the household may be expected to participate more in water collection as a result.

While the 2023 JMP report did report the average number of minutes women, men, girls, and boys spend per day collecting water, this has not been reported regularly, limiting current understanding of trends over time, variability across geographies, and changes that may result from climate change, which is expected to exacerbate water scarcity and associated water collection time and labor. Survey items already in use by MICS and DHS Household Questionnaires, and the data these survey items already have generated, can be leveraged for reporting on this indicator. These survey items should remain in MICS and DHS Household Questionnaires going forward, and adopted as needed by other data collection efforts, to enable regular reporting in the future. Below are the survey items from the MICS7 Household Questionnaire as they include more time-related detail than the DHS8 Household Questionnaire.

<table>
<thead>
<tr>
<th>Indicator Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition</strong></td>
</tr>
<tr>
<td><strong>Preferred data source</strong></td>
</tr>
<tr>
<td><strong>Survey item validity</strong></td>
</tr>
<tr>
<td><strong>Data availability</strong></td>
</tr>
<tr>
<td><strong>Future data collection</strong></td>
</tr>
</tbody>
</table>
Proposed Survey Items

1. **What is the main source of drinking water for members of your household?**
   **Response options:**
   - Piped into dwelling
   - Piped to yard/plot
   - Piped to neighbor
   - Public tap/standpipe
   - Tube well or borehole
   - Protected well
   - Unprotected well
   - Protected spring
   - Unprotected spring
   - Rainwater
   - Tanker truck
   - Cart with small tank
   - Surface water (river/dam/lake/pond/stream/canal/irrigation channel)
   - Bottled water
   - Other [Specify]

2. **Where is that water source located?**
   **Response options:**
   - In own dwelling
   - In yard/plot
   - Elsewhere

3. **How long does it take for members of your household to go there [to the main source of drinking water], get water, and come back?**
   **Response options:**
   - Members do not collect
   - Number of minutes ________
   - Don’t know

4. **Who usually goes to this source to collect the water for your household?**
   **Response options:**
   Insert name to link to sex and age data collected earlier in survey. If sex and age of individual named not previously collected, questions about sex and age should be added.

5. **Since last (day of the week), how many times has this person collected water?**
   **Response options:**
   - Number of times ________
   - Don’t know

**Measurement and Data Collection Notes:**

These survey items have been regularly collected by DHS and MICS Household Questionnaires, nationally representative household surveys that have been validated and administered at scale and they are included in the current version of the surveys (DHS8 Household Questionnaire and MICS7 Base Household Questionnaire). The survey item about where the water source is located refers to the main drinking water source, the type of which is asked about in the preceding question, and is only answered by those who do not say their main drinking water source is piped into their dwelling or piped into the yard or plot. In their documents, the JMP indicates that drinking water ‘refers to the accessibility, availability and quality of the main source used by households for all usual domestic purposes, including drinking, food preparation and personal hygiene.’ However, indicators W3 and W4 refer specifically to water used for drinking, as these indicators leverage survey questions that ask the respondent about their drinking water source. As such, it is expected that respondents will answer about their drinking water source. While it is possible that respondents only have one source for both drinking and other needs and uses, research has shown that multiple water source use is extensive and more specific monitoring is needed. Indicators W5 and W6 assess time for collecting water for all household needs. The survey item about who usually goes to the source for water collection would only be answered by households that indicate that their water source is located ‘elsewhere’. In the MICS Base Household Questionnaire, data collectors are prompted to answer this question by entering a ‘line number’ from earlier in the survey. Each ‘line number’ links to sex and age data for each household member that was previously entered in the survey. Those engaged in monitoring who are not using DHS or MICS need to include survey items that assess the sex and age of the water collector identified. The . MICS Base Household
Questionnaire only allows for a single person to be identified as responsible for water collection. Neither the indicator nor the survey items are able to capture the time spent by all who are engaged in drinking water collection in the household, just the time of the person identified as usually engaged.

**Analysis Notes:**

The average time spent per day by the primary water can be calculated for all households, regardless of where the source is located. If a household has a source located ‘elsewhere’ (not in the dwelling or yard/plot), the average number of minutes it takes to go to that water source, get water, and come back can be multiplied by the number of times the primary water collector is reported to have collected water from that source in the previous seven days to populate the total number of minutes per seven days. To determine the average number of minutes per day, the time per week can then be divided by seven. The JMP has reported time spent per day, and is thus recommended here. Those engaged in national-level monitoring efforts may elect to report average time per week based on context.

Data should be disaggregated and reported by sex and age. See Section 2.2 ‘Recommendations for Reporting on Priority Gender-Specific Indicators’ for age category guidance.

Since these questions do not consider all the household members who may spend time collecting water, the average time for the individual usually engaged may underestimate the average time spent by the entire household. Time spent collecting water may vary seasonally. The date of data collection could be considered in further analyses that seek to understand variability by season.
W5. Average time primary water collector spends per day collecting water for all household needs, by sex and age

Adoption and regular reporting of indicator W5 will enable understanding of the time burden that primary collectors bear each day collecting water for all household needs, and how that burden varies by sex and age.

While proposed Indicator W4 would leverage existing data to understand the time burden that primary collectors bear each day collecting drinking water for the household, water is needed for more than drinking and recent research demonstrates that water may be collected from more than one source depending on need. Specifically, household members may need to collect water for cooking, bathing, washing cookware and eating utensils, washing clothes, watering kitchen gardens, and other household uses. In certain contexts, water users may use different water sources for these different needs. For example, perceived cleanliness and taste may be prioritized for drinking and cooking, but may not be considered for watering kitchen gardens. Similarly, the ability to collect large amounts of water quickly or have a source with a high flow rate may be prioritized over cleanliness for washing clothes. Households may also utilize different sources because of seasonal shifts in water availability or to avoid over-depletion of a specific source, and each source may have a different time burden associated for water collection.

Our understanding of the time burden of water collection for all household uses is currently limited because reporting only focuses on the primary drinking water source, potentially missing time burden for other uses and from other sources. Further, survey items to capture these data are limited; they are either not validated, widely deployed, or easy to use.

Despite the current challenge with collecting and reporting these data, there remains a need to understand time burden for collecting water for all uses and relevant sources, and to understand how the time burden varies by sex and age.

