World Health Organization
REGIONAL OFFICE FOR Europe

UNECE

PROTOCOL ON WATER AND HEALTH

Surveillance of water, sanitation and hygiene in schools
A practical tool

unicef
for every child

Abstract

Adequate access to water, hygiene and sanitation (WASH) in schools is every child's right, as recognized in the 2030 Agenda for Sustainable Development, the Protocol on Water and Health and the Ostrava Declaration on Environment and Health. Access to WASH in schools in the pan-European region presents many and diverse challenges. A key step to improve the situation, bringing better educational and health outcomes, is high-quality surveillance to raise awareness and drive progress. This publication provides a practical tool to support countries in strengthening surveillance of WASH in schools. The findings will inform the development of supportive regulations and improvement planning to safeguard children's health, well-being, dignity and cognitive performance. The tool also enables countries to use the data collected to facilitate policy dialogue and inform international reporting, including on progress towards achieving the Sustainable Development Goal targets related to WASH in schools.

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WATER SUPPLY

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Contents

Foreword

Access to water, sanitation and hygiene (WASH) is a human right and a critical precondition for ensuring good health and well-being of schoolchildren. As an integral component of an inclusive and effective learning environment, access to WASH in schools maximizes educational outcomes. Despite the significant progress made in recent years in providing WASH services to all, however, a significant proportion of children in the pan-European region still spend their days in schools that do not provide basic WASH services, compromising their health and dignity.

The 2030 Agenda for Sustainable Development – in particular, the collective aspirations of Sustainable Development Goals 3, 4 and 6 – highlights the importance of improving safe WASH services for all in all settings, including paying special attention to the needs of girls and those living with a disability. This ambitious Agenda also calls on countries to guarantee safe learning environments for all, which cannot be achieved without ensuring adequate access to WASH in schools.

Progress towards universal access to WASH in schools has been a priority for the pan-European region since the adoption of the 2010 Parma Declaration on Environment and Health. Re-emphasizing the need for accelerated action, in the 2017 Ostrava Declaration on Environment and Health Member States committed to ensure "universal, equitable and sustainable access to safe drinking-water, sanitation and hygiene for all and in all settings, while promoting integrated management of water resources and reuse of safely treated wastewater, where appropriate". The Ostrava Declaration requires countries to develop national portfolios of action on environment and health, for which they may consider undertaking systematic situation assessments, setting targets and developing action plans to improve WASH in schools. This was also identified as a cross-sectoral priority under the Paris Declaration on partnerships for the health and well-being of our young and future generations, in which European countries committed to make every school a health-promoting school that provides adequate WASH services, among others.

The Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes is the primary policy instrument for WASH in the pan-European region, aiming to ensure access to drinking-water and sanitation for everyone – including children in schools. The United Nations Economic Commission for Europe and the WHO Regional Office for Europe jointly coordinate its implementation. The Protocol supports countries in translating and implementing global and regional policy aspirations into clear and accountable national or local targets and action plans. As a progressive tool for developing integrated policies on water management, sanitation and health, it provides a platform to work in partnership with all relevant sectors, including education.

Within the Protocol framework, WASH in schools has been a key priority since 2014. The WHO European Centre for Environment and Health in Bonn, Germany, has steered activities in this area, including:

- *compiling evidence on prevailing WASH policies and conditions in schools in the pan-European region, summarized in the publication* The situation of water, sanitation and hygiene in schools in the pan-European region *(2016);*
- *promoting accelerated policy attention in a multisectoral and integrated fashion, through advocacy publication* Prioritizing pupils' education, health and well-being: water, sanitation and hygiene in schools in the pan-European region *(2016), among others;*
- *bringing together health and education sectors, youth organizations and international partners.*

To achieve improved WASH in schools, it is crucial that all relevant stakeholders take action, including school staff, pupils and their parents. A complementary publication, Improving health and learning through better water, sanitation and hygiene in schools: an information package for school staff *(2019), has been developed to advise schools on management and educational measures for provision and accessibility of WASH services.*

Enhanced joint efforts by the health and education sectors are needed to improve the situation regarding WASH in schools, bringing better educational and health outcomes and ensuring well-being and dignity for all pupils. We believe a key step in reaching this goal is to strengthen high-quality surveillance to drive improvement action.

This publication offers a practical tool to support regular and routine public health surveillance of WASH in schools. It will help health and education sectors tackle persistent gaps by monitoring and assessing WASH conditions, both in individual schools and at the subnational or national level, identifying improvement needs. We are committed to supporting countries to use the findings to inform the development of supportive regulations that safeguard children's health, well-being, dignity and cognitive performance.

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1. Introduction

Access to water, sanitation and hygiene (WASH) in educational settings brings many tangible benefits: safe drinking-water supply and promotion of regular hydration contribute to better cognitive performance *(1)*; good hand hygiene in schools reduces the risk of infectious diseases and, by keeping children healthy, reduces absenteeism *(2)*; and providing accessible and acceptable toilets contributes to well-being and increases the ability to concentrate during classes *(3)*. Schools that strive to provide a safe, inclusive and equitable learning environment for all have provisions for menstrual hygiene management and facilities accessible for children living with limited mobility or vision.

WASH in schools in the pan-European region[1] presents many and diverse challenges, most frequently related to inappropriate system operation; problems with physical infrastructure; lack of continuous provision of hygiene consumables; inadequate cleaning; and insufficient maintenance *(4)*. Recent evidence also highlights how WASH services in schools needs to go beyond a basic (minimum) level and meet users' needs if health gains are to be achieved. Pupils' perception surveys reveal frequent dissatisfaction with school WASH facilities, which is not always acknowledged by school management and staff, fostering avoidance of the services and hindering healthy behaviours, as well as possibly facilitating antisocial behaviour in the facilities *(4; 5)*. Even where WASH facilities may be appropriate according to the parameters considered for public health inspection, they are still perceived as unacceptable or inappropriate by pupils – especially girls – with respect to hygiene and privacy. Pupils report higher severity and frequency of issues compared to reporting by school staff or through inspection visits *(6)*. This suggests a gap in current surveillance practices and insufficient awareness of school staff of the challenges faced by pupils at school. WASH services that are not acceptable to pupils deprive them of the opportunity to live with dignity in a healthy environment and severely affect their health and cognitive performance.

In recognition of the importance of equitable access to safe WASH facilities in educational settings, countries set a priority of improving WASH conditions in all settings, including in preschools and schools, under the 2030 Agenda for Sustainable Development, as set out in Sustainable Development Goals (SDGs) 3, 4 and 6 *(7)*. While the majority of countries in the pan-European region have established national policies and standards on WASH in schools, a lack of regular and comprehensive surveillance, local enforcement and financing are frequently observed. Further, responsibilities may be spread among numerous institutions without a clear definition of roles and leading actors, thereby compromising accountability, coordination and compliance. Even when monitoring is conducted, data are typically not comprehensive on all aspects of WASH; they are also rarely made available or used for improvement planning *(4)*.

Diligent and efficient surveillance allows evaluation of WASH conditions in schools and helps to raise awareness and improve enforcement. Regular surveillance in schools has proved useful to drive change: the evidence shows that as an indirect means of enforcement it is effective compared to other direct methods *(8)*. Alongside legally binding requirements to set the baseline standards, continued collaboration between public health and education stakeholders is essential to improve surveillance and to support the progressive standardization of high-quality data collection and analysis for national and global reporting of WASH in schools *(9)*.

[1] This publication uses the term "pan-European region" to refer to the Member States in the WHO European Region and Liechtenstein. The WHO European Region comprises 53 countries: Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Malta, Monaco, Montenegro, the Netherlands, North Macedonia, Norway, Poland, Portugal, Republic of Moldova, Romania, the Russian Federation, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine, the United Kingdom and Uzbekistan.

2. Purpose of the tool

Improving WASH conditions in schools, or maintaining existing good conditions, requires reliable and diligent national surveillance systems and data management. Onsite observations and inspections are key for evaluation and increasing accountability, which are important drivers of school improvement *(10)*. To monitor compliance with standards, track progress and determine the impact of efforts to improve service provision, routine surveillance of WASH in schools is vital. Timely and comprehensive information is of critical importance for identifying issues, understanding their scale, engaging in evidence-based advocacy and taking informed policy action. Joint efforts involving education and public health authorities are needed for efficient monitoring and assessment of WASH in schools.

The purpose of this tool is to provide evidence-based and ready-to-use surveillance instruments to support education and public health authorities in monitoring and assessing WASH conditions in schools, as well as in using surveillance findings to inform policy-making and improvement planning (For more details and examples see Chapter 7). It is intended primarily to serve as a resource for developing or strengthening national and subnational surveillance systems (Box 1), thereby improving the quality of WASH monitoring in schools. The surveillance instruments set out in Chapter 8 aim to inspire improvement and updates of surveillance tools already used in countries, rather than to replace them or duplicate current efforts.

Box 1. Uses for the instruments in this tool

The surveillance instruments aim to support:

- development of new or improvement of existing instruments for surveillance of WASH in schools;
- ensuring that the WASH component is adequately reflected in questionnaires for collection of statistical data on education systems, such as education management information systems (EMIS) questionnaires;
- include users' perspectives in surveillance and data collection exercises;
- conduct one-shot surveys or targeted assessments to gain a comprehensive and objective overview of WASH conditions in schools.

The surveillance instruments in this tool can be used at different levels and for various scopes and purposes, as summarized in Table 1. At the subnational (regional, municipal or district) level, responsible education and public health authorities can use them for comprehensive monitoring of different aspects related to WASH service provision in schools, alongside evaluating pupils' perspectives, experiences and behaviours. Data obtained in this manner can support informed decision-making and programming at the local level, including decisions on efficient resource allocation (such as budgeting for operation and maintenance) and planning of concrete improvements of WASH facilities to meet users' needs and comply with national standards. The instruments can also be used to initiate dialogue with school staff, who may not be aware of how best to provide and manage high-quality WASH services, and can help to break down common negative perceptions associated with surveillance inspections and related sanctions.

If applied at the national level, the instruments can be used to determine national coverage estimates, identify geographical and gender disparities, establish trends over time and track progress of WASH in schools. Unlike routine monitoring systems that provide a basic set of information on WASH in schools in the country and are not always inclusive of all internationally recommended indicators *(11)*, application of these instruments will generate a more complete national picture, improved datasets

and meaningful information concerning WASH conditions in schools. These would serve as a central building block for national target-setting, improved policies, effective enforcement and progressive implementation of targets towards universal coverage of WASH in schools. While primarily targeted at sanitary surveillance, some instruments could also be adapted to include WASH indicators in self-reported assessments (such as EMIS questionnaires). This could facilitate collection of relevant data and provide clearer insight into the status of the education environment and WASH service provision, as well as facilitating exploration of the possible links between WASH and school performance and/or attendance.

Table 1. Possible applications and outcomes of this tool

At the national and sub-national levels	At the international level
• Supporting EMIS reporting to facilitate better education system planning and policy dialogue • Assessing quality, completeness and consistency of data collected by existing surveillance systems • Establishing national and subnational baselines for target-setting, programming and planning, and monitoring of WASH improvements in schools • Establishing or developing a national database on WASH in schools • Monitoring the compliance of schools with international, national or subnational requirements for WASH provision • Using the data obtained for advocacy purposes and informing the development of educational measures • Initiating dialogue with school staff to raise awareness of proper WASH management in schools and breaking down negative perceptions associated with surveillance inspections and sanctions • Evaluating and improving school curricula on strengthening health promotion • Informing policy-making and policy revision • Monitoring progress and identifying gaps in implementation (such as equitable distribution of adequate services or human resources) • Informing annual operation plans and ad hoc action plans for enforcement • Identifying financial needs and priorities to inform effective resource allocation and investment	• Informing reporting on national progress towards achieving SDG targets – including, but not limited to, target 4a related to the school environment and targets 6.1 and 6.2 related to safely managed WASH services for all and means of implementation *(7)* • Informing a regional overview of WASH in schools and supporting monitoring of progress in realization of regional WASH commitments under the Ostrava Declaration on Environment and Health *(12)* and the Protocol on Water and Health *(13)* • Supporting the development and monitoring of global and regional standards for health-promoting schools *(14; 15)* • Reporting on national progress in realizing the human right to water and sanitation

The tool also supports countries in preparing for global reporting on progress towards achieving the SDG targets related to WASH in schools *(16)* (Table 2). It is expected that application of these surveillance instruments and, most importantly, their integration into existing surveillance systems will result in improved national datasets on the status of WASH in schools that take into consideration the normative criteria of the human right to water and sanitation and include users' perspectives.

Table 2. SDGs and targets relevant for WASH in schools

	SDG	SDG targets and indicators
	**Goal 3: Ensure healthy lives and promote well-being for all at all ages**	**Target 3.3** By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases. **Target 3.9** By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.
	**Goal 4: Ensure inclusive and quality education for all and promote lifelong learning**	**Target 4.a** Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all. **Indicator 4.a.1** Proportion of schools with access to: (a) electricity; (b) the internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking-water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions).
	**Goal 6: Ensure availability and sustainable management of water and sanitation for all**	**Target 6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all. **Target 6.2** By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.

Source: United Nations *(7)*.

This tool reflects and builds on evidence-based environmental health and educational indicators of international relevance. It thus enables countries to use the data collected to facilitate international policy dialogue and inform international reporting exercises. These may include reporting on relevant SDG targets (Table 2) via the WHO/United Nations Children's Fund (UNICEF) Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) *(16)* and reporting on other international commitments, such as the Ostrava Declaration on Environment and Health *(12)* and the Protocol on Water and Health *(13)*. Data obtained using this tool can also contribute to observing progress in implementation of the human right to water and sanitation and the Paris Declaration on partnerships for the health and well-being of our young and future generations *(17)*.

Use of the surveillance instruments will also generate important insights into needs for improvement and appropriate maintenance, considering not only standard provision of hardware such as WASH infrastructure but also soft aspects that affect pupils' perceptions and hinder acceptability, such as cleanliness, safety, privacy and provision of consumables.

Finally, using standardized instruments to monitor provision of WASH services in schools should provide a common understanding and facilitate constructive dialogue between responsible authorities (and all other relevant stakeholders for the context of the country). Thus, this tool is intended to promote collaboration and generate workable solutions for the issues identified, not to generate data for issuing fines or punishments. Data created through use of similar definitions and indicators also facilitate comparison and combination of information from different areas in a country, collected at different points in time or by different agencies.

3. Target audience

This tool primarily addresses health and education authorities responsible for:

- surveillance and enforcement of sanitary and environmental health conditions in schools;
- conducting assessments under governmental programmes;
- reviewing or developing national or subnational surveillance and monitoring systems for WASH in schools.

Additional stakeholders and interested groups from civil society can also benefit from the surveillance instruments provided as an integral part of their programmes and activities related to health and WASH in schools, such as:

- national statistical offices;
- authorities in charge of the environment, water resources, financing and infrastructure development, among others, at the national or local level;
- school administrations (school managers, teachers and other school staff);
- pupils and youth organizations;
- parents' associations;
- donors and development partners;
- nongovernmental organizations.

These groups are encouraged to work together, setting clear roles and responsibilities (Box 2). This would strengthen the implementation and quality of national monitoring systems and ensure the application of needed interventions so that schools make progressive improvements towards achieving universal access to WASH services and promoting health and well-being.

Box 2. Clear roles and responsibilities for all actors

Surveillance of WASH conditions and services in schools may be the responsibility of health or education authorities, depending on a country's jurisdiction. The responsible authority will coordinate surveillance activities in cooperation with all concerned stakeholders (such as school authorities) and make sure that available surveillance instruments are appropriate, up to date and without gaps or duplications. For efficient monitoring and follow-up, clear responsibilities and roles should be defined among the authorities concerned.

- The lead ministry or authority should take overall responsibility for organization, ensure authorization to collect data and support the coordination of analysis and dissemination of results. It should also promote the use of data for improvement programming and policy-making. Engagement of the education sector is necessary to ensure the participation of all schools in surveillance programming. The lead can be taken by the health or education sector or by the national statistical office.
- A coordination group, including relevant bodies and key stakeholders for WASH service provision and education, should be chaired by the lead ministry or authority. It should provide leadership and oversight. Analysis and evaluation of results and development of recommendations should be supported by the coordination group to ensure consensus on needed intervention priorities and facilitate follow-up action.
- An implementation agency should be in charge of conducting and coordinating field data collection and confirming data quality. This may be a local health or school authority.

Regardless of the specific responsibility shares in a given country, given the crosscutting nature of WASH in schools, it is vital that health and education authorities maintain effective coordination and communication mechanisms. Close collaboration is important to allow efficient use of surveillance data, planning of smart interventions at school level, joint programming and development of targets at the policy level. Ensuring adequate WASH services in schools may also require collaboration with other sectors, such as water, environment, infrastructure development, communal services and/or finance.

4. Overview of the tool

This tool contains evidence-based and ready-to-use surveillance instruments that are meant to facilitate monitoring and assessment of WASH conditions and services in schools. The questions and indicators used build on available international guidance and state-of-the-art literature. The tool includes three instruments.

- The first is a **questionnaire for school staff**, which aims to collect information about the experience and the perception of school managers and other relevant personnel regarding provision of WASH services and WASH-related school policies and procedures relevant to pupils and staff. This is designed to elicit reliable data on WASH from interviews with non-WASH professionals – usually school managers. It is recommended to engage other members of staff in addition – such as teachers, caretakers, janitors, cleaning personnel or technical staff – who may provide more detailed information about operation measures and practices in the school.
- The second is a **checklist for observations**, intended for spot-checks to collect unbiased data about the onsite situation at the time of the inspection.
- The third is a **questionnaire for pupils**, which aims to provide insightful information about appropriateness and use of school WASH facilities, pupils' satisfaction and reasons for toilet avoidance, (un)healthy behaviours, hygiene education, knowledge and practice. Consulting with pupils is an essential part of the surveillance or assessment, because the picture would not be complete without the input and views of schoolchildren themselves.

