

School WASH Supplement

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Introduction

School WASH is fundamental to caring for the body during menstruation. Adequate WASH infrastructure within schools ensures access to safe water, improved sanitation facilities, and hygienic practices. Further, the cleanliness, privacy and safety of school WASH infrastructure is key to ensuring comfort using these facilities and essential for menstrual health. Additionally, school WASH experiences include factors such as the availability and quality of water, students' interactions with sanitation facilities, and their ability to effectively maintain hygiene practices.

Reasons to include **school WASH infrastructure** measures in your work:

- To describe the WASH infrastructure in participants' schools
- To assess school WASH disparities among participants
- To understand the influence of school WASH characteristics on menstrual health

Reasons to include **school WASH security and experiences** measures in your work:

- To understand participants' access and quality of water at school
- To describe how participants feel about WASH facilities at school
- To understand the influence of school WASH on menstrual health

The Adolescent Menstrual Experiences and Health Cohort (AMEHC) Study will measure school WASH infrastructure and school WASH security and experiences to increase our understanding the WASH facilities and services available to girls, and the influence that this has on their menstrual health.

Overview of School WASH Infrastructure: Structures and Resources

Definition	The structures and resources necessary to sustain systems of water, sanitation, and hygiene in the school. ¹
Importance to Menstrual Health	WASH infrastructure such as handwashing stations, toilets, and water sources are all necessary structures for menstrual hygiene (menstrual blood management). Features of more menstrual-friendly school toilets include sex-segregated toilets, secure doors, disposal systems for used menstrual materials, water for handwashing as well as offering cleanliness, privacy, safety and other features such as reliable light, and a mirror for checking for menstrual leaks.
Measurement Method	Wash1,3,5: Self-reported by girls on an enumerator-administered survey Sch_S1,12, Sch_W2,4: Self-reported by school staff on an enumerator-administered survey Sch_S1_type, Sch_S2,4-6,8,10,11,11_type,13-16,16_1,16_2, W2-3, R1-2: Observed by an enumerator
General Considerations	Depending on the context, the answer options may need to be changed. The answer options below are specific to our AMEHC study context in Bangladesh. Some questions were adapted from the sources below.
Question Source	Wash1, Sch_S1-4,8,11,13,15, SchW1-4: World Health Organization, UNICEF. <i>Core Questions and Indicators for Monitoring WASH in Schools in the Sustainable Development Goals</i> . World Health Organization; 2018. Accessed March 25, 2024. https://washdata.org/reports/jmp-2018-core-questions-and-indicators-wash-in-schools Wash3, Sch_S5,6,16: Global MHH Monitoring Group. <i>Priority List of Indicators for Girls' Menstrual Health and Hygiene: Technical Guidance for National Monitoring</i> . Columbia University; 2022. https://www.publichealth.columbia.edu/file/8002/download?token=AViwoc5e And Hennegan, J., Caruso, B. A., Zulaika, G., Torondel, B., Haver, J., Phillips-Howard, P. A., ... & Sommer, M. (2023). Indicators for national and global monitoring of girls' menstrual health and hygiene: development of a priority shortlist. <i>Journal of Adolescent Health, 73</i> (6), 992-1001.

Construct's Main Use in the AMEHC Study			
Proximal Exposure for:	Distal Exposure for:	Covariate for:	Outcome for:
Menstrual health experience	Education Mental Health SRH Physical Health		

Included in the Following AMEHC Study Activities*					
Baseline Girls Survey	Baseline Guardians Survey	Baseline School Audit	Sub-cohort 1 Survey	Sub-cohort 2 Survey	Sub-cohort 3 Survey
		X	X		X
Wave 1 Survey	Wave 1 School Audit	Wave 2 Survey	Wave 2 Guardian survey	Wave 2 School Audit	
X	X			X	