Indicator Information

| Definition | Average number of minutes per day for the primary water collector to collect water for all household needs, disaggregated by sex and age |
| Method of measurement | Data from a nationally representative survey |
| Survey item validity | No validated survey items to adequately assess indicator |
| Data availability | Data needed to populate the indicator have not been collected |
| Future data collection | No plans known to create and validate survey items or to collect data required for this indicator |

No survey items proposed

No survey items have been identified. Development of survey items is needed for this indicator.
W6. Average time children/adolescents spend per day collecting water for all household needs, by sex and age

Adoption and regular reporting of indicator W6 will enable understanding of the time children and adolescents spend each day collecting water for the household, and how that burden varies by sex and age. Water collection is often done, at least in part, by children and adolescents, with female children and adolescents more likely to collect water than male children and adolescents, particularly as they age.\textsuperscript{35-37,49} Time spent collecting water has specific implications for children and adolescents. For example, research in Kenya has shown that older girls have a higher probability of school absenteeism when their household water source is more than 20 minutes away from the home.\textsuperscript{50} In India, reduced water collection time for those without access to piped water is associated with higher test scores, particularly among girls.\textsuperscript{51}

Involvement of children and adolescents in household water collection increases in times of water scarcity, such as during dry seasons or droughts. As growing and frequent extremes in climate lead to increased water scarcity, vulnerable households are likely to increase involvement of children and adolescents in water collection, particularly as time burden of water collection increases.\textsuperscript{42,43}

This indicator leverages existing MICS7 Base Questionnaire for Children and Adolescents Age 5-17 survey items (not collected by DHS) to determine the time a randomly selected child or adolescent in a household (age 5-17) spends collecting water for household use.\textsuperscript{15} The other indicators that assess water collection time burden focus only on the primary water collector, thus only include children and adolescents if they are the primary water collector for the household. However, even in households in which children and adolescents are not the primary water collectors, they do participate and, in some contexts, allocate significant time to water collection. Collecting and reporting data on the time spent by children and adolescents collecting water for all household needs allows a more comprehensive understanding of how the burden of water collection activities are distributed among household members, is critical for child and adolescent rights, and is increasingly important in the context of the climate crisis.

**Indicator Information**

<table>
<thead>
<tr>
<th>Definition</th>
<th>The average time children (ages 5-17 years) spend collecting water for all household needs per day, disaggregated by sex and age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferred data source</td>
<td>Data from a nationally representative household-level survey</td>
</tr>
<tr>
<td>Survey item validity</td>
<td>Proposed survey items have been validated</td>
</tr>
<tr>
<td>Data availability</td>
<td>Data are available for many countries from MICS Base Questionnaire for Children and Adolescents Age 5-17 surveys</td>
</tr>
<tr>
<td>Future data collection</td>
<td>Future data collection is planned in many countries via MICS7 Base Questionnaire for Children and Adolescents Age 5-17 surveys. surveys</td>
</tr>
</tbody>
</table>
Proposed Survey Items

1. Since last (day of the week), did (name of randomly selected child) fetch water for household use?
   Response options:
   - Yes
   - No

2. If yes, in total, how many hours did (name of randomly selected child) spend on fetching water for household use, since last (day of the week)?
   Response options:
   Number of hours _______

Measurement and Data Collection Notes:
These survey items are regularly collected by the MICS Questionnaire for Children and Adolescents Age 5-17, which is a nationally representative household survey that has been validated and collected at scale. This questionnaire captures information about one randomly selected child in a household, enabling calculation of the indicator. This MICS module captures age data and can be cross-referenced with the MICS Base Household Questionnaire, which captures data on the age and sex of all household members, for disaggregation based on sex and age. Those engaged in monitoring who are not using DHS or MICS need to include survey items that assess the sex and age of the child referenced.

Analysis Notes:
The second survey question queries the number of hours the randomly selected child spent fetching water for household use in the last seven days. Those engaged in national-level monitoring efforts may elect to report average time per week. As the JMP has reported time spent on water collection per day, this can be done by dividing the number of hours per week by seven.

Data should be disaggregated and reported by sex and age. See Section 2.2 ‘Recommendations for Reporting on Priority Gender-Specific Indicators’ for age category guidance. Those engaged in national-level monitoring efforts may elect to report other categories as relevant to the context.
W7. Proportion (%) of individuals who felt unsafe collecting water in the last four weeks due to fear of being harmed or assaulted by someone, by sex and age

Adoption and regular reporting of indicator W7 will enable understanding of the proportion of individuals who felt unsafe while collecting water for any need in the last four weeks due to fear of being harmed or assaulted, and how feeling unsafe may vary by sex and age.

Recent systematic reviews have synthesized the growing body of research on water collection and experiences of violence, particularly among women and girls. Studies have reported women’s and girls’ experiences of fear and general unsafety, verbal harassment, interpersonal conflict, and sexual violence related to water collection with experiences of verbal, physical, and sexual harm occurring at water collection points and while walking long distances to them. Experiences have been described as more intense for adolescent girls, younger women, and racially and ethnically marginalized groups.

Indicator W7 assesses an individual’s actual lived experience to determine if they personally felt unsafe collecting water in the last four weeks due to fear of harm or assault by someone. The indicator and associated survey items intentionally do not ask about personal experiences of harm or assault as doing so could put the individuals disclosing that information at risk.

**Indicator Information**

| **Definition** | The proportion of individuals who reported feeling unsafe due to fear of being harmed or assaulted while collecting water in the last four weeks, based on self-report and disaggregated by respondent sex and age |
| **Numerator** | Number of individuals who reported feeling unsafe due to fear of being harmed or assaulted while collecting water in the last four weeks |
| **Denominator** | Total number of individuals who provided responses to all necessary survey items |
| **Preferred data source** | Self-reported data from a nationally representative survey |
| **Survey item validity** | Survey item adapted from validated survey items, but has not been validated in current form. Further testing is required |
| **Data availability** | Data are not available |
| **Future data collection** | No plans to collect data at scale as of publication date |
Proposed Survey Item

1. In the last four weeks, did you ever feel unsafe when going to collect water due to fear of being harmed or assaulted by someone?

Response options:

☐ Yes
☐ No

Measurement and Data Collection Notes:

The proposed survey item is informed by existing and validated sanitation-related survey items, but has not been validated and therefore requires testing before adoption at scale. Even though experiences of assault or harm are not specifically queried, precaution is needed. ‘Refuse to answer’ may be added as an additional response option, with enumerators trained specifically not to read it aloud, but to accept it from participants who do not want to choose from the other responses. Responsible data collection involves the ethical duty to support respondents who may need psychosocial support when asked questions about their fear of being harmed or assaulted. Implementation of these survey items should be accompanied by a safeguarding process that refers respondents to local service providers should they experience emotional distress and need referral.

Analysis Notes:

To be counted in the numerator, the respondent must have responded. ‘Yes’ to the survey item. The denominator includes all who responded to the survey item (those who indicated ‘I don’t know’, refused to answer, or provided any other response should be considered missing and therefore be excluded from analysis).

Data should be disaggregated and reported by sex and age. See Section 2.2 ‘Recommendations for Reporting on Priority Gender-Specific Indicators’ for age category guidance.
W8. Proportion (%) of individuals who believe that women and girls in their community face the risk of being physically harmed or assaulted when collecting water, by sex and age

Adoption and regular reporting of indicator W8 will enable understanding of the proportion of individuals who believe that women and girls in their community face risk of physical harm or assault when collecting water, and how this belief may vary by sex and age.