Each instrument includes the following:

- a short methodological guidance section on how to use the instrument;
- a pool of questions (set out according to WASH indicators or subindicators);
- explanatory notes to help the assessors note down the responses in a correct and objective manner;
- the rationale for each question, providing brief insights on best practice and standards.

All three instruments cover the three WASH dimensions: water, sanitation and hygiene (including menstrual hygiene management). A complementary section with general questions to elicit information about the educational institution is also provided. This is useful in case of missing school databases and for evaluation of the results.

The pool of questions is designed to assist health and education authorities in assessing the usability of WASH services, comprising the **availability** of drinking-water, sanitation and hygiene facilities; their **accessibility** for all pupils, including those with limited mobility and impaired vision; their **functionality**; and the **privacy** of the facilities. The questions also cover aspects related to the **quality** of the WASH services and facilities in schools and their **acceptability** to pupils, particularly to girls; **operation and maintenance procedures**; and aspects related to **school policies and education** and **behaviours and practices**.

The questions and indicators chosen are based on the latest national and international standards, tools and guidelines for monitoring the condition of WASH in schools. These include the 2009 WHO/UNICEF water, sanitation and hygiene standards for schools in low-cost settings *(18)*; selected existing national standards and checklists *(19; 20)*; and global tools for monitoring progress on human rights[2] and on WASH in schools *(21; 22*; *23)* and for reporting under SDG

[2] Note: affordability cannot be monitored explicitly via the proposed indicators because of the diverse contexts and complex nature of measuring affordability in the school setting.

targets 4a, 6.1 and 6.2 on the school environment *(16)*. Other survey tools, recently developed by technical support agencies and academia, were also considered to cover emerging priorities such as menstrual hygiene management *(24; 25)*.

Explanatory notes provide additional information and specific instructions and clarifications for the assessors, guiding them on how to ask the questions and/or elicit answers from the respondents. These notes are intended to support the development of a nationally or locally adapted version of the instrument and facilitate standardized running of the survey. They should not be mentioned during interviews; nor should they appear in any paper-and-pencil questionnaires used to collect pupils' perceptions or information from school managers. For the purpose of adapting existing national surveillance instruments, those questions that are useful to inform international reporting exercises are highlighted, including specific reference to the questions featured in the JMP reporting tool for WASH in schools *(16)*.

The rationale listed for each question provides background information on the health and education impacts of the WASH aspects and indicators considered in the instruments, as well as insight into international standards and best practice. This information can be considered during development and adaptation of the instruments for local purposes, as it explains the importance of each question's inclusion in the data collection. It is intended to be useful in the preparation/planning phase and during data analysis and evaluation but not during the data collection phase. Specific information outlined in the question rationales can also be used during the training of assessors to ensure equal understanding and – during or after inspections – to facilitate communication with education staff who might not be aware of or may ask questions about best practices.

Between and within the instruments, some aspects and indicators are addressed repeatedly through a number of questions. The purpose of the repetition is to capture different features related to the provision of WASH services and different perspectives. This allows comprehensive evaluation and validation of the results. Validation is done by comparing the results from the different instruments and looking at the differences between what was objectively observed on the day of the inspection and what was reported by school staff and pupils. The first will give insight into the actual condition at one point in time, the latter will shed light on the efforts and intentions for provision, sufficiency of service over time and use. This should be helpful in developing recommendations that reflect the real-life situation in the assessed school and are not in conflict with users' needs. If only parts of the instruments are used, repetitions also ensure that key aspects and indicators are not missed.

5. How to use the tool

Application of the tool requires visits to schools, as data collection is based on key informant interviews and onsite observations. The quality of the results is in the hands of the assessors involved in collecting the data.

Ideally, assessors should be knowledgeable about public health and have experience with sanitary inspection of schools; they should be trained in advance to become familiar with the scope, purpose and objectives of data collection, methodological approaches and the surveillance instruments. Assessors should be instructed on how to register the situation observed on site objectively, referring to existing norms and standards without being influenced by their subjective perceptions and opinions, and on how to address sensitive topics, such as menstrual hygiene management, effectively with respondents. Training should ensure harmonized understanding of the terms and definitions used and awareness of the importance of ethics, data quality and confidence in the results. It should also include an overview of all the questions and definitions included in the instruments and address all the aspects listed above, as well as practical considerations regarding attitudes when visiting a school and sound methodology for conducting onsite observations and interviews with adults and children. The guidance provided with each instrument and the glossary are especially relevant resources for developing training content.

The questionnaire for school staff, the checklist for observations and the questionnaire for pupils – and the individual WASH dimensions in each instrument – can be used alone or as a package, depending on the objectives, scope and purpose of the data collection, national context, needs, priorities and available resources. For instance, Menstrual Hygiene Day, an annual awareness day on 28 May, is a good opportunity to highlight the importance of good menstrual hygiene management in schools by conducting a basic assessment to determine the extent of schools' menstrual hygiene management facilities. For this purpose, it would be appropriate to use only the parts of the instruments containing relevant questions and indicators for menstrual hygiene management. Another example would be the need to establish a national baseline for target-setting, planning and monitoring WASH improvements in schools. In this case, it is recommended to use all instruments as a package to ensure comprehensive data collection that encompasses all key indicators. For other possible applications of the instruments see Chapter 2.

The tool can be integrated into local surveillance activities, step by step. For example, a set of minimum indicators could be used in a first iteration, with more advanced indicators employed after a period of time. In this way, authorities could first focus on developing a sound methodology with a limited number of key indicators to monitor the provision of basic WASH services in schools – considered the minimum level to protect the health of pupils and school staff – such as that defined at the international level for the monitoring of SDGs (Fig. 1). Questions relevant to monitoring the provision of basic services can be found in the tool and are marked with the corresponding SDG core question in the notes. Countries, regions, districts or schools that have achieved a basic level of WASH can then add additional indicators to their surveillance activities to monitor progress towards achieving a higher level of service, which also reflects the needs of users and aspects related to health promotion and well-being.

Fig. 1. Service ladders for monitoring WASH in schools

Drinking-water	Sanitation	Hygiene
Advanced service: additional criteria may include quality, quantity, continuity and accessibility to all users	**Advanced service**: additional criteria may include student per toilet ratios, menstrual hygiene facilities, cleanliness, accessibility to all users and excreta management systems	**Advanced service**: additional criteria may include hygiene education, group handwashing, menstrual hygiene materials and accessibility to all users
Basic service: drinking-water from an improved source and water is available at the school at the time of the survey	**Basic service:** improved sanitation facilities at the school that are single-sex and usable (available, functional and private) at the time of the survey	**Basic service:** handwashing facilities with water and soap available at the school at the time of the survey
Limited service: drinking-water from an improved source but water is unavailable at the school at the time of the survey	**Limited service:** improved sanitation facilities at the school that are either not single-sex or not usable at the time of the survey	**Limited service**: handwashing facilities with water but no soap available at the school at the time of the survey
No service: drinking-water from an unimproved source or no water source at the school	**No service**: unimproved sanitation facilities or no sanitation facilities at the school	**No service:** no handwashing facilities available or no water available at the school

Source: WHO/UNICEF JMP *(16)*.

To gain useful information for policy-making and programming, data with geographical coverage are crucial, from all schools or from a representative sample, depending on the resources, objectives and availability of a school inventory. The national statistical office can provide technical assistance in this respect. Also, if the tool is used for a one-off survey or a targeted assessment, it is important to conduct sampling systematically to ensure representative findings in the geographical area of interest. Data collection requires sufficient resources for numerous inspections as well as for administrative matters, including communicating with schools and preparing materials, and for follow-up actions after inspections, including data entry, evaluation and providing feedback to inspected schools. Integrating WASH into existing surveillance systems may therefore be a cost-effective solution (Box 3). When planning and implementing new instruments or a new methodology for data collection, adequate time and resources need to be considered for the training of assessors, for their personal preparation.

Box 3. Clear roles and responsibilities for all actors

In countries where routine surveillance is already in place, the instruments – or relevant questions from them – can be integrated into existing school monitoring systems and/or routine inspection sheets. Several questions, especially from the instruments developed for interviewing school staff and pupils, can also be adapted to include WASH indicators in self-reported assessments (such as EMIS questionnaires). Use of the instruments in this way will strengthen available systems to include important indicators for WASH in schools surveillance, rather than putting forward new tools and launching a parallel monitoring system, increasing the need for human and financial resources. This approach would also avoid overburdening schools with requests and inspections. If extracted, questions can be combined in various questionnaires or surveys adapted for different purposes (see Chapter 2).

Although the questions have been developed to be applicable across the pan-European region, some may be more or less relevant to a specific setting or country. The instruments are designed to be flexible and adaptable, to take into account national standards, cultural context, local conditions and current practices. In some cases, the instruments can be used directly with little or no modification, given accurate translation and question coding (see Box 4). In other cases, modifications may be necessary to ensure the instruments are adequate for the purpose of data collection and/or the local context (for example, for a specific type of educational institution such as preschools or boarding schools; or for local sanitation practices such as the use of toilet paper or water for anal cleansing).

In the process of adapting the instruments, emphasis should be placed on adequate translation of the question and answers. Reviewing and adapting technical terms and answer options to reflect definitions in national norms are also recommended. Terminology can thus be adapted to reflect national norms and local realities, without losing the correctness and original meaning of the questions, as indicated in the notes and rationales. Making the instruments socially and culturally appropriate is of particular importance when addressing sensitive topics such as toilet use and menstrual hygiene management. The translated instruments should be reviewed and proofread carefully by an in-country expert on WASH in schools. The glossary in Chapter 9 provides definitions to support translation and adaptation to the local context.

Box 4. Question coding

Data analysis can be time-consuming. Identifying each question with a specific code is necessary to enter and process data electronically, and to gain a clear identification system during data analysis after collection. All questions can be coded with letters based on the type of the instrument they refer to (Q = questionnaire; C = checklist; P = pupil questionnaire), the dimension (W = water; S = sanitation; H = hygiene) and a number. For example, questions to assess the condition of sanitation services in the questionnaire for school staff are coded as follows: QS1, QS2 etc., where Q refers to the type of the instrument (questionnaire), S to the content category (sanitation) and 1 and 2 to the question numbers.

It should be noted that the proposed question coding is just an example. Health and education authorities using the instruments are encouraged to adapt question coding to the data collection procedures used locally. To facilitate input of participants' responses into a database and statistical processing, answer options can also be coded. For example, numbers from 1 to n can be assigned to the different answer options, while codes may be used for special answer options such as "no answer", "not applicable" or "other", as in the example below.

If the school has an onsite sanitation system, is there a schedule for emptying and disposing of the sludge?

☐ 1: Yes

☐ 2: No

☐ 98: I don't know

☐ 99: Not applicable

This ensures that these special answer options are not confused with the list of potential responses generated.

6. How to interpret the results

Data collection on WASH in schools is worthwhile only if results are analysed, reported and linked to decision-making processes at the national and subnational levels. Data analysis and interpretation of results is vital to develop an understanding of the situation in schools across the country or in the assessed area. Result interpretation may take into consideration:

- the geographical scope of the data (national, subnational, school level);
- the type of educational institution (e.g. preschool, primary school, secondary school, boarding school);
- the indicators used to measure service coverage (e.g. proportion of schools with handwashing facilities that have soap and water);
- the various facets and perspectives of the indicators provided by the different instruments (the questionnaire for school staff, the checklist for observations and the questionnaire for pupils).

The data collected may be useful for composing national and/or subnational figures about the levels of services of WASH in schools. For this purpose, proportions can be calculated for each indicator (see the example in Box 5).

Box 5. Calculation of the level of WASH services

To calculate the levels of water provision in schools, for example, the following indicators and calculations can be considered, as used to define the JMP service ladders for monitoring progress under the SDGs (Fig. 1). Indicators and related calculations for other WASH dimensions can be found in the JMP *Core questions and indicators for monitoring WASH in schools in the Sustainable Development Goals (16).*

- **Indicator:** proportion of schools with an improved drinking-water source (*limited or basic service level*)
- **Calculation:** the number of schools where there is an improved source, divided by the total number of schools surveyed
- **Indicator:** proportion of schools with drinking-water available from an improved source (*basic service level*)
- **Calculation:** the number of schools where there is an improved source AND water from the main source is available, divided by the total number of schools surveyed

Source: WHO/UNICEF JMP *(16)*.

Comparison of schools is also useful as it facilitates better understanding of which are performing well in terms of compliance and WASH service provision and which are lagging behind, along with possible causes. Hence, developing a system to allow data from all included schools to be collated and compared may be considered. Comparison is not always feasible straight away. For example, whether the number of toilets and handwashing facilities is appropriate depends on the size of the school. It is thus important to consider the general information on the school to allow calculation of pupil–fixture ratios and production of numbers that are comparable across schools.

A scoring system facilitates comparison. For example, the JMP service ladders can help to categorize schools by WASH service levels and thus support prioritization of interventions. The advanced service level is left for countries to set at the national level; this can be done using the additional indicators in the instruments in this tool. An alternative way to categorize services is to assign a score between 0 and 1 to each question answered, with 0 representing the poorest and

1 the best condition, and 0.1—0.9 the spectrum between; the sum of all scores (min: 0, max: n, where n is the total number of questions) can be associated with each school. The categories or scores can be used to create a matrix by geographical area, colour-coded to identify high-priority schools or areas quickly.

Disaggregation is a useful way to obtain informative data and efficiently support the development of policies and improvement programmes at the national level. It helps to identify disparities in WASH coverage and service provision that may not be obvious from the overall dataset. Disaggregation can be by urban/rural setting, by administrative area (e.g. regions or provinces) and/or by school type (e.g. preschool, primary, secondary). To gain complete understanding of the condition of WASH in schools, it is also important to look at possible sex- and age-related disparities.

In the case of differences across regions and settings, where one geographical or administrative category (e.g. schools in urban settings or schools in one region) shows low need for improvement and others show high need, it is important to avoid use of an overall average value. The average, being a mathematical value between the two extremes of the spectrum of conditions, does not reflect the variety of conditions and possible differences. Useful alternatives to the average are range values (minimum–maximum), variable categorization into groups (such as percentile groups) and median values.

Interpretation of results should initially be guided by national norms and standards. Specific indicators can be also analysed in relation to relevant international standards and guidelines, such the WHO/UNICEF water, sanitation and hygiene standards for schools in low-cost settings *(18)*, the WHO guidelines for drinking-water quality *(26)*, the WHO guidelines on sanitation and health *(27)*, WHO guidance on the physical environment in a health-promoting school *(28)* and resources for improving menstrual hygiene *(25)*.

The rationale listed for each question in the instruments provides suggestions from international standards and best practices, which should facilitate correct interpretation of the surveillance results. Thus, comparing results against the national norms and standards and/or the rationale of questions should facilitate identification of issues and challenges in WASH service provision. Issues can also be identified if the answer selected indicates the following:

- non-compliance with national or international norms;
- a condition that may pose a risk to the health of the users;
- a condition that may limit access to WASH services or mean limited/insufficient provision;
- an issue perceived by users;
- a low level of awareness or inaccurate understanding of critical WASH aspects;
- in multiple-choice questions, answers that do not match the recommended provision/practice outlined in the rationale.

Negative results or issues emerging from the data are not meant to be used to impose sanctions on the school in the first instance. Instead, the findings can inform improvement planning and encourage cooperation between the school and the responsible authority by providing recommendations and finding joint solutions on how national standards can be reached, step by step. Official follow-up measures such as requests for action or awards and recognition are crucial for driving change *(10)*. While negative feedback and sanctions are not to be recommended, if adverse conditions persist, it is important to activate legal instruments and put accountability mechanisms in place.

Some questions include the answer options “I don’t know” and/or “no answer”. Questions that rely on personal knowledge or experience require an “I don’t know” answer option, but it should be noted that “I don’t know” and “no answer” options are not the same and cannot be used interchangeably. Sensitive questions that respondents may not wish to answer require a “no answer” option, in line

with the right not to respond to the question. Aspects for which such answers are provided should not be categorized as an issue but should be kept under consideration, as they may indicate a need to raise awareness about the importance of WASH aspects or a need to strengthen available education or information programmes.

In contrast, the answer option "not applicable" allows respondents (or assessors in the case of the checklist for observations) to indicate that the aspects considered in the question cannot be investigated in the particular situation or the particular school visited. For example, a question on the functionality of pupils' toilets/latrines in the current school year is not applicable if there are no toilets/latrines at the school. The "not applicable" answer option should also not be confused with a missing value or "no answer" option.