***Specific questions varied over different data collection activities according to study needs.**

School WASH Infrastructure Survey Questions in AMEHC

Question Number	Question	Response Options
<i>FOR GIRLS: Thinking about the sanitation facility at your school over the past two months...</i>		
Wash1	Were there separate toilets/latrines for boys and girls?	<ul style="list-style-type: none"> • Yes • No
Wash3	Was there at least one individual stall for girls that had a functioning door and could be locked from the inside?	<ul style="list-style-type: none"> • Yes • No
Wash5	Does the school toilet/latrine usually have the following <i>Select all that apply</i>	<ul style="list-style-type: none"> • A mirror [0/1] • Water for cleansing [0/1] • Soap for handwashing [0/1] • A hook or shelf to hold your bags or garments [0/1] • A bin with a lid for menstrual waste [0/1] • A bin without a lid for menstrual waste [0/1] • None
<i>FOR SCHOOL STAFF/OBSERVATION:</i>		
Sch_S1	Is there a sanitation facility at this school that is available for students to use? <i>Respondent to answer</i>	<ul style="list-style-type: none"> • Yes • No
Sch_S1_type	<i>*Ask the respondent to take you to view the sanitation facility for students</i> What type of sanitation facility is it? <i>Enumerator to answer</i>	<ul style="list-style-type: none"> • No facility/bush/field • Bucket/pan • Hanging toilet • Composting toilet • Pit latrine with open pit (no slab) • Pit latrine with slab • Ventilated improved pit latrine • Pour/Flush to open drain • Pour/Flush to septic tank • Pour/Flush to pit latrine • Pour/Flush to sewer • Other

Sch_S1_specify	Please specify the other type of sanitation facility	<ul style="list-style-type: none"> • <i>[Text]</i>
Sch_S2	<p>Are there separate toilets/latrines for boys and girls?</p> <p><i>Enumerator to answer</i></p>	<ul style="list-style-type: none"> • Yes • No
Sch_S4	<p>At the time of observation, how many stalls (individual stalls/toilets) are usable (not locked) and functional (for females to use)?</p> <p><i>That is, the toilet/latrine is not broken, the toilet hole is not blocked, and water is available for flush/pour-flush toilets</i></p> <p><i>Enumerator to answer</i></p>	<ul style="list-style-type: none"> • <i>[number]</i>
Sch_S5	<p>At the time of observation, is there a door on the female toilets/latrines (including the individual stalls) that can be locked from the inside?</p> <p><i>Enumerator to answer</i></p>	<ul style="list-style-type: none"> • Yes, all stalls • Yes, at least one functional stall • No
Sch_S6	<p>Are the female toilets/latrines otherwise private (including the individual stalls that can be locked from the inside?)</p> <p><i>For example, there are no large gaps in the door/wall so that someone can see in easily from the outside.</i></p> <p><i>Enumerator to answer</i></p>	<ul style="list-style-type: none"> • Yes, all stalls • Yes, at least one functional stall • No

Sch_S8	<p>At the time of observation, how is the toilet/latrine lit?</p> <p><i>Enumerator to answer</i></p>	<ul style="list-style-type: none"> • Daylight only, sufficient light to see well inside the latrine stalls. • Daylight only, insufficient light to see well inside the latrine stalls. • Electronic light that is working. • Electronic light is not working.
Sch_S10	<p>At the time of observation, is the toilet/latrine structurally safe?</p> <p><i>That is, the shelter (roof and walls) is not damaged or incomplete, it is structurally sound, and it is free of pests and trip/harm hazards.</i></p> <p><i>Enumerator to answer</i></p>	<ul style="list-style-type: none"> • Yes • No, the shelter isn't structurally sound • No, the toilet/latrine has pests • No, there are trip/harm hazards • No, it has multiple hazards
Sch_S11	<p>At the time of observation, Is appropriate cleansing material available?</p> <p><i>This means material that is culturally appropriate (to prevent exposure to excreta), and appropriate for the technology (i.e. it won't block drains or damage the facility) Cleansing material includes toilet paper, leaves, and water.</i></p> <p><i>Enumerator to answer</i></p>	<ul style="list-style-type: none"> • Yes • No
Sch_S11_type	<p>What materials are available?</p> <p><i>Select all that apply</i></p> <p><i>Enumerator to answer</i></p>	<ul style="list-style-type: none"> • Water [0/1] • Toilet paper [0/1] • Cloth [0/1] • Leaves [0/1] • Other paper or tissue [0/1] • Nothing [0/1]

Sch_S12	<p>Does the teacher/administrator report there is usually appropriate cleansing material available?</p> <p><i>Respondent to answer</i></p>	<ul style="list-style-type: none"> • Yes • No
Sch_S13	<p>At the time of observation, is there a discrete way to dispose of menstrual waste inside the female latrine/toilet?</p> <p><i>Enumerator to answer</i></p>	<ul style="list-style-type: none"> • Yes there is a bin with a lid for menstrual waste inside at least one cubical/stall • Yes, there is a bin with a lid inside the latrine/toilet area • Yes, there is a shoot to an incinerator • No, there is a bin but it has no lid inside at least one cubical/stall • No, there is a bin but it has no lid inside the latrine area • No, no mechanism for menstrual waste disposal
Sch_S14	<p>At the time of observation does the sanitation area have</p> <p><i>Enumerator to answer</i></p>	<ul style="list-style-type: none"> • A mirror [0/1] • A hook to hang clothes during changing [0/1] • None of the above [0/1]
Sch_S15	<p>Is there a place to dispose of menstrual waste on-site at the school?</p> <p><i>Enumerator to answer</i></p>	<ul style="list-style-type: none"> • No • Yes, there is an incinerator on site • Yes, there is a storage location for municipal waste