Women’s and girls’ experience and fear of physical harm or assault during water collection are well-documented and also are important concerns for those in their communities. Across varied settings, women and girls have reported fear and general unsafety, verbal harassment, interpersonal conflict, and sexual violence related to water collection with experiences of verbal, physical, and sexual harm occurring at water collection points and while walking long distances to them. It is also critical to understand what others perceive women’s and girls’ risk to be in their communities as these perceptions can influence policy and practice. Further, in some settings, it may be more feasible or appropriate to ask about general perceptions of risk within the community, rather than to ask an individual about their experiences of feeling unsafe, as is done for indicator W7. Reporting by sex and age would enable understanding of how perceptions vary by these characteristics.

**Indicator Information**

<table>
<thead>
<tr>
<th>Definition</th>
<th>The proportion of individuals who believe that women and girls in their community face the risk of being physically harmed or assaulted while fetching water, disaggregated by respondent sex and age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Number of individuals who reported that they ‘agree’ or ‘strongly agree’ that women and girls in their community face the risk of being physically harmed or assaulted while fetching water</td>
</tr>
<tr>
<td>Denominator</td>
<td>Total number of individuals who provided a response to the survey item</td>
</tr>
<tr>
<td>Preferred data source</td>
<td>Self-reported data from a nationally representative survey</td>
</tr>
<tr>
<td>Survey item validity</td>
<td>Survey item adapted from validated survey items, but has not been validated in current form</td>
</tr>
<tr>
<td>Data availability</td>
<td>Data are not available</td>
</tr>
<tr>
<td>Future data collection</td>
<td>No plans to collect data as of publication date</td>
</tr>
</tbody>
</table>

**Proposed Survey Item**

1. **Indicate the extent to which you agree with the following statement:**
   Women and girls in my community face the risk of physical harm or sexual assault when going to collect water

   **Response options:**
   - [ ] Strongly disagree
   - [ ] Disagree
   - [ ] Agree
   - [ ] Strongly agree

**Measurement and Data Collection Notes:**

This survey item is adapted from the Agency, Resources, and Institutional Structures for Sanitation-related Empowerment (ARISE) Scales. This adapted survey item will need to be validated and tested at scale.

Even though experiences of assault or harm are not specifically queried, precaution is needed. ‘Refuse to answer’ may be added as an additional response option, with enumerators trained specifically not to
read it aloud, but to accept it from participants who do not want to choose from the other responses. Responsible data collection involves the ethical duty to support respondents who may need psychosocial support when asked questions about the risk of being harmed or assaulted. Implementation of these survey items should be accompanied by a safeguarding process that refers respondents to local service providers should they experience emotional distress and need referral.

**Analysis Notes:**

To be counted in the numerator, the respondent must have responded ‘agree’ or ‘strongly agree’. The denominator includes all who responded either ‘strongly disagree’, ‘disagree’, ‘agree’, or ‘strongly agree’ to the survey item (those who indicated ‘I don't know’, refused to answer, or provided any other response should be considered missing and therefore be excluded from analysis).

Data should be disaggregated and reported by sex and age. See Section 2.2 'Recommendations for Reporting on Priority Gender-Specific Indicators' for age category guidance.
Priority Gender-Specific Indicators for WASH Monitoring Under SDG Targets 6.1 and 6.2: RECOMMENDATIONS FOR NATIONAL AND GLOBAL MONITORING

SANITATION

THEMATIC DOMAIN: Ability to Meet Basic Needs

S1. Proportion (%) of individuals who reported that the sanitation location they used most often in the last four weeks was clean, private, and safe, by sex and age

Adoption and regular reporting of indicator S1 will enable understanding of the proportion of individuals who deemed the sanitation location they used most often in the last four weeks to be clean, private and safe, and how this varies by sex and age. ‘Sanitation location’ is queried—not facility—to enable those who do not have access to or use a facility to provide responses and be included in the indicator.

Sanitation is a human right and fundamental for personal dignity and public health.22,23,70 The JMP regularly reports on the proportion of households globally that use safely managed sanitation services (SDG indicator 6.2.1a), but this indicator is limited in scope due to the primary focus on whether the sanitation facilities and services in use enable the safe disposal and management of human excreta. Other critical features —like cleanliness, privacy, and safety—are not captured at the household level. A household could have a sanitation facility that is considered to be at the top of the JMP ‘sanitation ladder’ (See Figure 1), but be neither clean, private, nor safe, and therefore not enable the ability to meet basic needs. Regardless of whether a sanitation facility can safely manage excreta, when individuals perceive sanitation facilities to not be clean, private, or safe, individuals may choose not to use them, potentially compromising their own health and the health of others, particularly if the alternative is open defecation.71–73

SDG target 6.2 states the need to pay “special attention to the needs of women and girls and those in vulnerable situations.” Access to and use of clean, private, and safe sanitation is critical for all, yet has been shown to be particularly impactful for women and girls.52 While the JMP does assess whether sanitation facilities are shared, partly in recognition of potential negative impacts of shared facilities on cleanliness, privacy, and safety for women and girls—the assessment of sharing is a proxy. It is not a direct measure of the cleanliness, privacy, and safety of a sanitation location from a user perspective. To better assess whether or not facilities are able to meet basic needs—specifically if they are clean, private, and safe—direct assessment is needed.

Indicator S1 is compiled using individual survey items to capture perceptions of the cleanliness, privacy and safety of the sanitation location they used most often in the last four weeks, though each survey item also can be reported separately. Questions focus on the location used most often in the last four weeks to facilitate respondent recall and ensure sensitivity to changes over time. Further, indicator S1 can be assessed with SDG indicator 6.2a to determine variability along the ladder.
**Indicator Information**

<table>
<thead>
<tr>
<th>Definition</th>
<th>The proportion of individuals who reported that the sanitation location they used most often in the last four weeks to be clean, private, and safe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Number of individuals who report that the sanitation location they used most often in the last four weeks was clean, AND private, AND safe</td>
</tr>
<tr>
<td>Denominator</td>
<td>Total number of individuals who provided responses to all necessary survey items</td>
</tr>
<tr>
<td>Preferred data source/alternative data source</td>
<td>Self-reported data from a nationally representative survey</td>
</tr>
<tr>
<td>Survey item validity</td>
<td>Survey items adapted from validated survey items, but have not been validated in current form. Further testing is required</td>
</tr>
<tr>
<td>Data availability</td>
<td>Not all data needed to populate the indicator have been collected</td>
</tr>
<tr>
<td>Future data collection</td>
<td>No plans to collect all data required for this indicator at scale as of publication date</td>
</tr>
</tbody>
</table>

**Proposed Survey Items**

1. **Over the last four weeks, was the sanitation location you used most often clean most of the time?**
2. **Over the last four weeks, did you ever worry [were you ever concerned] that the sanitation location you used most often was not private enough, that is, that someone would see you while using it?**
3. **Over the last four weeks, did you ever feel the sanitation location you use most often was unsafe due to fear of being harmed or assaulted by someone?**

**Response options for all:**
- Yes
- No

**Measurement and Data Collection Notes:**

The proposed survey items are adapted from items in the Priority List of Indicator for Girls’ Menstrual Health and Hygiene and in the Agency, Resources, and Institutional Structures for Sanitation-related Empowerment (ARISE) scales. These adapted survey items need to be tested and validated before adoption at scale.