Validation of data through triangulation (cross-verification) of the results from all three instruments is recommended. If results are contrasting – for example, findings gained from the questionnaire for pupils and the checklist for observations differ – empirical data may be given greater weight than self-reported data, as it is less prone to information bias and variation. In this specific instance, the information acquired through the checklist for observations may be taken as the reference and used for comparison. This is recommended as:

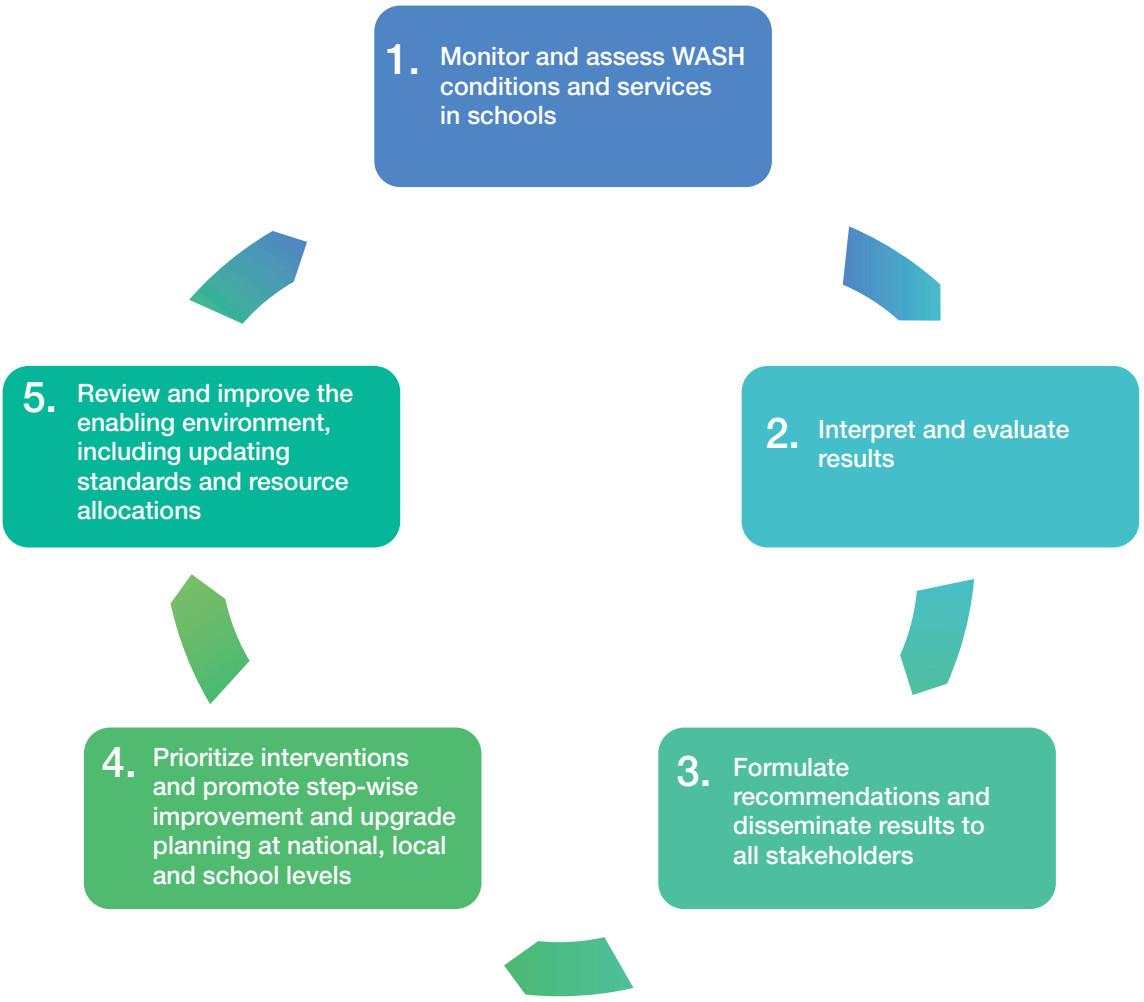
- it reflects the latest situation at one point in time and in the same period for the schools considered;
- it is collected by assessors trained to register the situation objectively and impartially.

It should be noted, however, that the purpose of data cross-verification is to capture different facets of the provision of WASH services and different perspectives. Data from school manager or pupil interviews that may appear contrasting may indicate that some aspects of service provision – such as effectiveness of maintenance and education or accessibility to facilities at all times – may not always be met. One example could be availability of toilet paper. The questionnaire for school staff examines general provision of toilet paper by the school; the checklist for observations considers availability and details of the level of provision at one point in time; while the questionnaire for pupils assesses the frequency and continuity of toilet paper availability from the user's perspective. Thus, the overall response by pupils may indicate that toilet paper is rarely available, while the observation may indicate the presence of toilet paper on the day of the inspection. This does not mean that the data obtained through analysis of the questionnaire for pupils are incorrect. As the aim of the analysis is to gain a complete and objective picture of WASH conditions in schools, results from all the instruments should be evaluated to allow identification of missing or inefficient steps in the chain from provision to practice, or to identify gaps in awareness or knowledge.

7. How to use the results

Surveillance is only the first step towards improving WASH in schools. Data captured through monitoring and assessment are, however, often underutilized *(4; 11).* Good use of surveillance results is critical to raising awareness of the benefits of improvements and to triggering change. Surveillance is a continuous process, which involves regular monitoring, objective evaluation and follow-up action in a periodic manner. The cycle from surveillance to compliance is summarized in Fig. 2. The steps related to monitoring and results interpretation are addressed in the previous chapters; the remaining complementary steps are described below.

Fig. 2. Use of surveillance data: from monitoring to improving WASH in schools sustainably



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Once data are collected, analysed and interpreted, an evaluation of existing policies and standards is useful to appraise how far the desired outcomes are being achieved and to identify shortcomings and gaps. Evaluation can make use of results from previous data collection exercises, if available, to facilitate observation of possible trends and overall progress. In addition, results can be compared to planned activities, available data on human and financial resource allocation, and health and education data. Collected data can also be useful for updating and extending national inventories or databases, which would allow tracking progress over time.

3 To ensure use of the data and uptake of the results, dissemination of findings and associated recommendations is critical. Results can be disseminated through reports, policy briefs (summarizing policy-relevant results and recommendations), awareness-raising activities and international reporting instruments. Primary users of the monitoring results are health and education authorities at local, subnational and national levels. Key findings should be reported and communicated internally across all relevant departments and externally to all other relevant stakeholders and other bodies sharing responsibility for WASH in schools. Authorities can generate context-specific recommendations referring to the results to guide improvements to WASH facilities to meet users' needs and national standards.

It is important to communicate the results to the schools involved and investigated to foster ownership of the findings and to spark school-based improvements. This especially applies to school-based management of operation, maintenance and cleaning of WASH facilities and WASH behaviour-related education measures. Awareness at the school level can be encouraged during the inspection visits themselves (see suggestions in Box 6) and continued through provision of follow-up recommendations. Evidence shows that decision-makers, such as school principals, are most keen to undertake changes and improve the quality of WASH service provision when there is understanding and awareness of the importance of the policies and standards, when feedback and recommendations are provided and when formal follow-up is in place, such as rewards and incentives *(8; 10).* Providing incentives and public recognition of the schools that show progress can play a significant role in fostering motivation to take up recommendations derived from the surveillance findings and to undertake improvement actions to meet users' needs and national standards. Support from key stakeholders such as pupils and parent groups or the school board is also an important driver of improvements in schools, meaning that dissemination and awareness-raising among the broader community are critical.

Box 6. Surveillance activities as a means of education and awareness-raising

Under the framework of the Protocol on Water and Health *(13)*, a complementary document has been developed for schools wishing to improve WASH services and take the lead on driving change: *Improving health and learning through better water, sanitation and hygiene in schools: an information package for school staff (29).* During routine surveillance visits, interested school managers could be invited to undertake specific training on available options for school-based improvements and WASH management, and hard copies of the information package can be distributed.

For school staff interested in youth-friendly educational materials, the European Environment and Health Youth Coalition developed HYGIENE MUCH, a brochure that addresses students of all ages. It aims to encourage good hygiene practices by providing health facts and memorable tips and tricks, presented in a humorous way. These include a discussion of different problems young people face when using WASH facilities in schools. Particular attention is given to menstrual hygiene management: the chapter entitled "Menstruation – full disclosure!" identifies the importance of breaking taboos around this topic and the need for adequate menstrual hygiene education, together with good access to menstrual materials in schools.

4 Surveillance is not about collecting data per se: surveillance outcomes serve to inform step-wise action towards progressive improvements. At the national and subnational levels, authorities may use the monitoring results for multiple purposes, from establishing a national baseline to track policy enforcement, to informing strategic planning and/or financial resource allocation for WASH in schools (see also Chapter 2). At the same time, observed shortcomings may inform an improvement plan at the school level and guide a step-by-step upgrade of WASH facilities in line with the resource availability and capacity of each school.

For example, results of national data collection may be helpful to identify any in-country inequalities in access to WASH in schools and indicate where the most significant needs are. It is advisable that responsible actors take follow-up action to explore the causes of such inequalities and identify solutions to close any gaps identified. This could be conducted in a top-down fashion, where national authorities address gaps in the implementation of regulatory requirements, and/or using a bottom-up method by engaging stakeholders at the local and school levels to address the shortcomings found in a practical way. Authorities can use the results to review the status of WASH in schools critically against set policy targets and regulatory requirements, and adapt their strategies, action plans and programming in response to any gaps identified. Uptake of the surveillance results can thus contribute to progressive elimination of inequalities and evidence-based policy-making.

To facilitate implementation, it is important to plan improvement actions in both short-term and long-term practical steps. During evaluation of the findings or follow-up planning, it is important to include a step of prioritization. This will help to guide choices of which improvements should come first and enable schools to achieve step-wise improvements over time.

Improvement plans will be effective only if they are accepted by school users, if they are feasible in the local context, if they are time-bound and if they reflect available financial and human resources. Using the JMP service ladders to categorize schools by WASH service levels in the analysis of results can help with identification of feasible intermediate levels to be aimed at in the first round of improvement action. To test feasibility and practicality of an intervention in the local context, implementation may be conducted first as a small-scale pilot project and then be adapted for scale-up. Authorities and schools can prioritize actions in accordance with the relative importance of the issue identified for the health and well-being of pupils and school staff, as well as with feasibility in terms of time and available human and financial resources. The highest priority should be given to achieving provision of a basic level of WASH services (see Fig. 1), as this is critical to safeguard pupils' health, well-being and cognitive performance *(1; 2; 3).* To ensure the success of improvement interventions, the engagement of all school stakeholders, including pupils, is recommended throughout, including in the planning phase.

If the available resources do not permit construction of new (potentially costly) infrastructure – which may reflect the expectations of users – affordable and acceptable intermediate solutions may be implemented in the short and medium term, prioritizing feasible interventions with a high impact on the health of school staff and pupils. This may include, for example, regular provision of soap or small upgrades of existing sanitation facilities to improve their cleanliness (such as installation of a platform or slab). Gradual improvements can be planned in the long term to achieve compliance with advanced national requirements, create an equitable learning environment and eventually ensure sustainability of WASH facilities and services.

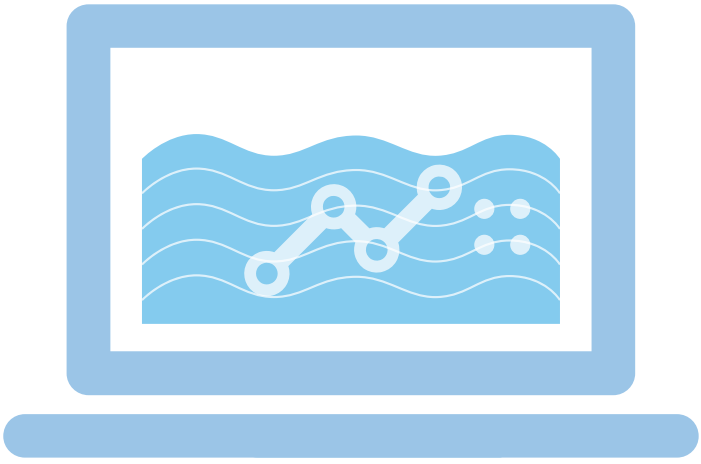
Pupil education and operation and maintenance procedures are complementary aspects that are essential to sustain functionality and usability of infrastructure; both thus need to be considered during follow-up planning. Such aspects can be cost-efficient intermediate steps while raising funds for infrastructural improvements. At the school level, small enhancements in the capacity of the school budget that bring health benefits can be part of the progressive realization of pupils' right to a healthy learning environment. For example, a first step may be to improve the operation and maintenance of existing toilets/latrines so that they are functional and usable for pupils, if investments in rehabilitation and/or increasing the number of toilets (for example, to meet national standards for pupil–toilet ratios) are not attainable in the short term. Students can also be involved in health clubs or other educational activities to raise awareness of the importance of handwashing.

5 Finally, an enabling environment needs to be nurtured and proactively fostered to provide favourable conditions for improving WASH in schools. Surveillance results can inform and guide the development of a supportive legal and institutional framework, which includes:

- fostering political support and commitment to improve WASH in schools;
- reviewing and updating existing national policies and standards to ensure that the national policy framework is supportive of improved WASH conditions in school settings that meet pupils' needs;
- strengthening the regulatory framework for policy enforcement to encourage compliance;
- strengthening cost-efficient financial resource allocation for planned improvements;
- developing capacities at the institutional and local levels to facilitate implementation of improvement plans.

An effective surveillance system is an integral part of the enabling environment for improving and sustaining adequate WASH services in schools. Even when schools have reached adequate service provision, it takes effort to maintain safe, accessible and acceptable services and facilities throughout the year, to ensure that they services meet pupils' needs and support healthy behaviours. Routine and regular surveillance is vital to track progress, address changes promptly, recognize new needs and reallocate resources accordingly.

In the pan-European region, some countries currently conduct inspections yearly in all schools, while some undertake surveillance on a rotation, covering a specific school category each year. Whichever approach is used, it is important that surveillance is conducted regularly and systematically, using structured methodology and instruments, and that inspections are conducted at a time when the school is in use. The surveillance instruments and methodology tips in this tool can be used to establish or improve regular surveillance to assess the status of WASH services in schools.



8. Surveillance instruments

Besides a section on general information on the school, this tool offers three instruments for surveillance and data collection, each covering different aspects and perceptions:

- the perception of the school manager
- the perception of the public health expert
- the perception of the users.

While there is no specific order in which the instruments should be applied, starting with the checklists for on-spot observations may be convenient as surveyors would get to know the specific situation and conditions in the school, which could then facilitate the interviews. Key informants (e.g. school principal or school staff responsible for cleaning and/or maintenance) may not be aware of all the issues related to WASH service provision and surveyors can help them with their answers.

The time needed to complete the data collection using the complete instruments ranges between one and three hours, depending on the experience of the surveyors involved in data collection, the size and the setting of the school. This should not take much more time than current surveillance practices in the countries that make use of a structured checklist.

Before use, the instruments need to be translated and adapted to best reflect conditions, terminology, administrative arrangements and legal norms in the country or the area of implementation.

Detailed indications and methodology specific to the individual instruments are provided in the related sections.

General information on the school

This section is designed to be country-specific, so the wording should be adapted to reflect the educational system, type of school and available national standards. The questions may be answered at the beginning of the interview or prior to the onsite inspection; they will serve as primary data for calculations in later sections and for evaluation purposes.

The questionnaire has been structured to enable the respondent/assessor to select only one answer for each question or subquestion, for ease of completion.

Questions	Rationale
G1. Date of the inspection (dd/mm/yy): ___/_____/_____ Day of the week: _____ **G2. Time of the inspection (hh/mm):** ___:___ *Note: specify the day of the week as well as the date, month and year.*	Certain issues with WASH facilities can be highly dependent on the season of the year (date and month) and the relative temperatures, as well as when cleaning procedures or high peaks of use occur (weekday and time). This information will be useful for evaluation of results, development of recommendations and recording of surveillance frequency.
G3. Name(s) of school staff member(s) interviewed G3.1 *Name 1*: _____ G3.2 *Name 2*: _____ **G4. Position of the interviewed school staff member(s)** G4.1 *Position 1*:_____ G4.2 *Position 2*:_____ **G5. Gender(s) of school staff member(s) interviewed** G5.1 Staff member 1: ☐ Male ☐ Female G5.2 Staff member 2: ☐ Male ☐ Female *Note: ideally, interviewee 1 should be school manager (or a person delegated by a school manager) and interviewee 2 a second person involved in any aspect of WASH (teacher, caretaker, school nurse, cleaning person) to provide answers to support the onsite inspection.*	Ensuring adequate WASH facilities in schools requires regular and appropriate operation and maintenance, providing a sustainable budget and promoting access to WASH services and education. Depending on the country, responsibility for ensuring WASH in schools may be spread among different staff members. Interviewing a second person may facilitate collection of consistent data.
G6. School identification number _____ **G7. School name** _____ *Note: school name and identification number (or code) should reflect available national or subnational listings.*	Categorising the results by code facilitates an impartial and unbiased judgment when evaluating the results.

Questions	Rationale
G8. School location _____ *Note to questions: Insert answer. The address and/or geolocation data can be entered. GPS data could be collected to allow a mapping of the schools and geographical representation of the data distribution.* **G9. What type of area is the school located in?** ☐ Rural ☐ Urban ☐ Peri-urban *Note: the answer options may need to be adapted to reflect any available national definitions and terminology.* **G10. What is the type of the school?** ☐ Preschool/kindergarten ☐ Primary school ☐ Middle school ☐ High school ☐ Other (please specify):_____ *Note: "other" may be selected for schools of mixed type, and all the types present should be specified.* *The answer options may need to be adapted to reflect established school categories/definitions. They could also be adapted to reflect additional types of school (e.g. professional school) if required.* **G11. What is the age of pupils attending the school?** G11.1 age of youngest pupil:____ G11.2 age of oldest pupil:____ *Note: insert digits only.* **G12. What is the type of school management?** ☐ Public ☐ Private ☐ Mixed (please specify):_____ *Note: the answer options may need to be adapted to reflect the categories present at the national/local level.*	WASH services in schools may vary significantly between types of school, districts, regions or urban and rural settings. Depending on the legal and institutional set-up, different norms may apply in different areas, and different authorities may be accountable for enforcement. It is often the case that management, infrastructure and/or the financial situation – and consequently the WASH conditions in schools – are heterogeneous in one region or one country. Collecting specific information on the area and the type of school can help with stratifying or mapping data to identify areas with higher needs for attention in terms of improvement. Depending on the age of the pupils, different requirements for age-specific WASH services are important. For example, lower partitioning walls can be used and smaller, age-friendly fixtures are necessary in preschools and primary schools. For older pupils, adequate height of fixtures and partitioning walls is important. For older girls, specific hygiene measures to ensure adequate menstrual management are needed.