Sch_S16	<p>At the time of observation, is water and/or soap available inside the female sanitation facility such that it is private from male observation? (this may be used for genital or hand washing)</p> <p><i>Check yes if water and soap are available for discrete personal hygiene (hand and body washing), cleaning clothes/uniforms, and washing reusable menstrual hygiene products (as applicable).</i></p> <p><i>Enumerator to answer</i></p>	<ul style="list-style-type: none"> • Yes, water and soap • Yes, water only
Sch_S16_1	<p>What was the water source?</p> <p><i>Enumerator to answer</i></p>	<ul style="list-style-type: none"> • Bucket/ pot • Tube well • Tube well with submergible pump connected to pipe water • Khulna-WASA connection pipeline • Others (NGO-supported pipeline with filter)
Sch_S16_2	<p>Was there water at the time of observation?</p> <p><i>Enumerator to answer</i></p>	<ul style="list-style-type: none"> • Yes • No
Sch_W1	<p>At the time of observation, is there water available for handwashing?</p> <p><i>Enumerator to answer</i></p>	<ul style="list-style-type: none"> • Yes • No
Sch_W2	<p>Does the teacher/administrator report there is usually water available for handwashing?</p> <p><i>Respondent to answer</i></p>	<ul style="list-style-type: none"> • Yes • No

Sch_W3	At the time of observation, is there soap available for handwashing? <i>Enumerator to answer</i>	<ul style="list-style-type: none"> • Yes • No
Sch_W4	Does the teacher/administrator report there is usually soap available for handwashing? <i>Respondent to answer</i>	<ul style="list-style-type: none"> • Yes • No
Sch_R1	At the time of observation, is there another room at the school that girls are expected to use to change their menstrual materials or to rest during menstruation? <i>Enumerator to answer</i>	<ul style="list-style-type: none"> • No • Yes, to change menstrual materials • Yes, to rest • Yes, to both change menstrual materials and rest
Sch_R2	Does this room have: <i>Select all that apply</i> <i>Enumerator to answer</i>	<ul style="list-style-type: none"> • A mirror • Water • Soap • A seat or place to rest • Privacy (a door that can be locked from the inside) • A bin with a lid for menstrual waste disposal • A bin without a lid for menstrual waste disposal • Is clean • None of the above

Overview of School WASH Security & Experience: Ensuring Safe, Reliable Access and Understanding Perceptions and Behaviors Around WASH Facilities

Definition	<p>WASH Security: A school's ability to consistently access safe and reliable water sources, adequate sanitation facilities, and hygienic practices to meet its basic needs.⁵</p> <p>WASH Experience: The perceptions, attitudes, behaviors, and lived experiences of students regarding their WASH conditions and practices.</p>
Importance to Menstrual Health	Inadequate access to private and adequate toilets and functioning handwashing stations can contribute to experiences of stress, ⁶⁻⁸ shame, ⁹ physical discomfort, and gender-based violence ^{10,11} among people who menstruate. Negative experiences with WASH at school. Perceptions of the cleanliness, privacy, safety and accessibility of school WASH infrastructure are key to students' experience of menstruation. ^{10,12}
Measurement Method	<p>Wash2,4,6_use,6-10: Self-reported by girls on an enumerator-administered survey</p> <p>Sch_S3,9, M1-4: Self-reported by school staff on an enumerator-administered survey</p> <p>Sch_S2,7: Observed by an enumerator</p>
General Considerations	Depending on the context, the answer options may need to be changed. The answer options below are specific to the AMEHC study context in Bangladesh. Some questions were adapted from the sources below.
Question Source	<p>Wash2,4, Sch_S2,37: World Health Organization, UNICEF. <i>Core Questions and Indicators for Monitoring WASH in Schools in the Sustainable Development Goals</i>. World Health Organization; 2018. Accessed March 25, 2024. https://washdata.org/reports/jmp-2018-core-questions-and-indicators-wash-in-schools</p> <p>School1, Sch_M1: Global MHH Monitoring Group. <i>Priority List of Indicators for Girls' Menstrual Health and Hygiene: Technical Guidance for National Monitoring</i>. Columbia University; 2022. https://www.publichealth.columbia.edu/file/8002/download?token=AViwoc5e</p> <p>Hennegan, J., Caruso, B. A., Zulaika, G., Torondel, B., Haver, J., Phillips-Howard, P. A., ... & Sommer, M. (2023). Indicators for national and global monitoring of girls' menstrual health and hygiene: development of a priority shortlist. <i>Journal of Adolescent Health, 73</i>(6), 992-1001.</p>