The survey items ask individuals about their perceptions. Thus, individuals should provide responses about cleanliness, privacy, and safety based on their own interpretations of those terms. For the purposes of training for data collection, definitions of clean, safe, and private are provided in Annex 1.

Even though experiences of assault or harm are not specifically queried, precaution is needed. ‘Refuse to answer’ may be added as an additional response option, with enumerators trained specifically not to read it aloud, but to accept it from participants who do not want to choose from the other responses. Responsible data collection involves the ethical duty to support respondents who may need psychosocial support when asked questions about feeling unsafe. Implementation of these survey items should be accompanied by a safeguarding process that refers respondents to local service providers should they experience emotional distress and need referral.

**Analysis Notes:**

To be counted in the numerator, the respondent must have responded as follows: ‘Yes’ to Survey item #1 AND ‘No’ to survey item #2, AND ‘No’ to survey item #3.
The denominator includes all who responded to each of the survey items (those who indicated ‘I don’t know’, refused to answer, or provided any other response should be considered missing and therefore be excluded from analysis).

Data should be disaggregated and reported by sex and age. See Section 2.2 ‘Recommendations for Reporting on Priority Gender-Specific Indicators’ for age category guidance.
SANITATION

THEMATIC AREA: Safety & Freedom from Violence

**S2 Proportion (%) of individuals who felt unsafe at the sanitation location they used most often in the last four weeks due to fear of being harmed or assaulted by someone, by sex and age**

Adoption of and regular reporting of indicator S2 will enable understanding of the proportion of individuals who felt unsafe while using the sanitation location they used most often in the last four weeks due to fear of being harmed or assaulted, and how feeling unsafe may vary by sex and age.

The safety and security concerns of women and girls in relation to sanitation are well documented. Specifically, across numerous countries and settings, women and girls have reported harassment, including teasing, taunting, peeping, name calling, and other forms of verbal abuse and fear and experience of physical and sexual assault, particularly when needing to leave home to tend to sanitation needs.

Indicator S2 assesses an individual’s actual lived experience to determine if they personally felt unsafe at the sanitation location they used most often in the last four weeks due to fear of harm or assault by someone. It differs from indicator S1, which assesses individuals’ perceptions of the sanitation location itself. The indicator and associated survey items intentionally do not ask about personal experiences of harm or assault as doing so could put the individuals disclosing that information at risk.

<table>
<thead>
<tr>
<th>Indicator Information</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition</strong></td>
<td>The proportion of individuals who reported feeling unsafe due to fear of being harmed or assaulted while at the sanitation location they used most often in the last four weeks, based on self-report and disaggregated by respondent sex and age</td>
</tr>
<tr>
<td><strong>Numerator</strong></td>
<td>Number of individuals who reported ‘yes’ to feeling unsafe due to fear of being harmed or assaulted at the sanitation location they used most often in the last four weeks</td>
</tr>
<tr>
<td><strong>Denominator</strong></td>
<td>Total number of individuals who provided a response to the survey item</td>
</tr>
<tr>
<td><strong>Preferred data source</strong></td>
<td>Self-reported data from a nationally representative survey</td>
</tr>
<tr>
<td><strong>Survey item validity</strong></td>
<td>Survey item adapted from validated survey item, but has not been validated in current form. Further testing is required</td>
</tr>
<tr>
<td><strong>Data availability</strong></td>
<td>Data are not available.</td>
</tr>
<tr>
<td><strong>Future data collection</strong></td>
<td>No plans to collect data at scale as of publication date</td>
</tr>
</tbody>
</table>
Proposed Survey Item

1. Over the last four weeks, did you ever feel unsafe at the sanitation location you used most often due to fear of being harmed or assaulted by someone?

Response options:
- Yes
- No

Measurement and Data Collection Notes:
The proposed survey item is adapted from survey items in the Priority List of Indicators for Girls’ Menstrual Health and Hygiene,66 the Agency, Resources, and Institutional Structures for Sanitation-related Empowerment (ARISE) Scales69 and the SanQol measure for assessing sanitation-related quality of life.67,68 The survey item asks individuals about their perception. Thus, individuals should provide a response about feeling unsafe based on their own perception. While the proposed survey item is based off of other existing and validated survey items, it has not been validated and therefore requires testing before adoption at scale.

Even though experiences of assault or harm are not specifically queried, precaution is needed. ‘Refuse to answer’ may be added as an additional response option, with enumerators trained specifically not to read it aloud, but to accept it from participants who do not want to choose from the other responses. Responsible data collection involves the ethical duty to support respondents who may need psychosocial support when asked questions about feeling unsafe. Implementation of these survey items should be accompanied by a safeguarding process that refers respondents to local service providers should they experience emotional distress and need referral.

Analysis Notes:
To be counted in the numerator, the respondent must have responded ‘Yes’ to the survey item. The denominator includes all who responded to the survey item (those who indicated ‘I don’t know’, refused to answer, or provided any other response should be considered missing and therefore be excluded from analysis).

Data should be disaggregated and reported by sex and age. See Section 2.2 ‘Recommendations for Reporting on Priority Gender-Specific Indicators’ for age category guidance.
S3. Proportion (%) of individuals who believe that women and girls in their community face the risk of being physically harmed or assaulted when accessing sanitation locations, by sex and age

Adoption and regular reporting of indicator S3 will enable understanding of the proportion of individuals who believe that women and girls in their community face risk of physical harm or assault when accessing sanitation locations, and how this belief may vary by sex and age.

Women’s and girls’ experience and fear of physical harm or assault when accessing and using sanitation locations are well documented, and are important concerns for those in their communities. Women and girls have reported harassment, including teasing, taunting, peeping, name calling, and other forms of verbal abuse and fear and experience of physical and sexual assault, particularly when needing to leave home to tend to sanitation needs. Family and community members have expressed concern for the safety of the young girls in their communities, including their daughters and daughters-in-law, due to perceived risks of violence when they are meeting their sanitation needs. It is also critical to understand what others perceive women’s and girls’ risk to be in their communities as these perceptions can influence policy and practice. Further, in some settings, it may be more feasible or appropriate to ask about general perceptions of risk within the community, rather than to ask an individual about their experiences of feeling unsafe, as is done for indicator S2. Reporting by sex and age would enable understanding of how perceptions vary by these characteristics.