Questions	Rationale
G13. What is the school programme? ☐ short school day (4–6 hours) ☐ long school day (7–10 hours) *Note: select the total number of working hours per day, including the hours for lectures and breaks, and those dedicated to extracurricular activities when pupils may use the facilities.* *The answer options may need to be adapted to reflect any available local requirements and definitions of the school day.* **G14. How many shifts does the school have per day?** Specify number of shifts:_____ *Note: insert digits only. If the school does not work in shifts, enter "1".* **G15. Is the visited school a boarding school?** ☐ Yes ☐ Partially (only for some students) ☐ No	This information allows assessors to develop an understanding of user needs. Availability of WASH facilities can be expressed as the ratio of pupils to available fixtures. Depending on the number of pupils during one shift, WASH services accessibility may vary. Depending on how long pupils stay at school, different levels of WASH services may be necessary (e.g. water quantity, number of fixtures to access water and hand hygiene, means for menstrual hygiene management, quantity of soap and toilet paper). Limitations and restrictions in accessibility to WASH services may affect pupils' well-being at school.
G16. How many students attend the school? G16.1 Total: _____ G16.2 Boys: _____ G16.3 Girls: _____ *Note: insert digits only. Provide the number of pupils across all shifts. Depending on the methodology decided prior to data collection, the interviewer may request the average number over a year or the number of students on the day of the inspection.*	This information will be used to calculate the ratio of the WASH fixtures (toilets, handwashing facilities, water distribution points). Even when the school has an equal number of toilets for both sexes, there might be an issue of accessibility if the proportion between girls and boys is strongly divergent. If the school works in shifts, the number of shifts in which students are divided should be considered in calculation of the ratios.
G17. How many staff members does the school have? G17.1 Total number of staff:_____ G17.2 Number of female staff:_____ G17.3 Number of male staff:_____ G17.4 Number of teachers:_____ G17.5 Number of administrative staff: _____ G17.6 Number of operation and maintenance staff:_____ *Note: insert digits only. Depending on the methodology decided prior to data collection, the interviewer may request the average number over a year or the number of staff on the day of the inspection.* *Cleaning staff and caretakers can be considered operation and maintenance staff.*	School staff represent some of the users of school WASH facilities and some of the actors actively contributing to ensuring good WASH conditions in schools. Information on the number of staff can help answer a series of additional questions, such as the following. Are the facilities sufficient for the number of users? Are female staff available that can support girls with problems related to menarche and menstruation? Does the school have personnel to ensure proper operation, maintenance and cleaning of WASH services?

Questions	Rationale
G18. How many students with limited mobility attend the school? Specify number:_____ *Note: insert digits only. Depending on the methodology decided prior to data collection, the interviewer may request the average number over a year or the number of students on the day of the inspection.* *The question may be adapted and/or an additional question may be included to reflect any available national standards that provide more detail on the provision of WASH services for pupils with different forms of disability.*	Pupils with disabilities need facilities with specific adaptations to allow their use without external help. The presence of pupils with physical disabilities in the school will define the need for appropriate WASH facilities..
G19. When was the school built? G19.1 Main building: _____ G19.2 Extension (if applicable):_____ *Note: insert digits only. Specify the year construction was finished for the first time. If the school was expanded and a new section built, including WASH facilities, this may be specified under "extension", otherwise this line can be filled with "NA" (not applicable).* **G20. Was the building designed to serve as an educational institution?** ☐ Yes, it was designed to serve that purpose ☐ No, but it was adapted for that purpose ☐ No *Note: confirm by asking whether the school was built to serve the specific type of school indicated under question G10.* **G21. Have WASH services ever been renovated?** ☐ Yes (specify when last): _____ ☐ No *Note: if any interventions (renovations, rebuilding or upgrading) of WASH facilities and services have been conducted, specify the year they were last done.*	In a number of countries, buildings used for schools are very old and/ or were not built for the purpose of education *(4)*. These may require more attention from the authorities as they have a higher probability of being noncompliant with national standards. Older buildings with no recent rehabilitation may not meet current requirements; for example, they may have an insufficient ratio of WASH facilities to pupils, which may affect the cleanliness of the facilities, or inappropriate plumbing materials (such as lead pipes), which may impair the quality of the drinking-water. This information will be useful for data interpretation and for creation of recommendations for improvement or rehabilitation and related cost planning.

Questions	Rationale
G22. Is there a budget for the operation and maintenance of WASH services at the school? ☐ Yes, the budget covers more than 75% of needs ☐ Yes, the budget covers between 50% and 75% of needs ☐ Yes, but the budget covers less than 50% of needs ☐ No *Note: operation and maintenance costs may include equipment and materials for small repairs, cleaning materials, staff, hygiene consumable such as toilet paper and soap, and running costs for water and sanitation services, among others. If there is a general budget for operation and maintenance but it does not cover running costs and repairs for WASH facilities, select "no".*	To ensure sustainable WASH services in schools, it is important that a budget line is dedicated to operation and maintenance and that resources remain constant *(30)*. Improvement actions need to consider the availability of budget and involve responsible actors. Parents' involvement in budget generation could indicate insufficient government support.
G23. Who is responsible for providing the budget for the operation and maintenance of WASH services at the school? G23.1 School administration ☐ Yes ☐ No ☐ NA G23.2 Local public administration ☐ Yes ☐ No ☐ NA G23.3 Parents of the pupils ☐ Yes ☐ No ☐ NA G23.4 Other (please specify): ☐ Yes ☐ No ☐ NA _____ *Note: select "yes" or "no" for each subquestion. If there is no budget for operation and maintenance of WASH services, select "NA".*	

Questions	Rationale

G24. Who is responsible for the provision of WASH services on the school premises?

	G24.1 Water	G24.2 Sanitation	G24.3 Hygiene
External provider	☐	☐	☐
School management	☐	☐	☐
Both external provider and school management	☐	☐	☐
Other (please specify):_____	☐	☐	☐

Note: select one answer option for each WASH dimension. An external provider could be represented by a municipal enterprise/utility or a private company, among others.

The answer options may need to be adapted to reflect any available national requirements and terminology.

G25. Who is responsible for operation and maintenance of the WASH facilities on the school premises?

	G25.1 Water	G25.2 Sanitation	G25.3 Hygiene
External provider	☐	☐	☐
School caretaker(s)	☐	☐	☐
Both external provider and school caretaker(s)	☐	☐	☐
Other (please specify):_____	☐	☐	☐

Note: select one answer option for each WASH dimension. Operation and maintenance of WASH services may include regular supervision of safety and functionality, conducting small repairs, regular provision of consumables and cleaning of the facilities. An external provider could be represented by a municipal enterprise/utility or a private company, among others.

The answer options may need to be adapted to reflect available national requirements and terminology.

G26. Who is responsible for solid waste management?

	G26.1 Collection and storage at the premises	G26.2 Disposal
External provider	☐	☐
School caretaker(s)	☐	☐
Both external provider and school caretaker(s)	☐	☐
Other (please specify):_____	☐	☐

Note: select one answer option for each WASH dimension. Waste management on the premises may include collection of waste from bins, transport to and management of a waste storage area, and supervision of waste collection and disposal (if not conducted offsite). An external provider could be represented by a municipal enterprise/utility or a private company, among others.

The subquestions and answer options may need to be adapted to reflect available national standards and terminology.

Depending on the country, responsibility for WASH services may vary between regions, districts or municipalities. To allow for improvement, it is important to understand the distribution of responsibilities at the local level. Such information may not be necessary if the area of interest has the same system for all schools. "Operation" refers to all activities that ensure that WASH services are functional; "maintenance" refers to all activities that sustain the functionality and usability of such services. Responsibilities are sometimes unclear or distributed among different actors *(4)*. The answer will be useful to inform clear assignment of responsibilities in policies/regulations and/or ensure communication between different actors sharing similar responsibilities.

Questionnaire for school staff

This instrument consists of an evidence-based questionnaire for a face-to-face interview. Suggested interviewees are the school manager (or a person delegated by the school manager) and another staff member involved in any aspect of WASH (teacher, school nurse, caretaker, cleaning personnel), who can answer together to support the onsite inspection.

The interview should be conducted by assessors trained in asking questions and filling out questionnaires in an impartial and objective manner.

The questionnaire for school staff covers elements such as availability, functionality, privacy, accessibility, quality of services, operation and maintenance of WASH facilities and services, as well as WASH education, policies and practices in school. The questionnaire has been structured to enable the respondent/assessor to select only one answer for each question or subquestion, for ease of completion.

It is recommended that the monitoring based on this questionnaire is conducted in combination with the checklist for observations and the questionnaire for pupils. In this way, information provided by the school staff will be triangulated[3] and validated to ensure that the findings represent the real situation regarding WASH in the school.

Assessors should become familiar with the questions and definitions included the instruments prior to starting data collection. This will allow more efficient collection without affecting the quality of the data. Some questions require the assessor to list the answer options while asking the question; others require the interviewer to wait for the participant's answer and then read out the options. If the respondent chooses the answer option "other", the assessor may ask them to specify and give examples, which should be noted in clearly legible handwriting.

Because some questions are sensitive, it is recommended that the data are collected in a face-to-face interview. This has the advantage of creating personal contact between the assessor and participants, allowing for more in-depth data collection and comprehensive understanding. The assessor can also probe for additional explanations of the responses provided.

With an interview, it is important that the assessor contacts the school in advance to arrange an appointment to ensure a successful visit. The interviewer should always introduce him/herself and clarify the purpose of the appointment both in advance and on the day of the inspection.

Before starting the interview, participants should be informed about the purpose of the visit and how the results will be used. It is also important to emphasize that the aim of the data collection is to provide support and advice, not to impose sanctions. School management may thus be encouraged to be transparent and share challenges faced to allow authorities to be informed and take supportive action. Preferably, participants should also receive this information in written form and sign to confirm receipt for the record, if feasible.

[3] Validation of data through cross-verification from two or more sources.

Water: availability, functionality

Question	Rationale
QW1. What is the main source of drinking water provided by the school? ☐ Piped water supply into school building ☐ Piped water supply into school yard/plot ☐ Public tap/standpipe out of school yard/plot ☐ Protected well/spring ☐ Rainwater ☐ Unprotected well/spring ☐ Packaged bottled water ☐ Tanker-truck or cart ☐ Surface water (lake, river stream) ☐ No water source available *Note: if there is more than one source, select the water source used **most frequently** for drinking-water by pupils and staff. If children need to bring water from home because water is not provided by the school, "no water source" should be selected. A protected well (which may include boreholes, tubewells or dug wells) or spring is protected from any possible contaminants (e.g. solid waste, surface run-off, chemicals, pathogens from latrines) through a fence, an apron or seal, a cover and a drainage system (31).* *The answer options may need to be adapted to reflect the local context and terminology, so that respondents are able to understand each one clearly, and they are able to be categorized as suitable or not for water consumption or "no water source".* *The information should be compared with the data obtained through the checklist for observations.* *These data can be used to answer JMP core question W1.*	Safe drinking-water is essential for the physical and cognitive development and well-being of children. A potentially safe (or improved) drinking-water source, by the nature of its construction, has the potential to deliver safe water suitable for human consumption by protecting the source from outside contamination. Potentially safe (or improved) drinking-water sources may include the following types: piped, protected well or spring, rainwater catchment, bottled water and water delivered by tanker-trucks and small carts *(16)*. An unprotected well or spring and surface water are sources that do not ensure the safety of the water quality and may pose health risks to users. Different maintenance procedures should be implemented at the school according to the water source.

Water: availability, functionality

Question	Rationale
QW2. In the previous two weeks, was drinking-water from the main source available at the school throughout each school day? ☐ Yes, all the time ☐ No, there were irregular interruptions ☐ No, there are regular interruptions ☐ Not applicable QW2.1 If there are interruptions in the previous two weeks, when and for how long have they happened? *Answer:*_____ _____ *Note: read all the answer options out loud and let the respondent select one. If no water source is available, select "not applicable". Confirm issues by asking when they had a water supply interruption and for how long. Interruptions may occur on daily basis or on regular days of the week. Details of when interruptions occurred should describe the days or hours when water was not available. Only select "Yes, all the time" if this was true for all school days for the previous two weeks. For question QW2.1, if water was available all the time or if no water source is available, write "not applicable".* *These data can be used to answer JMP expanded question XW1.*	Intermittent water supply is observed in parts of the pan-European region, especially in rural areas *(4)*. Interruptions in water supply may be a regular event, lasting for hours or even days, that severely affects access to water for pupils and school staff. Intermittent water supply may lead to poor water quality due to possible infiltration of contaminated water caused by pressure variations, and elevated risk of waterborne illness *(32)*. It can also lead higher maintenance costs due to higher corrosion rates *(33)*. Irregular interruptions may indicate a localized issue in the system
QW3. Is drinking water from the main source always available throughout the school year? ☐ Yes, always ☐ No, there were irregular interruptions ☐ No, there are regular interruptions (specify when): _____ ☐ No, water is never available **QW4. If water from the main source is available but there have been interruptions, how often did this happen in the last 12 months?** ☐ 30 or fewer days ☐ More than 30 days ☐ I don't know ☐ Not applicable *Note: for question QW4, if water is not available one or more weeks in a year, or one or more days every week, try to calculate an approximate total number of days when water was not available and select the corresponding answer option. If water is always or never available, select "not applicable".* *These data can be used to answer JMP expanded question XW2.*	

Water: availability, functionality

Question	Rationale
QW5. If the main source is not always available, is there an alternative source of drinking water available at the school? ☐ Yes (specify type):_____ ☐ No *Note Note: consider question QW1 about the main source of water to categorize the type of secondary water and interpret whether it is adequate for the purpose of drinking.* *The information should be compared with the data obtained through the checklist for observations.*	If a school relies on a secondary water source for some period of time during the day or during the year, additional consideration should be given to ensuring the safety and reliability of this drinking-water source.

Water: quality of services, operation and maintenance

Question	Rationale
QW6. What is the provider of the main drinking water supply? ☐ External provider (municipal or private) ☐ The water source is school-owned ☐ Unknown ☐ Not applicable *Note: if there is more than one source, select the water source used **most frequently** for drinking-water. If no water sources are available, select "not applicable".* *The information should be compared with the data obtained through the checklist for observations.* *The answer options may need to be adapted to reflect additional categories in the local context.*	This question explores where responsibility for the main water supply lies. Ensuring continuous and safe water requires a functional operation and maintenance plan, which may include aspects such as regular treatment and maintenance of the water source in the case of a school-owned source. For communal or private services, the service provider should ensure the safety and continuity of services and should communicate water quality results to the school. Water that is brought from home can be considered only as a temporary measure until the school provides this basic service.
QW7. When the main drinking water supply is functional, does it provide enough water for the needs of the school? ☐ Yes ☐ No ☐ Not applicable *Note: the needs of the school may include water for drinking, personal hygiene (including handwashing, showering), food preparation, cleaning and laundry, among others. If no water source is available, select "not applicable".*	For day schools, WHO recommends 5 litres of water per person per day for all schoolchildren and staff, excluding the water required for flushing toilets and showers *(18)*. This should ensure that sufficient water is available for drinking, personal hygiene, food preparation, cleaning and laundry. Additional quantities of water may be required for sanitation (e.g. flushing toilets).

Water: quality of services, operation and maintenance

Question	Rationale

QW8. Has the quality from the main water source ever been tested on the school premises for compliance with national standards for drinking-water?

☐ Yes, within the last 12 months
☐ Yes, more than 12 months ago
☐ No, the water quality has never been tested
☐ I don't know
☐ Not applicable

QW9. When was the quality of the main water source tested last?

☐ Specify date of last test (mm/yy):_____
☐ Not applicable

Note: the questions refer to any drinking-water quality testing conducted on the school premises at the point of use. Confirm by asking if there is any document or report on the water quality (issued by the supplier or the health authority). If there is no water source available select "not applicable". For question QW9, if there is no water source at the school, the water has never been tested or the respondent has no information about testing, select "not applicable".

Subquestion categories (for example, with respect to the required frequency of testing) may need to be adapted to reflect any available national standards and terminology.

These data can be used to answer JMP expanded question XW7.

QW10. If the water from the main source has been tested within the last 12 months, what parameters have been tested?

QW10.1 *Escherichia coli* (*E. coli*)	☐ Yes	☐ No	☐ DK	☐ NA
QW10.2 Arsenic	☐ Yes	☐ No	☐ DK	☐ NA
QW10.3 Lead	☐ Yes	☐ No	☐ DK	☐ NA
QW10.4 Nitrate	☐ Yes	☐ No	☐ DK	☐ NA
QW10.5 Fluoride	☐ Yes	☐ No	☐ DK	☐ NA
QW10.6 Other (please specify):_____	☐ Yes	☐ No	☐ DK	☐ NA

Note: select "yes" or "no" for each subquestion. If there is no water source at the school or water has never been tested select "NA" (not applicable). If there is no information about water testing, select "DK" (I don't know).