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X		X	X		X
Wave 1 Survey	Wave 1 School Audit	Wave 2 Survey	Wave 2 Guardian Survey	Wave 2 School Audit	
X	X			X	

***Specific questions varied over different data collection activities according to study needs.**

School WASH Security & Experience Survey Questions in AMEHC

Question Number	Question	Response Options
<i>Thinking about the sanitation facility at your school over the past two months...</i>		
Wash2	Were the toilets/latrines always accessible to students? (e.g., not locked)	<ul style="list-style-type: none"> • Yes • No
Wash4	Were the school toilets/latrines clean?	<ul style="list-style-type: none"> • Always • Often • Sometimes • Never
Wash6	Did you feel comfortable using the school toilet/latrine for urination?	<ul style="list-style-type: none"> • Always • Often • Sometimes • Never
Wash6_use	How often did you use the school toilet for urination?	<ul style="list-style-type: none"> • Every day • Three or four days a week • One to three days a week • Less than once a week
Wash7	Over the past two months did you delay urinating during the school day?	<ul style="list-style-type: none"> • Always • Often • Sometimes • Never
Wash8	Is there another room at your school that girls are expected to use to change their menstrual materials or to rest during menstruation?	<ul style="list-style-type: none"> • Yes • No
Wash9	Did you use this room during your last period?	<ul style="list-style-type: none"> • Yes, to change materials • Yes, to rest • Yes, both • No

Wash10	During this past year, did you receive any free menstrual products (pads) from your school?	<ul style="list-style-type: none"> • Yes • No
School1	Does your school have menstrual materials available for emergencies (for example if you started your period unexpectedly)? <i>Do not read response options</i>	<ul style="list-style-type: none"> • Yes (free) • Yes (for purchase) • No • I don't know
School2	At your school, do you receive permission from teachers to go to the toilet when you ask?	<ul style="list-style-type: none"> • Don't need to ask • Yes, always • Yes, sometimes • No, rarely or never
FOR SCHOOL STAFF/OBSERVATION:		
Sch_S2	Are there separate toilets/latrines for boys and girls? <i>Enumerator to answer</i>	<ul style="list-style-type: none"> • Yes • No
San_access Sch_S3	Is the toilet/latrine available to students (doors are unlocked, or a key is available) at all times? <i>Respondent to answer</i>	<ul style="list-style-type: none"> • Yes • No
Sch_S7	At the time of observation, is the toilet/latrine clean? <i>That is, there are no visible faeces or urine on the floor and the enumerator perceives the area to be acceptably clean.</i> <i>Enumerator to answer</i>	<ul style="list-style-type: none"> • Yes, all stalls • Yes, at least one functional stall • No
Sch_S9	Who is responsible for cleaning the toilet/latrine? <i>Respondent to answer</i>	<ul style="list-style-type: none"> • There is a cleaner • Students are rostered to clean the sanitation facility • No cleaning protocol • Other cleaning
Sch_S9_other	Please specify the other type of cleaning	<ul style="list-style-type: none"> • [Text]

Sch_M1	<p>At the time of observation, are there menstrual products available at the school that a girl can use if her period starts unexpectedly?</p> <p><i>Respondent to answer</i></p>	<ul style="list-style-type: none"> • No • Yes (free) • Yes (for purchase)
Sch_M2	<p>At the time of observation, does the school have free menstrual products that are provided to girls regularly (ie. not in an 'emergency' situation)?</p>	<ul style="list-style-type: none"> • Yes • No
Sch_M3	<p>Approximately how many pads does the school distribute per month?</p>	<ul style="list-style-type: none"> • [number]
Sch_M4	<p>Does the school have any pain medication that girls can request?</p> <p><i>Respondent to answer</i></p>	<ul style="list-style-type: none"> • Yes • No

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