**Indicator Information**

<table>
<thead>
<tr>
<th>Definition</th>
<th>The proportion of individuals who believe that women and girls in their community face the risk of physical harm or assault when accessing sanitation locations, disaggregated by respondent sex and age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Number of individuals who reported that they ‘agree’ or ‘strongly agree’ that women and girls in their community face the risk of being physically harmed or assaulted when accessing sanitation locations</td>
</tr>
<tr>
<td>Denominator</td>
<td>Total number of individuals who provided a response to the survey item</td>
</tr>
<tr>
<td>Preferred data source</td>
<td>Self-reported data from a nationally representative survey</td>
</tr>
<tr>
<td>Survey item validity</td>
<td>Survey item adapted from validated survey items, but has not been validated in current form</td>
</tr>
<tr>
<td>Data availability</td>
<td>Data are not available</td>
</tr>
<tr>
<td>Future data collection</td>
<td>No plans to collect data as of publication date</td>
</tr>
</tbody>
</table>

**Proposed Survey Item**

1. Women and girls in my community face the risk of physical harm or sexual assault when accessing sanitation locations.

Response options:
- [ ] Strongly disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly agree
**Measurement and Data Collection Notes:**

This survey item is adapted from the Agency, Resources, and Institutional Structures in Sanitation-related Empowerment (ARISE) Scales. The survey item was adapted from two validated survey items that ask separately about perceived physical harm and sexual assault when going to sanitation locations. This adapted survey item needs to be tested and validated before adoption at scale.

Even though experiences of assault or harm are not specifically queried, precaution is needed. ‘Refuse to answer’ may be added as an additional response option, with enumerators trained specifically not to read it aloud, but to accept it from participants who do not want to choose from the other responses. Responsible data collection involves the ethical duty to support respondents who may need psychosocial support when asked questions about the risk of being harmed or assaulted. Implementation of these survey items should be accompanied by a safeguarding process that refers respondents to local service providers should they experience emotional distress and need referral.

**Analysis Notes:**

To be counted in the numerator, the respondent must have responded ‘agree’ or ‘strongly agree’. The denominator includes all who responded either ‘strongly disagree’, ‘disagree’, ‘agree’, or ‘strongly agree’ to the survey item (those who indicated ‘I don’t know’, refused to answer, or provided any other response should be considered missing and therefore be excluded from analysis).

Data should be disaggregated and reported by sex and age. See Section 2.2 ‘Recommendations for Reporting on Priority Gender-Specific Indicators’ for age category guidance.
H1. Proportion (%) of individuals who reported that the bathing location they used most often in the last four weeks was private and safe, by sex and age

Adoption and regular reporting of indicator H1 will enable understanding of the proportion of individuals who deemed the bathing location they used most often in the last four weeks to be private and safe, and how this varies by sex and age.

Bathing, while not explicitly mentioned in the SDGs, is a fundamental aspect of the ability to meet basic needs for personal hygiene. Access to a household bathing location has been shown to be positively associated with well-being, demonstrating a link between hygiene and mental health. In the 2023 report, the JMP reported that an increasing number of countries now monitor the availability of bathing facilities, though note that indicator definitions vary and make comparison difficult. Regardless of the type of facility and where it is located, it is critical that the bathing location is private and safe, particularly for women and girls. The limited research available has shown that bathing locations, particularly those that are not private, can be locations of gender-based violence, resulting in individuals experiencing stress related to bathing or limiting their personal hygiene activities.

Indicator H1 is compiled using individual survey item to capture perceptions of privacy and safety of the bathing location they used most often in the last four weeks, though each survey item also can be reported separately. ‘Bathing location’ is queried—not facility—to enable those who do have access to or do not use a formal facility to provide responses. Locations could include any space where personal hygiene is practiced, whether an open body of water or a gas station bathroom, as has been reported by those experiencing homelessness. Questions focus on the location used most often in the last four weeks to facilitate respondent recall and ensure sensitivity to changes over time.

<table>
<thead>
<tr>
<th>Indicator Information</th>
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<tbody>
<tr>
<td>Definition</td>
<td>The proportion of individuals who reported that the bathing location they used most often over the last four weeks was private and safe</td>
</tr>
<tr>
<td>Numerator</td>
<td>Number of individuals who reported that the bathing location they used most often over the last four weeks was private and safe</td>
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<td>Denominator</td>
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<tr>
<td>Survey item validity</td>
<td>Survey items have not been validated</td>
</tr>
<tr>
<td>Data availability</td>
<td>Data are not available</td>
</tr>
<tr>
<td>Future data collection</td>
<td>No plans to collect data as of publication date</td>
</tr>
</tbody>
</table>
Proposed Survey Items

1. Over the last four weeks when at home, did you ever worry [were you ever concerned] that the bathing location you used most often was not private, that is, that someone would see you while using it?

2. Over the last four weeks when at home, did you ever feel the bathing location you used most often was unsafe due to fear of being harmed or assaulted by someone?

Response options for both survey items:

☐ Yes
☐ No

Measurement and Data Collection Notes:

Proposed survey items are adapted from survey items in the Priority List of Indicator for Girls' Menstrual Health and Hygiene and in the Agency, Resources, and Institutional Structures for Sanitation-related Empowerment (ARISE) scales. These adapted survey items need to be tested and validated before adoption at scale.

The survey items ask individuals about their perceptions. Thus, individuals should provide responses about privacy and safety based on their own interpretations of those terms. For the purposes of training for data collection, definitions of safe and private are provided in Annex 1.

Even though experiences of assault or harm are not specifically queried, precaution is needed. ‘Refuse to answer’ may be added as an additional response option, with enumerators trained specifically not to read it aloud, but to accept it from participants who do not want to choose from the other responses. Responsible data collection involves the ethical duty to support respondents who may need psychosocial support when asked questions about feeling unsafe. Implementation of these survey items should be accompanied by a safeguarding process that refers respondents to local service providers should they experience emotional distress and need referral.

Unlike analogous indicators for sanitation and menstrual health, cleanliness is not included in this indicator. Issues around cleanliness are less clear for bathing than for sanitation locations, and cleanliness for bathing was not identified as a priority for monitoring.

Analysis Notes:

To be included in the numerator, the respondent must have responded ‘No’ to both survey items. The denominator includes all who responded to both survey items (those who indicated ‘I don’t know’, refused to answer, or provided any other response to either survey item should be considered missing and therefore be excluded from analysis).

Data should be disaggregated and reported by sex and age. See Section 2.2 ‘Recommendations for Reporting on Priority Gender-Specific Indicators’ for age category guidance.
H2. Proportion (%) of individuals who felt unsafe at the bathing location they used most often in the last four weeks due to fear of being harmed or assaulted by someone, by sex and age

Adoption and regular reporting of indicator H2 will enable understanding of the proportion of individuals who felt unsafe while using the bathing location they used most often in the last four weeks due to fear of being harmed or assaulted, and how feeling unsafe may vary by sex and age.

There is limited research on safety and security related to bathing.\textsuperscript{57} Still, the growing body of research on fear and experiences of harassment and assault related to water and sanitation, particularly for women and girls who need to access water sources and meet their sanitation needs away from the home,\textsuperscript{52,54,74} suggests that women and girls may face similar experiences related to bathing, especially those who bathe in a location in public or away from the household compound.