Subquestion categories may need to be adapted to reflect additional parameters relevant in the local context.

These data can be used to answer JMP expanded question XW7.

QW11. According to the latest tests, for what parameters is the water from the main source compliant with the national standards for drinking-water quality?

QW11.1 *E. coli*	☐ Yes	☐ No	☐ NA
QW11.2 Arsenic	☐ Yes	☐ No	☐ NA
QW11.3 Lead	☐ Yes	☐ No	☐ NA
QW11.4 Nitrate	☐ Yes	☐ No	☐ NA
QW11.5 Fluoride	☐ Yes	☐ No	☐ NA
QW11.6 Unknown parameter(s)	☐ Yes	☐ No	☐ NA
QW11.7 Other (please specify):_____	☐ Yes	☐ No	☐ NA

Drinking-water should meet national standards. This question explores water quality monitoring on the school premises and whether any parameter exceeded the limits set by national standards.

Safe drinking-water is strongly related to children's health and their physiological and intellectual development. Microbiological water contamination may cause gastrointestinal infections. Long-term exposure to some chemical compounds (such as arsenic, fluoride or lead) may cause various forms of non-infectious disease *(34; 35)*.

Even if water quality is tested for the main water supply (e.g. at the city level), it may also be tested on the school premises. This is important because the school's plumbing system may introduce chemical or microbiological contamination as a result of, for example, stagnation of water in the pipes, corrosion of (old) pipes or use of inappropriate pipe materials (e.g. lead).

Testing for lead in drinking-water is especially important in old buildings. Lead can also be found in service pipes. Lead affects learning abilities and causes intellectual deficits in children, eventually causing encephalopathy *(36)*.

Evidence-based information and health-related recommendations on water quality standards are collected in the WHO guidelines, which are updated routinely *(26)*.

For water that does not meet national standards, the responsible health authority may ban certain uses (e.g. consumption, food preparation) until necessary corrective measures are taken.

Water: quality of services, operation and maintenance

Question	Rationale

(Continued). *Note: select "yes" or "no" for each parameter to indicate whether compliance with national standards was observed. Parameters are not compliant if they exceed the limits set by the national standard. If there is no water source at the school, the water has never been tested or the respondent has no information about testing, select "NA".*

Subquestion categories may need to be adapted to reflect additional parameters relevant in the local context.

These data can be used to answer JMP expanded question XW7.

QW12. In the past 12 months, have there been complaints about the quality and/or availability of drinking-water at the school?

☐ Yes, about availability

☐ Yes, about quality

☐ Yes, about quality as well as availability

☐ No

Note: complaints may come from parents, staff or pupils. Complaints about quality may be due to the smell, the colour or the taste of the water.

QW13. In case of complaints, what measures are taken at the school?

QW13.1 Complaint is documented	☐ Yes	☐ No	☐ NA
QW13.2 Corrective action requested of responsible persons in the school	☐ Yes	☐ No	☐ NA
QW13.3 Corrective action requested of the responsible local authorities	☐ Yes	☐ No	☐ NA
QW13.4 Corrective action requested of the water service provider	☐ Yes	☐ No	☐ NA
QW13.5 Test results reviewed and new tests requested	☐ Yes	☐ No	☐ NA
QW13.6 Secondary source for drinking-water is provided	☐ Yes	☐ No	☐ NA
QW13.7 Other (please specify):_____ _____	☐ Yes	☐ No	☐ NA

Note: select "yes" or "no" for each subquestion. If there were no complaints in the past 12 months, select "NA". Only select measures taken by the school management.

School users like pupils and staff are valuable actors in monitoring possible changes in the quality and availability of water at school throughout the day and the school week. Changes in odour, colour and taste may indicate some sort of water contamination, which may pose a risk to the health of consumers.

Documenting complaints can provide a useful indication of specific issues with the water supply and assist with planning of improved operation and maintenance procedures. Documented complaints and follow-up interventions can facilitate communication with authorities and the water service provider to seek technical and/or financial support.

Water: quality of services, operation and maintenance

Question	Rationale
QW14. Who is responsible for identifying and reporting about issues with drinking-water system and facilities? QW14.1 School management/staff ☐ Yes ☐ No QW14.2 Teachers ☐ Yes ☐ No QW14.3 Students ☐ Yes ☐ No QW14.4 Caretaker ☐ Yes ☐ No QW14.5 Other (please specify):_____ ☐ Yes ☐ No *Note: to assist the respondent, ask about the typical scenario when a water point is not working or gets damaged.* *Confirm by asking whether the task is regularly practised by the people indicated.*	Diligent operation and maintenance of the facilities are vital to ensure and sustain access to safe drinking-water, especially in the case of a school-managed water source but also in a school provided with municipal water. Intense use, and sometimes misuse, of facilities frequently creates a need for small repairs, replacement of fixtures and basins and maintenance of the plumbing system. By institutionalizing a mechanism of identification and reporting of problems related to the drinking-water supply systems, periods of non-operation or poor operation will be avoided or reduced. This will help to ensure access and reduce potential costs for bigger rehabilitations.
QW15. Who is responsible for the operation and maintenance of the drinking-water provision on the school premises? QW15.1 School management/staff ☐ Yes ☐ No QW15.2 Teachers ☐ Yes ☐ No QW15.3 Students ☐ Yes ☐ No QW15.4 Caretaker ☐ Yes ☐ No QW15.5 Contracted services ☐ Yes ☐ No QW15.6 Other (please specify):_____ ☐ Yes ☐ No *Note: "operation" can be described as all activities that ensure that WASH services are functional; "maintenance" can be described as all activities that sustain the functionality and usability of such services.* *The subquestion categories may need to be adapted to reflect the local requirements and administrative organization.*	
QW16. What measures are taken at the school level regarding drinking-water? QW16.1 Regular cleaning of water points with sanitizer ☐ Yes ☐ No ☐ NA QW16.2 Water treatment ☐ Yes ☐ No ☐ NA QW16.3 Regular inspection of water supply system infrastructures to identify insanitary conditions and/or damages ☐ Yes ☐ No ☐ NA QW16.4 Regular flushing of water system (if piped) ☐ Yes ☐ No ☐ NA QW16.5 Other (please specify):_____ ☐ Yes ☐ No ☐ NA *Note: measures should be undertaken at the school by caretakers, technicians or other responsible staff. If there is no water source at the school, select "NA".* *The information should be compared with the data obtained through the checklist for observations.*	This question explores possible measures to keep the drinking-water system clean and functional and examines whether water from the main source is treated in the school. All schools should monitor and maintain the water supply in good condition. Further, schools with their own water supply can prevent contamination by ensuring a water source that is intact and free from dirt, with a proper cover and isolation. The specific health risks of the water supply should be assessed systematically using sanitary inspections, as described in the WHO guidelines for drinking-water quality *(26)*. Treatment of water from a safe supply is not necessary. Thus, absence of treatment does not indicate an issue with water quality, which should be tested against the national standards.

Water: quality of services, operation and maintenance

Question	Rationale
QW17. What driking-water treatment method is used on the premises of the school? QW17.1 Boiling ☐ Yes ☐ No ☐ NA QW17.2 Chlorination ☐ Yes ☐ No ☐ NA QW17.3 Filtration ☐ Yes ☐ No ☐ NA QW17.4 SODIS or solar disinfection ☐ Yes ☐ No ☐ NA QW17.5 Ultraviolet disinfection ☐ Yes ☐ No ☐ NA QW17.6 Other (please specify):_____ ☐ Yes ☐ No ☐ NA _____ *Note: if there is no water source or no water treatment in use at the school, select "NA". Filtration may include variable technologies such as ceramic filters and reverse osmosis.* *These data can be used to answer JMP expanded question XW6b.*	This question explores what type of water treatment is in used at the school for water disinfection. Where the water from the source is unsafe, adequate and regular water treatment can reduce microbiological risks *(18)*. This will protect children and the whole community from intestinal and other infectious diseases. Water treatment is also important in schools connected to a centralized water supply, if the school plumbing system presents risks of microbiological or chemical contamination. If the water supply is managed by the school, staff can take additional measures to prevent contamination by ensuring that the water source is intact and free from dirt, with a proper cover and isolation.
QW18. Is there a written operation and maintenance plan? ☐ Yes ☐ No *Note to question: Select one answer option. An operation and maintenance plan should include the routine inspection, as well as cleaning and maintainance procedures, including setting clear responsibilities and frequencies of activities.*	Having the required operational and maintenance procedures documented and respected ensures functionality, efficiency, continuity and access. In some countries, the school may be required to develop a hygiene plan, in which operation and maintenance activities can be included.

Water: education and practices

Question	Rationale
QW19. When are pupils allowed to drink water at school? ☐ Always (whenever they need, including during lessons) ☐ During the breaks only *The information should be compared with the data obtained through the questionnaire for pupils.*	Dehydration decreases alertness and concentration. Limited accessibility to drinking-water at school, because of location or inappropriate size of drinking-water points, restricting rules or financial constraints, may affect the level of hydration of pupils *(4)*. Allowing pupils to drink regularly and making water available at no cost from water points outside the toilets (e.g. via water fountains or dispensers) and during meal times can help promote children's hydration and reduce consumption of sugary drinks, improving their readiness to learn and overall health *(4)*. This question investigates regular practice at the school beyond the presence of infrastructure, and whether the school manager is aware of it.
QW20. Where do pupils get their drinking water from at school? QW20.1 Taps or fountains outside the toilet facilities ☐ Yes ☐ No QW20.2 Taps inside the toilet facilities ☐ Yes ☐ No QW20.3 At the canteen free of charge ☐ Yes ☐ No QW20.4 Pupils bring water from home ☐ Yes ☐ No QW20.5 Pupils purchase water at the canteen or kiosk ☐ Yes ☐ No *Note: read all the answer options out loud and let the respondent select one.* *The answer options may need to be adapted to reflect any additional drinking-water points such as water coolers, filtered water stations or pitchers of water in the school canteen, as well as purchasing options relevant to the local context.* *The information should be compared with the data obtained through the questionnaire for pupils.*	
QW21. Is a written school policy or rule in place to ensure accessible drinking-water? ☐ Yes ☐ No *Note: a school policy may include rules, for example, on when pupils are allowed to drink water or on activities to promote drinking-water accessibility and consumption, including specifying responsibilities of staff and students.*	A written policy can help to drive attention to the topic of drinking-water at school. It can raise awareness of the importance of securing access to safe water on school premises and promote student consumption of water.

Sanitation: availability

Question	Rationale
QS1. What type of toilets/latrines do pupils commonly use at the school? ☐ Flush/pour flush toilets connected to sewer ☐ Flush/pour flush toilets connected to onsite storage ☐ Pit latrines with slab ☐ Composting toilets ☐ Pit latrines without slab ☐ Hanging latrines ☐ No toilets or latrines *Note: if more than one type is used, the most common type of student toilet/latrine should be selected. The answer options may need to be adapted to reflect national definitions and terminology.* *The information should be compared with the data obtained through the checklist for observations.* *These data can be used to answer JMP core question S1.*	Access to safe sanitation in schools is essential for ensuring good health and overall well-being of pupils. The lack of safe sanitation facilities may lead to infections such as diarrhoea and school absence *(27)*. General information about the type of toilets/latrines pupils are using provides an insight into the safety of the facility in use, as well as the different operation and maintenance procedures needed. All toilets in schools should meet national standards, including safe containment, and pay special attention to availability and accessibility of toilets, privacy and security, as well as menstrual hygiene management needs. Only improved toilets, defined as designed to separate human excreta from human contact hygienically, can be considered safe. These may include flush/pour-flush toilets, pit latrines with slab and composting toilets.
QS2. How many toilets cubicles/latrines are currently available to pupils? Insert number_____ *Note: insert digits only. You may wish to explain what "available to pupils" means: doors are unlocked or a key is available at all times. If no toilets/latrines are available insert "0".* *The information should be compared with the data obtained through the checklist for observations.* *These data can be used to answer JMP core question S2.*	Sufficient toilets/latrines should be available in the school to meet pupils' basic needs at all times. The ratio of pupils to toilets often exceeds national guidelines, for both girls and boys *(11),* resulting in long waiting times that discourage use and cause inconvenience. Information on the number of available toilets/latrines per student should be compared with national standards. Toilets should be available, but also usable. This can be verified through the checklist for onsite observation.
QS3. Are there toilet facilities for staff (separate from pupils' toilet facilities) at the school? ☐ Yes ☐ No *The information should be compared with the data obtained through the checklist for observations.*	Separate toilets for staff and pupils may be appropriate, especially in primary schools where age-appropriate toilets are provided *(18).* Toilets for those with limited mobility or vision could be accessible to pupils, teachers and visitors.

Sanitation: functionality, privacy

Question	Rationale
QS4. Are there toilet facilities to be used exclusively by female pupils? ☐ Yes ☐ No ☐ Not applicable **QS5. Are there toilet facilities to be used exclusively by female staff?** ☐ Yes ☐ No ☐ Not applicable	Sex-separated toilet facilities are a prerequisite for ensuring that staff and pupil privacy needs are met. Separate toilet facilities should be built for girls and boys, particularly adolescents; and for female and male teachers.
Note: "exclusively by female pupils/staff" means that there are separate girls' and boys' toilet facilities (divided by solid walls) or the toilets in a single-sex school. To be considered separate, facilities should provide privacy from pupils of the opposite sex, but this definition should be further defined based on local context, as needed. In schools where boys and girls attend in separate shifts and use the same facilities but at different times, select "yes", since at the time of use, the toilets are only for girls. Also select "yes" in the case of private single rooms with one toilet (and one handwashing facility) to be used by one student only at a time and thus ensuring privacy. If no toilets/latrines are available select "not applicable". *This question may not be relevant in preschools.* *The question may be adapted to reflect any available national standards and definitions.* *If relevant and appropriate, an additional question may be asked about the presence of a gender-neutral toilet (a private toilet room with only one toilet that can be used by one person exclusively at a time) for any students who prefer to use them.* *The information should be compared with the data obtained through the checklist for observations and the questionnaire for pupils.* *These data can be used to answer JMP core question S3.*	
QS6. Do pupils' toilet cubicles provide enough privacy? ☐ Yes ☐ No ☐ I don't know ☐ Not applicable	Privacy of toilet facilities can be an important determinant of the extent to which pupils are willing and able to use them. To be considered private, school toilets should have a door with a working lock that is easy for pupils to operate from the inside but not easily opened from the outside by other pupils. Locks are essential for privacy: if missing, this may contribute to toilet avoidance, which is an unhealthy behaviour associated with voiding disorders, urinary tract infections and constipation *(37)*.
Note: you may wish to explain that toilet cubicles are considered private if there are closable doors that look from inside and no large gaps in the structure. However, lockable toilets may not be applicable in preschools. If there are no toilets/latrines available select "not applicable". *The information should be compared with the data obtained through the questionnaire for pupils.* *These data can be used to answer JMP core question S2.*	

Sanitation: functionality, privacy

Question	Rationale
QS7. Have there been any issues with the functionality of pupils' toilets/latrines in the current school year? ☐ Yes, but they have been solved ☐ Yes, and they haven't been solved yet ☐ No, pupils' toilets/latrines have been functional all the time ☐ Not applicable *Note: you may wish to explain what "functional" means: the toilet is not broken, the toilet hole is not blocked and water is available for flush/pour-flush toilets. Read all the answer options out loud and let the respondent select one. If no toilets/latrines are available select "not applicable".* *The information should be compared with the data obtained through the questionnaire for pupils.* *These data can be used to answer JMP core question S2.*	The way pupils use toilet facilities, and in some cases whether they use them at all, can depend on their physical quality and appearance; for example, whether they are fully functional and inviting. Toilets that are broken or blocked, toilet flush mechanisms that are not working or similar encourage toilet avoidance.

Sanitation: accessibility

Question	Rationale
QS8. Are the toilets/latrines accessible to all pupils in the school? ☐ Yes ☐ No ☐ Not applicable *Note: you may wish to explain what "accessible to all" means: there is at least one usable toilet/latrine that is accessible to the smallest children at the school; there at least one usable toilet/latrine that is accessible to those with limited mobility. If no toilets/latrines are available select "not applicable".* *The information should be compared with the data obtained through the checklist for observations and the questionnaire for pupils.* *These data can be used to answer JMP expanded questions XS6 and XS7.*	Easily accessible sanitation infrastructure is crucial for going to school. To ensure equal learning opportunities, schools should provide toilets that are within physical reach of all pupils, including the youngest ones. Pupils with a disability are less likely to have access to a school toilet: in both high- and middle-income countries, schools are often observed not providing accessible sanitation *(4)*.

Sanitation: accessibility

Question	Rationale
QS9. Does the school have specified times when pupils are allowed to visit the toilets/latrines? ☐ Pupils are free to use the toilets/latrines any time during the school day, as they need them ☐ Any time, but during the lessons upon request for permission only ☐ At specific times during the school day only (such as breaks) ☐ Not applicable **QS10. Are toilet always accessible?** ☐ Yes, any time without the key ☐ Yes, any time upon request of the key ☐ No, only at specific times (such as breaks) ☐ Not applicable	To promote healthy behaviours, school toilets should always be open and easily accessible. To avoid health problems, it is essential that pupils are allowed to use the toilet at any time throughout the school day in case of need. The doors should be kept unlocked, or keys should be available at all times. Ensuring access to clean and functional sanitation facilities at all times provides favourable conditions for promoting healthy behaviours. A significant number of pupils (especially girls) feel uncomfortable when they need to ask for permission to use a toilet *(4; 38)*. For some pupils with specific untreated health conditions, such as hyperactive bladder or incontinence, any delay may be impossible.

Note: read all the answer options out loud and let the respondent select one. If no toilets/latrines are available, select "not applicable".

The information should be compared with the data obtained through the questionnaire for pupils.

These data can be used to answer JMP expanded question XS9.

Sanitation: quality of services, operation and maintenance

Question	Rationale
QS11. How often are the toilet facilities cleaned? ☐ Twice per day or whenever needed ☐ Once per day ☐ 2–4 days per week ☐ Once per week ☐ Less than once per week ☐ Not applicable	Toilet facilities should be cleaned regularly to remove any dirt, litter and faecal material, so that health risks for users are minimized. Dirty toilets also deter pupils from using them and foster avoidance. The school needs to have a regular cleaning schedule and reliable system in place to keep toilet facilities usable and clean. Frequency of cleaning may be regulated by national requirements and should be conducted at least once a day *(4)*.

Note: this question focuses on operation and maintenance processes and it is intended to provide a proxy for toilet cleanliness. Don't give hints. Let the respondent try to give their answer(s) first, then read the remaining answers out loud in random order. If no toilets/latrines are available, select "not applicable".

The information should be compared with the data obtained through the checklist for observations and the questionnaire for pupils.

These data can be used to answer JMP expanded question XS4.

Sanitation: quality of services, operation and maintenance

Question	Rationale
QS12. Is there lighting in the toilet facilities? ☐ Yes ☐ No ☐ Not applicable *Note: if no toilets/latrines are available, select "not applicable".* *The information should be compared with the data obtained through the checklist for observations.*	Inadequate illumination may prevent toilet use. Lack of functional lighting in the school toilets hinders acceptability and use of toilet facilities, especially by younger pupils and girls. While this question is relevant in most settings, it may be especially appropriate for countries with prolonged periods of darkness during the school day.
QS13. Are there means of ventilation in the toilet facilities? ☐ Yes ☐ No ☐ Not applicable *Note: if the answer is "yes", confirm by asking about the type of the ventilation system in place (natural ventilation, windows, mechanical ventilation etc.). If no toilets/latrines are available, select "not applicable".* *The information should be compared with the data obtained through the checklist for observations and the questionnaire for pupils.*	School toilet facilities are a humid environment and can generate odours. For this reason, a good ventilation system is needed to prevent mould growing and to dilute stuffy and smelly air. Bad odours in toilets may lead to toilet avoidance. School management should have a basic understanding of the need for good ventilation in the toilets.
QS14. Are the toilet facilities heated during the wintertime? ☐ Yes ☐ No ☐ Not applicable *Note: if the answer is "yes", confirm by asking about the type of heating system in place. If no toilets/latrines are available, select "not applicable".*	Toilet facilities should be warm enough to be comfortable in winter. Inadequate temperatures in the toilet facilities may lead to toilet avoidance. This question may be especially appropriate for boarding schools, in countries with prolonged periods of winter and cold, and for schools with toilets/latrines located off the premises.
QS15. Are culturally appropriate means for anal cleansing usually available? ☐ Yes, always ☐ Yes, most of the time ☐ Rarely ☐ No, never *Note: means for anal cleansing may vary between countries, and the question may need to be adapted to reflect the uses and terminology in the local context. In schools that have a multicultural student body, respond "yes" only if materials are provided to suit the needs of all students.* *The information should be compared with the data obtained through the checklist for observations and the questionnaire for pupils.* *These data can be used to answer JMP expanded question XS10.*	Culturally appropriate means for anal cleansing should be available within the toilet. For example, this could be a water tap/hose or materials for wiping (e.g. toilet paper), including a disposal container where required *(27).* Anal cleansing materials may be provided in all toilet cubicles at the start of a school day and a re-supplying process should be in place during the school day.

Sanitation: quality of services, operation and maintenance

Question	Rationale
QS16. Are general waste bins provided in the toilet facilities? ☐ Yes ☐ No ☐ Not applicable **QS17. How often are general waste bins emptied?** ☐ Twice per day or whenever needed ☐ Once per day ☐ 2–4 days per week ☐ Once per week ☐ Less than once per week ☐ Not applicable *Note: if no toilets/latrines are available, and for question QS17 if there is no general waste bin in the toilet facilities, select "not applicable".* *The information should be compared with the data obtained through the checklist for observations.*	Adequate waste disposal, including provision of covered bins and regular emptying, is essential for keeping toilet facilities clean and functional.
QS18. How is solid waste from the school disposed of? ☐ Not disposed of by the school but collected by municipal waste system ☐ Buried and covered on premises ☐ Burned on premises at controlled temperatures ☐ Openly burned on premises ☐ Openly dumped on premises *Note: the answer options may need to be adapted to reflect additional categories in the local context or any available national definitions and terminology.* *These data can be used to answer JMP expanded question XH7.*	Unmanaged litter may not only cause an unsightly appearance of school premises but can also pose a risk to the health of pupils and staff. Waste openly dumped on the premises, open burning or burning in ovens that have no seal and no control over the temperature are not considered appropriate forms of disposal.
QS19. Are sanitary bins for the disposal of used menstrual hygiene products provided in girls' toilet cubicles? ☐ Yes ☐ No ☐ Not applicable *Note: if no toilets/latrines are available, select "not applicable".* *This question is not relevant in preschools.* *The information should be compared with the data obtained through the checklist for observations and the questionnaire for pupils.* *These data can be used to answer JMP expanded question XS2.*	Disposal facilities for menstrual hygiene products should be available in all age-appropriate girls' toilet cubicles, as ordinary bins are not sufficient. Lack of suitable disposal facilities may create embarrassment and encourage insanitary practice.

Sanitation: quality of services, operation and maintenance

Question	Rationale
QS20. Are there appropriate disposal mechanisms for menstrual hygiene waste at the school? ☐ Yes ☐ No *Note: if the answer is "yes", confirm by asking about the type of disposal mechanisms for menstrual hygiene waste at the school. Disposal mechanisms can include incineration or another safe method on site (e.g. buried in sealed pit or kept in sealed containers for collection by municipal services), or safe storage and collection via a municipal waste system, as appropriate.* *This question is not relevant in preschools.* *These data can be used to answer JMP expanded question XS3.*	Inappropriate disposal of menstrual hygiene materials (e.g. flushing them in the toilets) can result in failure of sanitation systems *(25)*, which increases the costs of operation and maintenance and the health risks associated with a lack of sanitation if no alternative toilet system is available during repairs. Body fluids, including menstrual blood, can pose a risk for the transmission of diseases and should be collected separately and disposed of safely, as solid waste.
QS21. If the school has an onsite sanitation system, is there a schedule for emptying and disposing of the sludge? ☐ Yes ☐ No ☐ Not applicable ☐ I don't know *Note: onsite sanitation systems may include pit latrines, composting toilets or septic tanks, as appropriate. If the school is connected to a centralized sewage system or has no onsite sanitation system, select "not applicable". This question does not apply to all sanitation facilities (e.g. sewer connection) but primarily to the management of faecal sludge from onsite systems.* *These data can be used to answer JMP expanded question XS12.*	Latrines at the school that are too full to be used, or where the pits have not been emptied regularly, may have negative impacts on public health (because of contact with faecal matter or a lack of sanitation) and the environment. These problems can be avoided by proper management of faecal sludge by the school and regular emptying of onsite sanitation systems.

Sanitation: education and practices

Question	Rationale
QS22. Have pupils or teachers ever reported episodes of bullying or violence in the school toilet facilities? ☐ Yes ☐ No ☐ I don't know ☐ Not applicable *Note: you may wish to explain what bullying is: an unwanted, aggressive behaviour among pupils that includes actions such as making threats, spreading rumours, attacking someone physically or verbally and excluding someone from a group on purpose. If there are no toilets/latrines available select "not applicable".* *The question may need to be adapted to reflect to the terminology in the local context.* *The information should be compared with the data obtained through the questionnaire for pupils.*	Bullying and other antisocial behaviours are a phenomenon in school toilets *(4; 39)*. School toilets are typically an adult-free zone. It is important that pupils feel safe using toilet facilities at all times. Being bullied can make pupils feel vulnerable, and cause discomfort and avoidance of school toilet facilities. This question explores to what extent pupils' security needs are being met.

Sanitation: education and practices

Question	Rationale
QS23. Does the school have complaints procedure in place encouraging pupils to report issues in the school toilet facilities? ☐ Yes ☐ No ☐ Not applicable **QS24. If pupils have ever complained about issues in the toilet facilities, has any action being taken by the school?** ☐ Yes, all complaints are taken seriously and are dealt with promptly ☐ No, no action taken ☐ I don't know/I am not aware of such action being taken ☐ Not applicable	This question examines the existence of complaint mechanisms in school and opportunities for pupils to report inadequate sanitation conditions such as poor maintenance, broken toilet seats or lack of toilet paper. It is important that the school management listens to complaints and suggestions from pupils about how school toilets can be improved. All complaints should be taken seriously and dealt with promptly.

Note: if no toilets/latrines are available, and for question Q24 if there have been no complaints, select "not applicable".

The information should be compared with the data obtained through the questionnaire for pupils.

Question	Rationale
QS25. In your opinion, what is needed to improve toilet facilities in the school? QS25.1 Increase the number of usable toilets for pupils ☐ Yes ☐ No QS25.2 Improve accessibility, taking into consideration age, gender and limited mobility/vision of pupils ☐ Yes ☐ No QS25.3 Increase privacy and/or safety of toilet facilities ☐ Yes ☐ No QS25.4 Improve cleanliness ☐ Yes ☐ No QS25.5 Ensure regular supply of culturally appropriate means for anal cleansing and/or menstrual hygiene materials ☐ Yes ☐ No QS25.6 Improve waste (solid and/or menstrual) disposal mechanisms ☐ Yes ☐ No QS25.7 Increase budget allocations for operation and maintenance and/or regular consumables provision (e.g. soap) ☐ Yes ☐ No QS25.8 Increase awareness of adequate use and ownership among pupils ☐ Yes ☐ No QS25.9 Other (please specify):_____ _____ ☐ Yes ☐ No	This is a self-evaluation question that helps determine areas for improvement as perceived by the school staff

Note: don't give hints. Let the respondent try to give their answer(s) first, then read the remaining answers out loud in random order.

Hygiene and menstrual hygiene management: availability, functionality

Question	Rationale
QH1. Where can handwashing facilities be found in the school? QH1.1 Near the toilets ☐ Yes ☐ No ☐ NA QH1.2 Near the canteen ☐ Yes ☐ No ☐ NA QH1.3 In classrooms ☐ Yes ☐ No ☐ NA QH1.4 Other (please specify):_____ ☐ Yes ☐ No ☐ NA _____ *Note: if there are no handwashing facilities in the school, select "NA" (not applicable). Read all the answer options out loud and let the respondent select one. A "handwashing facility" is any device or infrastructure that enables students to wash their hands effectively using running/poured water, such as a sink with tap, a water tank with tap, a bucket with tap, a tippy tap or other similar device. A shared bucket used for dipping hands is not considered an effective handwashing facility.* *The information should be compared with the data obtained through the checklist for observations.* *These data can be used to answer JMP core question H1.*	Handwashing facilities at school are essential to promote health and well-being of pupils. Access to handwashing facilities with water and soap facilitates good hand hygiene and plays an important role in preventing infectious disease transmission *(40)*. To enable good hand hygiene at critical times, such as before eating and after using the toilet, handwashing facilities should be easily accessible and conveniently located, in proximity to the canteens and toilets and wherever necessary.
QH2. Is water usually available for handwashing? ☐ Yes, always (or at all times throughout the school year) ☐ Most of the time ☐ Rarely ☐ No, never ☐ Not applicable *Note: to be considered available, water must be available at one or more of the handwashing facilities. If girls and boys have separate facilities, water should be at both. If there is no handwashing facility at the school, select "not applicable".* *The information should be compared with the data obtained through the questionnaire for pupils.* *These data can be used to answer JMP core question H2.*	Good hygiene behaviour requires continued functionality of the facilities. Pupils cannot be expected to wash their hands at critical times if there is no water. If functionality is intermittent, authorities might consider providing alternative solutions for specific situations and implementing long-term improvement measures.
QH3. Is soap usually available for handwashing? ☐ Yes, always (or at all times throughout the school year) ☐ Most of the time ☐ Rarely ☐ No, never ☐ Not applicable *Note: to be considered available, soap must be available at one or more of the handwashing facilities. If girls and boys have separate facilities, soap should be at both. Soapy water (a prepared solution of detergent suspended in water) can be considered an alternative for soap, but not for water, as non-soapy water is needed for rinsing. If there is no handwashing facility at the school, select "not applicable".* *The information should be compared with the data obtained through the questionnaire for pupils.* *These data can be used to answer JMP core question H2.*	Handwashing with water and soap is much more effective in removing bacteria from hands than handwashing with water only *(40)*. For effective prevention of infectious diseases, it is thus essential that soap is always available for handwashing.

Hygiene and menstrual hygiene management: accessibility

Question	Rationale
QH4. Are handwashing facilities accessible to all pupils in the school? ☐ Yes, handwashing facilities are accessible to all pupils ☐ No ☐ Not applicable **QH5. If handwashing facilities are not accessible to all pupils, what are the reasons?** QH5.1 Handwashing facilities are not accessible to the smallest children at the school ☐ Yes ☐ No ☐ NA QH5.2 Handwashing facilities are not accessible to pupils with limited mobility ☐ Yes ☐ No ☐ NA QH5.3 Other (please specify):_____ ☐ Yes ☐ No ☐ NA _____ *Note: you may wish to explain what "accessible to all" means: there is at least one functional handwashing facility that is accessible to the smallest children at the school; there is at least one functional handwashing facility that is accessible to those with limited mobility. For question QH4, if there are no handwashing facilities at the school select "not applicable". If the answer to question QH4 is "no", specify the reason under question QH5. If there are no handwashing facilities or if handwashing facilities are accessible to all pupils in the school, select "NA" for the QH5 subquestions.* *The information should be compared with the data obtained through the checklist for observations and the questionnaire for pupils.* *These data can be used to answer JMP expanded questions XH1 and XH2.*	Handwashing facilities in schools should be physically accessible to everyone. Inaccessible handwashing facilities relate directly to the quality of the learning environment and may affect access to education, especially for those with limited mobility.
QH6. Is hot/warm running water provided at handwashing facilities? ☐ Yes, always (or at all times throughout the school year) ☐ Yes, in the cold months only ☐ No ☐ Not applicable *Note: to be considered available, hot/warm water must be available at one or more of the handwashing facilities at the time of the visit. If there is no handwashing facility at the school, select "not applicable".* *The question may be adapted to reflect specific requirements in the national standards such as the number of facilities providing hot/warm water.*	Hands can be washed effectively without hot/warm water *(41)*, but availability of hot/warm water can increase acceptability and promote handwashing practice among pupils, especially during periods of cold weather *(42)*. Provision of hot water at school also implies the need for specific operation and maintenance procedures.

Hygiene and menstrual hygiene management: quality of services, operation and maintenance

Question	Rationale
QH7. Are records for the cleaning schedule of the toilet facilities available? ☐ Yes ☐ No ☐ Not applicable *Note: if there are no toilet facilities at the school, select "not applicable".* *The information should be compared with the data obtained through the checklist for observations.*	A cleaning schedule is part of the school operation and maintenance plan. If respected, it ensures cleanliness of the toilet facilities, thereby fostering their acceptance and the practice of healthy behaviours. Correctly documented cleaning schedules are a way to check the efficiency of cleaning procedures and ensure that they are carried out regularly.
QH8. How often are checks made during the day to ensure that toilet facilities remain clean and that soap, drying facilities and anal cleansing materials are provided? ☐ Twice or more per day ☐ Once per day ☐ Less than once per day ☐ Such checks are not conducted regularly ☐ Not applicable *Note: if there are no toilet facilities at the school, select "not applicable".* *The information should be compared with the data obtained through the checklist for observations and the questionnaire for pupils.*	This question focuses on operation and maintenance and is intended to provide a proxy for the condition of the toilet facilities. Checks of toilet facilities and cleaning should be conducted more than once during the school day, as otherwise cleanliness and availability of consumables are not ensured, especially after periods of high use *(4)*. Clean and visually attractive facilities, well equipped with needed consumables, may also foster healthy practices and reduce toilet avoidance.
QH9. Who is responsible for cleaning of the toilet facilities? QH9.1 Janitors ☐ Yes ☐ No ☐ NA QH9.2 Contracted cleaning services ☐ Yes ☐ No ☐ NA QH9.3 Municipal cleaning services ☐ Yes ☐ No ☐ NA QH9.4 Students ☐ Yes ☐ No ☐ NA QH9.5 Parents ☐ Yes ☐ No ☐ NA QH9.6 Other (please specify):_____ ☐ Yes ☐ No ☐ NA *Note: if there are no toilets/latrines or toilets are not cleaned, select "NA".*	Regular cleaning of toilet facilities in schools is needed. Those responsible for cleaning and maintenance should use methods and equipment that protect them from exposure to faecal matter. It is important to sensitize pupils to value the work of personnel responsible for cleaning the facilities and be encouraged to leave the facilities as they found them after use.
QH10. Have cleaning staff been trained on cleaning procedures, safe and adequate use of cleaning materials and protective equipment? ☐ Yes ☐ No ☐ I don't know	Those responsible for cleaning should be adequately trained on cleaning procedures, using cleaning materials such as chlorine bleach safely in the school environment and wearing protective equipment (e.g. gloves and face masks) during cleaning activities. It is important that school management provides clear directions to ensure quality and consistent procedures.