Indicator H2 assesses an individual's actual lived experience to determine if they personally felt unsafe at the bathing location they used most often in the last four weeks due to fear of harm or assault by someone. It differs from indicator H3, which assesses individuals' perceptions of the bathing location itself. The indicator and associated survey items intentionally do not ask about personal experiences of harm or assault as doing so could put the individuals disclosing that information at risk.\textsuperscript{64}

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Definition</strong></td>
</tr>
<tr>
<td><strong>Numerator</strong></td>
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<tr>
<td><strong>Denominator</strong></td>
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<tr>
<td><strong>Preferred data source</strong></td>
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<tr>
<td><strong>Survey item validity</strong></td>
</tr>
<tr>
<td><strong>Data availability</strong></td>
</tr>
<tr>
<td><strong>Future data collection</strong></td>
</tr>
</tbody>
</table>
Proposed Survey Item

1. Over the last four weeks, did you ever feel unsafe at the location you used most often for bathing due to fear of being harmed or assaulted by someone?

Response options:
- Yes
- No

Measurement and Data Collection Notes:
The proposed survey item is adapted from survey items in the Priority List of Indicators for Girls’ Menstrual Health and Hygiene, the Agency, Resources, and Institutional Structures for Sanitation-related Empowerment (ARISE) Scales and the SanQol measure for assessing sanitation-related quality of life. The survey item asks individuals about their perception. Thus, individuals should provide responses about feeling unsafe based on their own perception. While the proposed survey item is based off of other existing and validated survey items, it has not been validated and requires testing.

Even though experiences of assault or harm are not specifically queried, precaution is needed. ‘Refuse to answer’ may be added as an additional response option, with enumerators trained specifically not to read it aloud, but to accept it from participants who do not want to choose from the other responses.

Responsible data collection involves the ethical duty to support respondents who may need psychosocial support when asked questions about feeling unsafe. Implementation of these survey items should be accompanied by a safeguarding process that refers respondents to local service providers should they experience emotional distress and need referral.

Analysis Notes:
To be counted in the numerator, the respondent must have responded ‘Yes’ to the survey item. The denominator includes all who responded to the survey item (those who indicated ‘I don’t know’, refused to answer, or provided any other response should be considered missing and therefore be excluded from analysis). Data should be disaggregated and reported by sex and age.
Menstrual Health

THEMATIC AREA: **Ability to Meet Basic Needs**

MH1. Proportion (%) of individuals who menstruate who changed their menstrual materials in a space at home that was clean, private, and safe during their last menstrual period, by age

Adoption and regular reporting of indicator H1 will enable understanding of the proportion of individuals who changed their menstrual materials while at home during their last menstrual period in a space (e.g., room in the home, bathroom, etc.) they perceived to be to be clean, private and safe, and how this varies by age.

Menstruation presents challenges for many women, adolescent girls, and other individuals who menstruate, as is documented in a large body of research undertaken around the world. While not explicitly named, menstrual health is relevant to achieving the SDGs, and implicated in the ‘special needs of women and girls’ as part of equitable sanitation access under SDG 6.2. Menstrual health, defined as ‘a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity, in relation to the menstrual cycle,’ includes needs and practices that include and extend beyond hygiene.

Changing menstrual materials is an essential task for maintaining menstrual hygiene and for menstrual health. Within the home, women and girls need adequate space for changing materials, regardless of whether the materials used are single-use or reusable. Qualitative research has consistently identified cleanliness, privacy and safety as essential features of locations for changing menstrual absorbents so that women, girls, and other individuals who menstruate are able to meet this basic need, free from distress. Privacy and safety challenges for menstruation can be complicated by stigma surrounding menstruation, and expectations that all signs of menstruation may be shameful and should be hidden from others.

Indicator MH1 is compiled using individual survey items to capture perceptions of cleanliness, privacy and safety of the location used for changing menstrual materials, though each survey item also can be reported separately. Questions focus on the last menstrual period to facilitate respondent recall and ensure sensitivity to changes over time.
### Indicator Information

<table>
<thead>
<tr>
<th>Definition</th>
<th>The proportion of individuals who menstruate who reported that the space where they changed their menstrual materials when at home during their last menstrual period was clean, private, and safe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Number of individuals who menstruate who reported that the space where they changed their menstrual materials at home during their last menstrual period was clean, private, and safe</td>
</tr>
<tr>
<td>Denominator</td>
<td>Total number of individuals who provided responses to all necessary survey items</td>
</tr>
<tr>
<td>Preferred data source</td>
<td>Self-reported data from a nationally representative survey</td>
</tr>
<tr>
<td>Survey item validity</td>
<td>Proposed survey items have been validated</td>
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<tr>
<td>Data availability</td>
<td>Data are available, but not from nationally representative samples</td>
</tr>
<tr>
<td>Future data collection</td>
<td>No plans to collect all data required for this indicator at scale as of publication date, though survey item #4 is in the MICS7 Complementary Menstrual Health and Hygiene Module</td>
</tr>
</tbody>
</table>

### Proposed Survey Items

Survey items to establish if eligible to provide responses to indicator-specific survey items:

1. **When did your last menstrual period start?**
   - **Response options:**
     - Record date, if given
     - Record number of days, weeks, or years with appropriate unit
     - In menopause/has had hysterectomy
     - Before last pregnancy
   - **If ‘Never Menstruated’, End.**

2. **Check: Was the last menstrual period within the last year?**
   - **Response options (noted by enumerator):**
     - Yes, within last year
     - No, one year or more
   - **If ‘No, one year or more’, End.**

### Proposed survey items for indicator

3. **During your last menstrual period, was the place that you changed your menstrual materials when at home clean?**
4. **During your last menstrual period, did you worry that someone would see you while you were changing menstrual materials at home?**
5. **During your last menstrual period, did you ever feel the location you used to change your menstruation materials was unsafe due to fear of being harmed or assaulted by someone?**
   - **Response options for all:**
     - Yes
     - No
Measurement and Data Collection Notes:

Proposed survey items are adapted from those in the Priority List of Indicators for Girls’ Menstrual Health and Hygiene, which adapted them from the Menstrual Practices Needs Scale. Proposed survey item 2 (about worry being seen) is now included in the MICS7 Complementary MHH Module.

The survey items ask individuals about their perceptions. Thus, individuals should provide responses about cleanliness, privacy, and safety based on their own interpretations of those terms. For the purposes of training for data collection, definitions of clean, safe, and private are provided in Annex 1.

Even though experiences of assault or harm are not specifically queried, precaution is needed. ‘Refuse to answer’ may be added as an additional response option, with enumerators trained specifically not to read it aloud, but to accept it from participants who do not want to choose from the other responses. Responsible data collection involves the ethical duty to support respondents who may need psychosocial support when asked questions about feeling unsafe. Implementation of these survey items should be accompanied by a safeguarding process that refers respondents to local service providers should they experience emotional distress and need referral.