Question	Rationale

QH11. What is included in the routine cleaning procedure?

Cleaning of…	Yes	No	I don't know	Not available
QH11.1 Door handles	☐	☐	☐	☐
QH11.2 Flush handles	☐	☐	☐	☐
QH11.3 Taps	☐	☐	☐	☐
QH11.4 Toilet seats	☐	☐	☐	☐
QH11.5 Toilet bowls and urinals	☐	☐	☐	☐
QH11.6 Shower tray and surrounds	☐	☐	☐	☐
QH11.7 Shower heads	☐	☐	☐	☐
QH11.8 Handwashing basins/sinks	☐	☐	☐	☐
QH11.9 Cubicles (wall, floor, ceiling, lighting, window)	☐	☐	☐	☐
QH11.10 Bins (emptying)	☐	☐	☐	☐

Note: if the infrastructure is not available, check the corresponding box in the "not available" column.

The information should be compared with the data obtained through the checklist for observations.

The toilet and all surfaces of the toilet facility such as walls and floor and frequent hand contact sites such as toilet flush handles, taps, doorknobs and toilet seats should be kept clean and free of excreta. A regular cleaning schedule should be in place.

While "I don't know" answers cannot be evaluated, this answer option in schools where cleaning is not externally contracted may indicate a need for more attention to the topic and the need for clear protocols to ensure quality and consistent cleaning and hygienic facilities.

QH12. Are separate cleaning cloths used for different sanitary fixtures and different surfaces?

☐ Yes

☐ No

☐ I don't know

Note: sanitary fixtures may include handwashing facilities and toilets and surfaces may include basins, doors, walls and floors.

Cleaning should be conducted from the cleanest area to the dirtiest area. Separate cleaning equipment is also recommended to ensure that there is no cross-contamination between the different fixtures, especially from the dirtiest (e.g. the toilet seat) to the cleanest areas. Following good cleaning practices includes, for example, not using the same cloth for toilet seats/urinals and other surfaces. Authorities might use the opportunity to raise awareness of why this rule should be respected.

Hygiene and menstrual hygiene management: quality of services, operation and maintenance

Question	Rationale
QH13. What cleaning materials are available at the school in case of need? QH13.1 Bucket(s) ☐ Yes ☐ No ☐ I don't know QH13.2 Mop(s) ☐ Yes ☐ No ☐ I don't know QH13.3 Gloves ☐ Yes ☐ No ☐ I don't know QH13.4 Multiple cleaning cloths ☐ Yes ☐ No ☐ I don't know QH13.5 Detergent ☐ Yes ☐ No ☐ I don't know *Note: the number of cleaning cloths should be sufficient to clean different sanitary fixtures such as taps/basins, door handles and toilets with different cloths. If cleaning is contracted externally, a more basic set is sufficient.* *The answer options may need to be adapted to reflect any additional local requirements.* *The information should be compared with the data obtained through the checklist for observations.*	Studies document higher rates of infectious, gastrointestinal, neuro-cognitive and psychological illnesses where pupils are exposed to inadequate toilet facilities *(43)*. Even where an external contractor is in charge of cleaning, basic equipment to ensure a clean and hygienic environment is needed in case of accidents where dirt or body fluids may contaminate the school environment. Consumables may be kept in a separate dedicated storage room, but they should be made available in case of need, including late during the day.

Hygiene and menstrual hygiene management: education and practices

Question	Rationale
QH14. What activities are undertaken for hygiene promotion at the school? QH14.1 Hygiene education included in the curriculum ☐ Yes ☐ No ☐ NA QH14.2 Extracurricular activities on handwashing ☐ Yes ☐ No ☐ NA QH14.3 Group handwashing activities ☐ Yes ☐ No ☐ NA QH14.4 Educational/informative materials made available ☐ Yes ☐ No ☐ NA QH14.5 Reminders and posters hanged at critical points ☐ Yes ☐ No ☐ NA QH14.6 Teachers are requested to remind pupils to wash their hands ☐ Yes ☐ No ☐ NA QH14.7 Teachers have regular training ☐ Yes ☐ No ☐ NA QH14.8 Other ((please specify):_____ ☐ Yes ☐ No ☐ NA _____ *Note: if no activities are undertaken yet at the school, select "NA". Don't give hints. Let the respondent try to give their answer(s) first, then read the remaining answers out loud in random order. Hygiene education should be chosen only if it is institutionalized (i.e. regularly taught in class or through a regular school programme).*	School staff and teachers can play an important role in the development of healthy practices by pupils through training and setting a positive example. Update training for teachers, dedicated education inside and outside the classroom and active promotion will contribute to achieving behaviour change for the benefit of the children and the whole school community. Age-friendly materials and posters or extracurricular activities such as health clubs are additional options to ensure appropriate hygiene.

Hygiene and menstrual hygiene management: education and practices

Question	Rationale
(Continued) *If regular training of teachers is selected, confirm regularity by asking about the frequency.* *The subquestions may be adapted to reflect any additional programmes or activities in place at the national and subnational levels.* *The information should be compared with the data obtained through the questionnaire for pupils.*	
QH15. How many times per week are group handwashing activities conducted for all pupils? ☐ At least once per school day ☐ 2–4 days per week ☐ Once per week ☐ Less than once per week ☐ Not applicable *Note: if no group handwashing activities take place at the school, select "not applicable".* *The question is applicable in countries that have adopted approaches that consider group handwashing programmes. The question may not be relevant in secondary schools.* *The question may need to be adapted to reflect any alternative local programmes in place.* *These data can be used to answer JMP expanded question XH5.*	Group handwashing or other routinely practised activities can be a way to promote skills-based education and healthy behaviours. Group handwashing consists of a joint activity of a class or a group of classes at critical time, such as before lunch or after the break. It might not be feasible in schools with a limited number of handwashing facilities. Hygiene interventions with fixed schedules have been shown to improve handwashing practices.

Hygiene and menstrual hygiene management: menstrual hygiene management (MHM)

(not applicable in schools with boys only and preschools)

Question	Rationale
QH16. Are there any misconceptions or taboos around menstruation that you are aware of? ☐ Yes ☐ No ☐ I do not know ☐ No answer *Note: the participant may wish not to respond: remind them of their freedom to choose whether or not to answer a question.* *The question may be adapted to reflect the common/accepted terminology in the country and give an example of common taboos (e.g. involving notions of uncleanliness, shame, restriction around food).*	Stigma and taboos around menstruation directly affect girls' dignity, confidence and self-esteem *(44)*. Menstruation is a culturally sensitive issue, and is sometimes poorly understood by both men and women. Misconceptions and taboos around menstruation usually result in discomfort or even unwillingness to address the issue openly.

Hygiene and menstrual hygiene management: menstrual hygiene management (MHM)

(not applicable in schools with boys only and preschools)

Question	Rationale
QH17. What provisions for girls' MHM are available at the school? QH17.1 Private space for girls to manage menstrual hygiene ☐ Yes ☐ No QH17.2 Free menstrual hygiene products (e.g. pads) ☐ Yes ☐ No QH17.3 Sanitary bins for safe disposal of used menstrual hygiene products ☐ Yes ☐ No QH17.4 MHM education ☐ Yes ☐ No QH17.5 MHM information materials ☐ Yes ☐ No QH17.6 Other (please specify):_____ _____ ☐ Yes ☐ No *Note: terminology related to private spaces for girls and menstrual hygiene products should be adapted to the local context. Private spaces for girls may be separate from latrines and toilets, and their design may vary based on local context, but at minimum they should ensure availability of water and soap for personal hygiene in a private space (have closable doors that lock from the inside, and no holes, cracks, windows or low walls that would permit others to see in). The type of menstrual hygiene product may vary based on the local context. Availability may be via free distribution or for purchase. For "MHM education", select "yes" only if institutionalized (i.e. regularly taught in class or through a regular school programme).* *The subquestions may be adapted to reflect additional categories in the local context, such as the availability of a private bathing area for personal hygiene.* *The information should be compared with the data obtained through the checklist for observations and the questionnaire for pupils.* *These data can be used to answer JMP expanded question XH6.*	Provisions for MHM are critical to ensure equal learning opportunities for girls during menstruation. Lack of such provisions hinders ensuring the dignity of girls and affects girls' comfort and ability to attend and focus in class. Specific provisions for MHM may vary based on the local context. Nevertheless, minimum provision should include some sort of a private area for washing private parts and/or menstrual hygiene materials, affordable or free provision of MHM products and regular education in class *(45)*. Age-friendly materials and posters or extracurricular activities such as a girls' club are additional options to ensure appropriate MHM for female pupils.
QH18. If there is MHM education at the school, at what age and grade do girls start receiving this information? Age_____ Grade_____ *Note: insert digits only. Age should be recorded in years. If no information or no answer, insert "0".*	MHM education should be age appropriate, consisting of accurate, pragmatic and contextually adapted information. Girls report preferring to receive MHM information before menarche, as well as afterwards. The age and grade to start receiving MHM education are dependent on the country context.

Hygiene and menstrual hygiene management: menstrual hygiene management (MHM)

(not applicable in schools with boys only and preschools)

Question	Rationale
QH19. Are teachers in this school trained on menstrual health and hygiene promotion/education? ☐ Yes ☐ No ☐ I don't know *Note: if the answer is "yes", confirm by asking about the type of training received, how many school staff participated in the training and which institution provided it.*	Teachers/school staff should be able to talk in an informed, accessible and comfortable way about menstruation to both girls and boys. Training female teachers on menstrual health and hygiene promotion increases their capacity to help adolescent girls understand menstruation and how to manage their menses hygienically while at school.
QH20. Are MHM-related education materials accessible to girls at the school? ☐ Yes ☐ No ☐ There are no MHM-related education materials at the school ☐ I don't know *Note: education materials may include booklets, leaflets, posters, stickers etc. If the answer is "yes", confirm by asking about the type of education materials and topics covered (puberty, onset of menstruation, hygienic management etc.).* *The questions may need to be adapted to reflect any available national definitions and terminology.* *The information should be compared with the data obtained through the questionnaire for pupils.*	Girls need access to adequate information about the process of menstruation and options for good MHM, including how to dispose of used materials hygienically. Providing accurate, timely information for young girls is critical to the supportive environment needed for healthy and dignified MHM.
QH21. When can girls access menstrual hygiene products at the school? ☐ Any time, inside the toilet/other facilities ☐ Any time, upon request ☐ In exceptional cases only ☐ No menstrual hygiene materials available *Note: availability may be free of charge or for purchase. Asking for and obtaining menstrual hygiene materials could be from a head teacher or from named females in the school.*	Access to menstrual hygiene products is important to girls, who need to manage their periods safely in order to stay healthy and avoid physical and mental discomfort and leakages. If a school does not have the resources to provide products even in case of need, it can still provide the information to enable girls to select appropriate products for their circumstances, and the knowledge to use and dispose of them for maximum personal and environmental hygiene. To ensure dignifying conditions, girls need to feel comfortable about obtaining and disposing of menstrual hygiene products without drawing attention to themselves. Girls may feel embarrassed when they need to ask for permission to use a toilet or obtain menstrual hygiene products, especially from male teachers and in front of boys.

Hygiene and menstrual hygiene management: menstrual hygiene management (MHM)

(not applicable in schools with boys only and preschools)

Question	Rationale
QH22. Does the school have MHM-specific procedures for operation, maintenance and consumable provision? ☐ Yes ☐ No *Note: you may wish to give examples, such as provision of sanitary bins in the girls' toilet facilities/toilet cubicles, sanitary bags for safe disposal, regular bin emptying, regular procurement of menstrual hygiene products.*	Safe and environmentally managed disposal remains a neglected aspect of MHM in schools *(46)*. If not emptied regularly, sanitary disposal units or bins become over-full and smelly, which creates an unhygienic environment, leading to toilet avoidance and health issues.
QH23. Are you aware of girls missing classes because of menstruation? ☐ Yes, it is a common phenomenon ☐ Yes, but it happens rarely ☐ Girls don't miss classes because of menstruation ☐ I don't know *Note: read all the answer options out loud and let the respondent select one.* *The information should be compared with the data obtained through the questionnaire for pupils.*	In many countries, girls miss school or leave school early when they are menstruating *(44)*. Availability of good hygiene facilities; access to safe, private toilet in schools; and free access to menstrual hygiene products are important to ensure equitable learning opportunities. If girls do not have access to the means for MHM, they will often choose to leave school early, or stay at home *(44; 47; 48)*. This may have negative implications for their overall academic performance and achievement levels.
QH24. In your opinion, what could the school do to make it easier for girls to attend school during menstruation? QH24.1 Provide access to information and MHM education ☐ Yes ☐ No QH24.2 Improve sanitation facilities (privacy, accessibility, cleanliness) ☐ Yes ☐ No QH24.3 Improve access to menstrual hygiene materials ☐ Yes ☐ No QH24.4 Provide social support for school girls (overcoming MHM associated stigma and marginalization) ☐ Yes ☐ No QH24.5 More effective disposal of menstrual waste ☐ Yes ☐ No QH24.6 Other (please specify):_____ _____ ☐ Yes ☐ No *Note: don't give hints. Let the respondent try to give their answer(s) first, then read the remaining answers out loud in random order.*	A critical assessment of the current situation regarding MHM can be an opportunity to raise awareness and interest in a neglected topic. This question helps school staff to self-assess areas for improvement and encourages staff to critically think about their role in improving MHM provisions.

Checklist for observations

This checklist is meant for onsite observation on the school premises at a specific point when the school is in use, as in a routine inspection or a one-shot survey. It should be carried out by assessors trained in conducting objective onsite checks according to the predefined criteria. All responses in the checklist should be based on observation and reflect the condition at the time of the visit. It has been structured to enable the assessor to select only one answer for each question or subquestion, for ease of completion.

The checklist for observations has the same components as the questionnaire for school staff and covers elements including availability, functionality, privacy, accessibility, quality, operation and maintenance, as well as WASH education, policies and practices in the school. Its aim is to obtain information that is as objective as possible. Data obtained through the checklist may be triangulated with details given by respondents to the questionnaire for school staff and, if applicable, the questionnaire for pupils, thereby validating it to ensure that the findings represent the real situation regarding WASH in the school.

To ensure quality of data, assessors should become familiar with the questions and the definitions in the instrument prior to starting data collection. Taking photos during the onsite visits is also useful, if feasible.

Before starting the observation visit, it is important to inform the school management to ensure that school activities are not interrupted. The purpose of the visit and how the results will be used should be explained. Assessors should emphasize that the primary aim of the data collection is to identify opportunities for improvement and provide support and advice, rather than merely imposing sanctions.

If the assessor needs to visit toilet facilities dedicated to a different sex from their own, they might ask staff of the relevant sex to help, or to accompany them and temporarily limit access to the facility during the observation.

Hygiene conditions in school facilities can differ greatly depending on the time of the day when the visit occurs. It is thus important to consider this factor during planning and evaluation of the data collection, and preferably to plan the visit at the end of the school day or at least after a break, to see the state of the facilities as users find them when they visit the toilets.

To increase the quality and reliability of the data, it is also important to visit as many toilet facilities in the school as possible, as some may be used more or less than others. Preferably, all facilities should be visited, s to allow proper evaluation of the WASH services in the school. The auxiliary tables in the Annex will assist with keeping track of the status observed in each facility and of the numbers to record for final calculations to complete the checklist.

Water: availability; functionality

Question	Rationale
CW1. What is the main source of drinking water provided by the school? CW1.1 Piped water supply into school building ☐ Yes ☐ No CW1.2 Piped water supply into school yard/plot ☐ Yes ☐ No CW1.3 Public tap/standpipe out of school yard/plot ☐ Yes ☐ No CW1.4 Protected well/spring ☐ Yes ☐ No CW1.5 Rainwater ☐ Yes ☐ No CW1.6 Unprotected well/spring ☐ Yes ☐ No CW1.7 Packaged bottled water ☐ Yes ☐ No CW1.8 Tanker-truck or cart ☐ Yes ☐ No CW1.9 Surface water (lake, river stream) ☐ Yes ☐ No CW1.10 No water source available ☐ Yes ☐ No *Note: a protected well (which may include boreholes, tubewells or dug wells) or spring is protected from any possible contaminants (e.g. solid waste, surface run-off, chemicals, pathogens from latrines) through a fence, an apron or seal, a cover and a drainage system (31).* *The answer options may need to be adapted (in line with the related question in the questionnaire for school staff) to reflect the local context and terminology. Photos showing supply technology options may be useful, where feasible.* *The information should be compared with the data obtained through the questionnaire for school staff.* *These data can be used to answer JMP core question W1.*	Safe drinking-water is essential for the physical and cognitive development and well-being of children. A potentially safe (or improved) drinking-water source, by the nature of its construction, has the potential to deliver safe water suitable for human consumption by protecting the source from outside contamination. Potentially safe (or improved) drinking-water sources may include the following types: piped, protected well or spring, rainwater catchment, bottled water and water delivered by tanker-trucks and small carts *(16).* An unprotected well or spring and surface water are sources that do not ensure the safety of the water quality and may pose health risks to users. Different maintenance procedures should be implemented at the school according to the water source.
CW2. Is drinking-water from the main source currently available at the school? ☐ Yes ☐ No ☐ Not applicable *Note: to be considered available, water should be available at the school at the time of the inspection, either directly from the main source or stored water originally from the main source. If there is no water source at the school, select "not applicable".* *Confirm by checking whether water runs from water points connected to the main water source or whether water tanks/packages are present and contain water.* *These data can be used to answer JMP core question W2.*	Providing continuous water supply ensures that pupils can stay hydrated and focused in class. Intermittent water supply may lead to poor water quality due to possible infiltration of contaminated water caused by pressure variations, and elevated risk of waterborne illness. It can also lead higher maintenance costs due to higher corrosion rates *(33)*. Irregular interruptions may indicate a localized issue in the system.