Where possible, and when the data collection does not put respondents at risk, data can be collected on the respondent’s self-reported gender identity to enable gender-disaggregated analyses.

Analysis Notes:

To be counted in the numerator, the respondent must have responded as follows: ‘Yes’ to survey item #1 AND ‘No’ to survey item #2, AND ‘No’ to survey item #3. The denominator includes all who responded to each of the survey items (those who indicated ‘I don’t know’, refused to answer, or provided any other response should be considered missing and therefore be excluded from analysis).

Data should be disaggregated and reported by sex and age. See Section 2.2 ‘Recommendations for Reporting on Priority Gender-Specific Indicators’ for age category guidance. Data can also be disaggregated by the respondent’s self-reported gender identity, if data are available.
MH2. Proportion (%) of individuals who menstruate who reported having enough menstrual materials to change as often as they wanted during their last menstrual period, by age

Adoption and regular reporting of indicator MH2 will enable understanding of the proportion of women, girls, and other individuals who menstruate who reported having enough menstrual materials to change as often as they wanted during their last menstrual period, and how this varies by age.

Menstrual health requires having sufficient materials or products to catch and absorb menstrual blood. The materials and products preferred, and the quantity needed, vary widely between individuals, and individuals’ preferences and needs may change over time based on blood flow and other factors. Having a sufficient quantity of materials—whether single-use/disposable or reusable—enables menstrual hygiene and supports a positive experience of menstruation.

Indicator MH2 captures the proportion of women/girls/other individuals who menstruate who report having sufficient materials, operationalized as having enough materials to change them when desired. Questions focus on the last menstrual period to facilitate respondent recall and ensure sensitivity to changes over time.

### Indicator Information

| Definition | The proportion of individuals who menstruate who report having enough materials to change as often as they wanted during their last period, disaggregated by age |
| Numerator | Number of individuals who menstruate who reported having enough menstrual materials to change as often as they wanted during their last period |
| Denominator | Total number of individuals who provided a response to the survey item |
| Preferred data source | Self-reported data from a nationally representative survey |
| Survey item validity | Proposed survey item has been validated |
| Data availability | Data are available, but not from nationally representative samples |
| Future data collection | Proposed survey item is in the MICS7 Complementary MHH Module |

### Proposed Survey Items

Survey items to establish if eligible to provide responses to indicator-specific survey items:

1. **When did your last menstrual period start?**

   **Response options:**
   - Record date, if given
   - Record number of days, weeks, or years with appropriate unit
   - In menopause/has had hysterectomy
   - Before last pregnancy
   - Never menstruated

   ➔ If ‘Never Menstruated’, End.
2. **Check: Was the last menstrual period within the last year?**

   **Response options (noted by enumerator):**
   - Yes, within last year
   - No, one year or more

   ➔ If ‘No, one year or more’, End.

   **Proposed survey item for indicator:**

3. **During your last menstrual period, did you have enough menstrual materials to change them as often as you wanted to throughout your menstrual period?**

   **Response options:**
   - Yes
   - No
   - Don’t remember

   **Measurement and Data Collection Notes:**

   The proposed survey item is adapted from the Menstrual Practices Need Scale\(^{98}\) and is now included in the MICS7 Complementary MHH Module.\(^{97}\) Where possible, and when the data collection does not put respondents at risk, data can be collected on the respondent’s self-reported gender identity to enable gender-disaggregated analyses.

   **Analysis Notes:**

   To be counted in the numerator, the respondent must have responded ‘Yes’ to the survey item.

   The denominator includes all who responded to the survey item (those who indicated ‘I don’t know’, ‘Don’t remember’, refused to answer, or provided any other response should be considered missing and therefore be excluded from analysis).

   Data should be disaggregated and reported by sex and age. See Section 2.2 ‘Recommendations for Reporting on Priority Gender-Specific Indicators’ for age category guidance. Data can also be disaggregated by the respondent’s self-reported gender identity, if data are available.
Annexes

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Glossary of Terms

The definitions provided below may not be the only definition available for the noted term. Many terms have several definitions as different organizations, institutions, or agencies may adopt their own definitions to align with their purposes (See Appendix A in Caruso et al., 2021 for additional definitions and sources). The below terms include citations where available.

**Ability to exercise agency:** The ability to participate in decision-making around WASH issues, including at the leadership level, and to move freely to access WASH facilities and to attend WASH-focused meetings and activities.⁸

**Ability to meet basic needs:** Refers to women and men, boys and girls, and sexual and gender minorities experiencing equity of access to water, sanitation, and hygiene facilities, with different needs and vulnerabilities accounted for and addressed.⁸

**Access to resources:** Control over and access to all of the basic requirements to meet WASH-related needs.⁸

**Bathing location:** A designated location used for bathing or washing of the body.

**Clean:** The location does not have a strong smell or significant numbers of flies or mosquitos, and there is no visible faeces on the floor, walls, seat (or pan) or around the facility.⁹

**Data availability:** Indicates if data at scale currently exist, for example, as a part of the Demographic and Health Survey (DHS) or Multiple Indicator Cluster Survey (MICS), enabling reporting against the proposed indicator.

**Disability:** Refers to possible impairments, activity limitations, and participation restrictions that exist as a result of physical, mental, or psychological illnesses and environmental barriers (physical, social, cultural, or legislative), which interact to limit a person’s capabilities and participation in society.¹⁷

**Economic Context:** Inclusive of both physical marketplaces market systems, an enabling environment in which individuals can access the goods and services that they need for WASH as well as participate for economic benefit.⁸

**Financial resources and physical assets:** An individuals’ control over economic resources and long-term stocks of value, such as land, for the purposes of meeting individual and household WASH need.⁸

**Freedom of movement:** Individuals’ autonomy to move freely both to access water, sanitation, and hygiene facilities (including accessing resources to meet menstrual needs) and without hindrance as a result of limited WASH access.⁸

**Future data collection:** Indicates if there are existing plans for continual data collection of these survey items, enabling future reporting of the indicator.

**Gender:** A social and cultural construct, which distinguishes differences in the attributes of men and women, girls and boys, and accordingly refers to the roles and responsibilities of men and women. Gender-based roles and other attributes, therefore, change over time and vary with different cultural contexts. The concept of gender includes the expectations held about the characteristics, aptitudes and likely behaviors of both women and men (femininity and masculinity). This concept is useful in analyzing how commonly shared practices legitimize discrepancies between sexes.¹⁰⁰
Gender analysis: A critical and systemic examination of differences in the constraints and opportunities available to an individual or group of individuals based on their sex and gender identity\textsuperscript{12}

Gender-blind: Ignores gender norms, roles and relations and often reinforces gender-based discrimination. By ignoring differences in opportunities and resource allocation for women and men, such policies are often assumed to be “fair” as they claim to treat everyone the same.\textsuperscript{101} Note: We acknowledge that there is critique of this term as potentially insensitive to those with vision impairment.\textsuperscript{102} The term ‘gender blind’ is used in quotes in this document as it is drawn directly from a report by UN Women.

Gender identity: Gender identity reflects a deeply felt and experienced sense of one’s own gender. Everyone has a gender identity, which is part of their overall identity. A person’s gender identity is typically aligned with the sex assigned to them at birth. Transgender (sometimes shortened to “trans”) is an umbrella term used to describe people with a wide range of identities – including transsexual people, cross-dressers (sometimes referred to as “transvestites”), people who identify as third gender, and others whose appearance and characteristics are seen as gender atypical and whose sense of their own gender is different to the sex that they were assigned at birth. Trans women identify as women but were classified as males when they were born. Trans men identify as men but were classified female when they were born. Cisgender is a term used to describe people whose sense of their own gender is aligned with the sex that they were assigned at birth. Gender identity is distinct from sexual orientation and sex characteristics.\textsuperscript{13}

Gender-specific indicator: Indicators that explicitly call for disaggregation by sex and/or refer to gender equality as the underlying objective.\textsuperscript{2}

Gender statistics: Gender statistics are defined by the sum of the following characteristics: (a) data are collected and presented disaggregated by sex as a primary and overall classification; (b) data reflect gender issues; (c) data are based on concepts and definitions that adequately reflect the diversity of women and men and capture all aspects of their lives; and (d) data collection methods take into account stereotypes and social and cultural factors that may induce gender biases.\textsuperscript{11}

Health: Includes physical and mental well-being as they affect and are affected by WASH options and conditions. Health can be viewed as both an outcome of WASH, such as illness linked to unsafe water consumption, and as a resource for accessing WASH, such as the physical ability to walk to waterpoints or sanitation facilities.\textsuperscript{8}

Indicator: A quantitative metric that adds value to data by converting it to information that can be used to measure progress and assess performance.\textsuperscript{2}

Individuals who menstruate: This term recognizes that not all people who menstruate identify as a woman or a girl (see Gender identity), and is inclusive of cisgender women and girls, transgender men, non-binary and agender people, and other gender minorities who menstruate.\textsuperscript{103}

Intersectionality: A feminist sociological theory first coined by American civil rights advocate Kimberlé Crenshaw in 1989. Intersectionality refers to overlapping social identities and the related systems of oppression, domination and/or discrimination. The idea is that multiple identities intersect to create a whole that is different from the component identities.\textsuperscript{100}

Intersex: People born with physical or biological sex characteristics, such as sexual anatomy, reproductive organs, hormonal patterns and/or chromosomal patterns, which do not fit the typical definitions of male or female. These characteristics may be apparent at birth or emerge later in life, often at puberty.\textsuperscript{13}

Household decision-making: Individuals’ opportunities to influence and make decisions about water, sanitation, and hygiene within their homes.\textsuperscript{8}

Knowledge and information: Individuals’ knowledge and access to information related to water, sanitation and hygiene, including WASH improvements and maintenance.\textsuperscript{8}
Multi-level enabling environment: The social, legal, physical, and market-based factors that shape experiences, behaviors, and access to resources, agency, and WASH facilities.\textsuperscript{8}

Survey item validity: Indicates if the proposed survey item(s) have been tested to ensure they assess what they are meant to assess.

Physical environment context: The context in which individuals move and operate that can be enabling by providing individuals with safe, accessible conditions, or can pose a barrier to individuals’ WASH access\textsuperscript{9} and access to information related to water, sanitation and hygiene, including WASH improvements and maintenance.\textsuperscript{8}

Privacy: An individual’s ability to feel free from observation being heard or disturbed by others when accessing and utilizing sanitation locations and water sources, including for hygiene (e.g. bathing, menstruation) purposes.\textsuperscript{8}

Private: Individuals are able to feel free from observation, being heard, or disturbed by others when accessing and utilizing sanitation locations and water sources, including for hygiene (e.g., menstruation, bathing) purposes.\textsuperscript{10}

Political context: Legal structures, including laws and policies, budgets, and local leadership that can influence the realization of individuals’ WASH-related rights and access.\textsuperscript{8}

Public participation: Individuals’ ability to participate in WASH-related public activities, including influencing decisions at a public level, participating in committees, and assuming both formal (elected or appointed) and informal (positions of influence) leadership positions, and participating in WASH-related income-generating activities; and the impact of WASH conditions and responsibilities on individuals’ abilities to participate in public life.\textsuperscript{8}

Safe: Individuals are not in danger of interpersonal and gender-based violence, including both violent acts and threats of violence (physical or sexual), coercion, harassment, or force when accessing and using sanitation and hygiene locations or water collection points.\textsuperscript{9}

Safety & freedom from violence: Freedom from interpersonal and gender-based violence, including individuals’ freedom from both violent acts and threats of violence (physical or sexual), coercion, harassment, or force when accessing and using sanitation and locations or water collection points. Safety can be considered both an outcome of WASH and a resource to enable access to WASH.\textsuperscript{8}

Sanitation location: A designated location used for urination and defecation – inclusive of individuals who do not have access to or use a sanitation facility.

Sex: The biological categorization of a person as male, female, or intersex.\textsuperscript{12}

Sex-disaggregated data: Data that are collected and reported separately for males and females.\textsuperscript{11}

Social capital: Individuals’ membership in trusting and cooperative social networks that provide tangible (economic and material) and intangible (emotional, and instrumental) support. This includes relationships or social ties with individuals or groups that help individuals access water, sanitation, and hygiene and complete WASH-related tasks and activities.\textsuperscript{8}

Social context: Relationships, interactions, and intergroup dynamics and social rules (including social inclusion, social cohesion, social norms and community solidarity) that may impact access to WASH.\textsuperscript{8}

Time & labor: Individuals’ time and labor (paid or unpaid) spent on WASH-related tasks and activities and meeting their own WASH-related needs, as well as satisfaction with and control over time and labor spent.\textsuperscript{8}

Water insecurity: Problems with the availability, access, acceptability, safety, or reliability of water for basic daily needs\textsuperscript{24,25}
Annex 2

Conceptual Framework for Achieving Gender Equality and Equity in and from WASH

Figure 3. Conceptual Framework for Achieving Gender Equality and Equity in and from WASH, as proposed in Caruso et al, 2020

Multi-Level Enabling Environment
- Social Context
- Political Context
- Economic Context
- Physical Environment Context

Access to Resources
- Safety & Freedom from Violence
- Privacy
- Health
- Social Capital
- Financial Resources & Physical Assets
- Knowledge & Information
- Time and Labor

Ability to Exercise Agency
- Household Decision-Making
- Public Participation
- Freedom of Movement

WASH-Related Empowerment
- Ability to Meet WASH Needs
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Priority Gender-Specific Indicators for WASH Monitoring Under SDG Targets 6.1 and 6.2: 
RECOMMENDATIONS FOR NATIONAL AND GLOBAL MONITORING

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Annex 4

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