Water: availability; functionality

Question	Rationale
CW3. How many drinking-water points are at the school? Insert total number:_____ Insert number of functional water points:_____ *Note: insert digits only. Water points include any point where children can get water to drink when needed. These may include, but are not limited to, piped taps, water fountains, jugs, water coolers and buckets with taps, as well as protected wells or rainwater tanks if children get water directly from those sources. Count the total number of drinking-water points for pupils at the school. To be considered functional, the water point should be in use, not broken down and with running water. If there is no water point at the school insert "0".* *Confirm by opening the tap/using the water point.* *The information should be compared with the data obtained through the questionnaire for school staff.* *Use these numbers for the calculation of the water-point–pupil ratio, using the data provided by the school management in the section on general information on the school.* *These data can be used to answer JMP core question XW5.*	If the number of drinking-water points is insufficient, or if they are hard to access, students may avoid drinking-water or choose unhealthy alternatives. There are no international recommendations on the number of water points (pupil–fixture ratio) at school, but national standards may be available and should be considered for interpretation. The ratio of pupils per water point should nevertheless allow provision of sufficient capacity (1–2 litres of water per pupil for drinking, depending on the school day and whether physical activities are done) with no or very short waiting time.

Water: accessibility

Question	Rationale
CW4. Where are the drinking-water points (intended for drinking) located? CW4.1 In the school building on each floor ☐ Yes ☐ No ☐ NA CW4.2 In the school building, not on each floor ☐ Yes ☐ No ☐ NA CW4.3 In the toilet facilities ☐ Yes ☐ No ☐ NA CW4.4 Outside of the toilet facilities (common areas or in class) ☐ Yes ☐ No ☐ NA CW4.5 Near the canteen ☐ Yes ☐ No ☐ NA CW4.6 Outside or in a separate building ☐ Yes ☐ No ☐ NA CW4.7 Other (please specify):_____ ☐ Yes ☐ No ☐ NA _____ *Note: if there are no drinking-water points at the facility, select "NA" (not applicable).* *The answer options may need to be adapted to reflect any available national standards on the presence of drinking-water points in specifically defined areas.*	This question explores whether the location for drinking-water is comfortable and easy to reach by pupils. Water points that are far away or considered uncomfortable may lead to pupils avoiding or reducing their water intake, affecting their attention in class and eventually their health. Facilities should be easy to reach, close to the classroom and the recreational areas (in the same building, on the same floor and near the cafeteria) and preferably located outside the toilet facilities as pupils may avoid these because of bad odours and dirt.

Water: availability; functionality

Question	Rationale
CW5. Is at least one drinking-water point accessible to the smallest children at the school? ☐ Yes ☐ No ☐ Not applicable *Note: to be considered accessible, the water tap can be reached and easily opened/closed by the smallest children. If there are no drinking-water points at the facility, select "not applicable".* *The questions may not be relevant in secondary schools.* *The information should be compared with the data obtained through the questionnaire for staff and the questionnaire for pupils.* *These data can be used to answer JMP core question XW4.*	Age-friendly taps are mounted at the appropriate height from the ground surface to match the height of the students. This question's relevance depends on the information on the grades available and type of school provided in the section about "general information on the school".
CW6. Is at least one drinking-water point accessible for students with limited mobility? ☐ Yes ☐ Drinking-water points are not accessible ☐ Not applicable CW6.1 If drinking-water points are not accessible, what barriers are present? CW6.1.1 no access (e.g. stairs, narrow door) ☐ True ☐ False ☐ NA CW6.1.2 inadequate tap height ☐ True ☐ False ☐ NA CW6.1.3 no handrail ☐ True ☐ False ☐ NA CW6.1.4 water point difficult to open/close ☐ True ☐ False ☐ NA *Note: to be considered accessible, water can be accessed via a clear path without stairs or steps,[4] which is free of obstructions and has age-appropriate handrails; the tap can be reached from a seated position; and the water source/dispenser can be opened/closed with minimal effort with one closed fist or feet.* *If there are no drinking-water points at the school, select "not applicable", and for question CW6.1 if water points are accessible to all, select "NA".* *The answer options may need to be adapted to reflect any available national standards on the provision of WASH services for pupils with different disabilities, such as visual impairment, or an additional question could be included.* *The information should be compared with the data obtained through the questionnaire for pupils.* *These data can be used to answer JMP core question XW3.*	A lack of accessible facilities can deter children with disabilities from attending school. Accessibility elements may include, but are not limited to, easy-to-grip handrails, guided systems, proper lighting, ramps, wider doors, extra room inside stalls, special grips/foldable seats, light lids and taps and handles that are manoeuvrable with one hand or with feet *(49)*.

[4] Maximum ramp slope should follow national standards. In the absence of national standards, the following global guidelines are recommended: a maximum ramp slope of 1:20 without handrails or 1:10 with handrails for the first 10 metres. If a longer ramp is needed, there should be an intermediate landing every 10 metres.

Water: quality of services, operation and maintenance

Question	Rationale
CW7. What quality characteristics apply to the drinking-water on the premises? CW7.1 Water has no colour ☐ True ☐ False ☐ NA CW7.2 Water has no odour ☐ True ☐ False ☐ NA CW7.3 Water has no taste ☐ True ☐ False ☐ NA CW7.4 Water has no turbidity ☐ True ☐ False ☐ NA *Note: check the water from one of the water points designated for drinking accessible to most facility users. If there is no water at the school, select "NA".*	This question assesses basic indications of water quality with respect to its organoleptic properties. This information should not replace a proper test for health-related parameters, such as *E. coli* (indicating faecal contamination) of harmful chemicals, but it is useful to have an approximate evaluation in the meantime, while appropriate tests are organized and conducted.
CW8. Are there signs of measures taken at the school level with respect to drinking-water? CW8.1 Functioning means for water treatment ☐ Yes ☐ No ☐ NA CW8.2 No damage or crack of the water system or source ☐ Yes ☐ No ☐ NA CW8.3 Clean area around the water source ☐ Yes ☐ No ☐ NA CW8.4 Means for protection of water source (fence, cover, sealing) ☐ Yes ☐ No ☐ NA CW8.5 Other (please specify):_____ ☐ Yes ☐ No ☐ NA _____ *Note: if there is no water at the school, select "NA". For subquestion CW8.3 and CW8.4, if there is no water source or if the water source is not located on the school premises, select "NA".* *The information should be compared with the data obtained through the questionnaire for school staff.* *Terminology should be adapted based on the local context.* *These data can be used to answer JMP core question XW6a.*	This question explores evidence of measures to keep the drinking-water system clean and functional and safe to drink. All schools should monitor and keep the water supply in good condition. Further, schools with their own water supply can prevent contamination by ensuring a water source that is intact and free from dirt, with a proper cover and isolation. The specific health risks of the water supply should be assessed systematically using sanitary inspections, as described in the WHO guidelines for drinking-water quality *(26)*. If water treatment is in place, the assessor may verify that the treatment installation is properly operated and maintained and that there is evidence of treatment efficiency.
CW9. Are records available for tracking performance of regular maintenance of the water points? ☐ Yes ☐ No ☐ Not applicable *Note: if there are no drinking-water points at the facility, select "not applicable". Records may show the time schedules and the signature of the person in charge of maintenance and may be hanging on the walls at critical places or may be requested by the school management.* *The information should be compared with the data obtained through the questionnaire for school staff.*	Regular maintenance, including replacement of packaged water whenever empty, cleaning of water fountains and faucets with disinfectant and replacement or small repairs of outdated or non-functional equipment is important to efficiently ensure safe water on the school premises. Records and schedules can be useful to track the effectiveness of the procedures in place and facilitate improvement planning.

Water: education and practices

Question	Rationale
CW10. Are informative/educational materials about water and hydration available on the school premises? ☐ Yes ☐ No *Note: materials may include posters at critical points, reminders or nudges, or leaflet for children and/or parents.* *The information should be compared with the data obtained through the questionnaire for pupils.*	Pupils should be encouraged to drink water during the day to promote hydration and foster school performances as well as pupils' well-being. Healthy behaviours require a sustained promotion *(18)*. Visual reminders and educational materials at school can help to encourage children to drink and stay hydrated.
CW11. Is information on water quality easily accessible for school staff and pupils? ☐ Yes ☐ No *Note: information could include a label near the tap confirming that water is suitable to drink or indicating that it is not suitable for drinking, or proper formulated communication in a dedicated area (such as a noticeboard).*	If water is not suitable for drinking, it is important that this is clearly communicated to school staff and pupils, to avoid consumption that may severely affect the physical and cognitive development of children and affect teachers' health.

Sanitation: availability, functionality, privacy

Question	Rationale
CS1. What type of toilets/latrines for pupils are available at the school? CS1.1 Flush/pour-flush toilets ☐ Yes ☐ No CS1.2 Pit latrines with slab ☐ Yes ☐ No CS1.3 Composting toilets ☐ Yes ☐ No CS1.4 Pit latrines without slab ☐ Yes ☐ No CS1.5 Hanging latrines ☐ Yes ☐ No CS1.6 No toilets or latrines ☐ Yes ☐ No *Note: the answer options may need to be adapted to reflect national definitions and terminology.* *The information should be compared with the data obtained through the questionnaire for school staff.* *These data can be used to answer JMP core question S1.*	Access to safe sanitation in schools is essential for ensuring good health and overall well-being of pupils. The lack of safe sanitation facilities may lead to infections such as diarrhoea and school absence *(27)*. General information about the type of toilets/latrines pupils are using provides an insight into the safety of the facility in use, as well as the different operation and maintenance procedures needed. Only improved toilets, defined as designed to separate human excreta from human contact hygienically, can be considered safe. These may include flush/pour-flush toilets, pit latrines with slab and composting toilets.

Sanitation: availability, functionality, privacy

Question	Rationale

CS2. How many toilets cubicles/latrines for pupils are at the school?

	Girls only	Boys only	Unisex
Total number	CS2.1.1	CS2.1.2	CS2.1.3
Number that are available	CS2.2.1	CS2.2.2	CS2.2.3
Number that are functional	CS2.3.1	CS2.3.2	CS2.3.3
Number that are private	CS2.4.1	CS2.4.2	CS2.4.3
Number that are usable	CS2.5.1	CS2.5.2	CS2.5.3

Note: insert digits only. As per the definition of "toilet" used in this tool, urinals should be included in the overall number of toilets. "Unisex toilets" indicates the number of toilet seats or latrines inside a toilet facility used by both girls and boys at the same time. Additional categories relevant to the country context and the surveillance scope could be added, such as a breakdown of the number of urinals, gender-neutral toilet rooms and teachers' toilets. In schools where boys and girls attend in separate shifts and use the same facilities but at different times, the total number of toilet cubicles can be entered in both "girls only" and "boys only" columns. A private toilet room with only one toilet that can be used by one person exclusively at a time, may be counted in an extra column called "gender-neutral". If there are no toilets/latrines insert "0".

An "available" toilet means that the door to the toilet facility or the toilet cubicle is unlocked or a key is available at all times. "Functional" means that the toilet is not broken, the toilet hole is not blocked, and water is available for flush/pour-flush toilets at the time of the inspection. "Private" means that there are (partitioning) walls, a closable door that locks from the inside and no large gaps in the cubicle structure. For urinals, "private" means with integral partitioning walls. Lockable toilet doors may not be applicable in preschools. A "usable" toilet is available, functional and private at the same time.

The information should be compared with the data obtained through the questionnaire for school staff.

These data can be used to answer JMP core questions S2 and S3.

Sufficient usable (available, functional and private) toilets/latrines should be available in the school to meet pupils' basic needs at all times. The ratio of pupils to toilets often exceeds national guidelines, for both girls and boys, resulting in long waiting times that discourage use and cause inconvenience.

The third column about shared toilets, indicating toilet facilities with cubicles/seats/latrines used by both girls and boys at the same time, is necessary to determine the total number of toilet seats in schools where toilets are not sex-separated.

CS3. Are there toilet facilities for staff (separate from pupils' toilet facilities)?

☐ Yes

☐ No

Note: facilities dedicated to staff should be clearly indicated by a sign or text on the door.

Separate toilets for staff and pupils may be appropriate, especially in primary schools where age-appropriate toilets are provided *(18)*, although toilets for those with limited mobility or vision may be accessed by pupils, teachers and visitors.

Sanitation: accessibility

Question	Rationale
CS4. Where are the pupils' toilet facilities located? ☐ Within the school building on each floor ☐ Within the school building but not on each floor ☐ Outside the school building, but on the premises ☐ Off the premises ☐ Some within the school building and some outside the building ☐ Not applicable *Note: if no toilets/latrines for pupils are available, select "not applicable". If the school building has only one floor and toilets are within the school building, select the answer option "within the school building on each floor".* *These data can be used to answer JMP expanded question XS8.*	Toilet facilities may be evenly distributed around the school building, preferably on each floor, and located close to classrooms, so that pupils can use them during learning activities. If located in a remote area, pupils may face time challenges in accessing them between classes and avoid their use. Remote facilities outside the school building further hinder accessibility, especially when it rains and in cold seasons *(4)*. This question may be especially relevant in cold climates, boarding schools and regions with prolonged periods of darkness during school hours.
CS5. Is at least one toilet/latrine accessible to the smallest children at the school? ☐ Yes ☐ No ☐ Not applicable **CS6. If yes, what usability requirements are met?** CS6.1 The cubicle is available ☐ Yes ☐ No ☐ NA CS6.2 The cubicle is functional ☐ Yes ☐ No ☐ NA CS6.3 The cubicle is private ☐ Yes ☐ No ☐ NA *Note: to be considered accessible, a toilet/latrine that has a smaller toilet hole, a lower seat and a lower door handle should be available that can be used by the smallest children.* *For question CS5, if there are no toilets/latrines at the school, select "not applicable". For question CS6, if there are no toilets/latrines at the school or there is no toilet cubicle/latrine accessible to the smallest children, select "NA" (not applicable). "Available" means that doors are unlocked or a key is available at all times; "functional" means that the toilet is not broken, the toilet hole is not blocked, and water is available for flush/pour-flush toilets; "private" means that there are closable doors that lock from the inside and no large gaps in the structure, at the time of the observation.* *This question may not be relevant/applicable in secondary schools.* *The question may be adapted and/or an additional question may be included to ask whether there are accessible urinals for smaller pupils at the school.* *The information should be compared with the data obtained through the questionnaire for school staff and the questionnaire for pupils.* *These data can be used to answer JMP expanded question XS6.*	Easily accessible sanitation infrastructure is crucial. Schools should provide toilets that are within physical reach of all pupils, including the youngest ones. This question explores possible issues in accessing toilets by the smallest children at the school.

Sanitation: accessibility

Question	Rationale
CS7. Is at least one toilet cubicle accessible to those with limited mobility? ☐ Yes ☐ No ☐ Not applicable **CS8. If yes, what usability requirements are met?** CS8.1 The cubicle is available ☐ Yes ☐ No ☐ NA CS8.2 The cubicle is functional ☐ Yes ☐ No ☐ NA CS8.3 The cubicle is private ☐ Yes ☐ No ☐ NA *Note: to be considered accessible, the cubicle can be accessed via a clear path without stairs or steps,[5] which is free of obstructions and has age-appropriate handrails; there is enough space inside for a wheelchair user to enter, turn, close the door and park by the toilet (1.5 m^2); the door is wide enough for a wheelchair (at least 80 cm) and opens outward with minimal or no difference in floor height between the outside and inside; and the door handle and seat are within reach of children using wheelchairs or crutches/sticks, including a fixed raised pan or movable raised toilet seat to accommodate children who may have difficulty squatting. This definition may need to be adapted, based on the national standards.* *For question CS7, if there are no toilets/latrines at the school, select "not applicable". For question CS8, if there are no toilets/latrines at the school or no toilet cubicle is accessible to those with limited mobility, select "NA".* *The information should be compared with the data obtained through the questionnaire for school staff and the questionnaire for pupils.* *These data can be used to answer JMP expanded question XS7.*	Schools should provide access to toilets for all. Pupils with a disability are less likely to have access to a school toilet: in both high- and middle-income countries, schools are often observed not providing accessible sanitation *(4)*.

[5] Maximum ramp slope should follow national standards. In the absence of national standards, the following global guidelines are recommended: a maximum ramp slope of 1:20 without handrails or 1:10 with handrails for the first 10 metres. If a longer ramp is needed, there should be an intermediate landing every 10 metres.

Sanitation: quality of services, operation and maintenance

Question	Rationale
CS9. Are there any records of cleaning and maintenance schedules of the toilet facilities? ☐ Yes, satisfactory ☐ Yes, but incomplete or outdated ☐ No ☐ Not applicable *Note: if no toilets/latrines for pupils are available, select "not applicable". Confirm by checking the date of last cleaning activity and how regular the records are. Cleaning and maintenance records provide proof of conducting the procedure. To be satisfactory, they should be signed by the responsible person and indicate date and time when the cleaning procedure was completed.* *The information should be compared with the data obtained through the questionnaire for school staff.*	It is important that schools have a reliable system in place to keep toilets, handwashing and water facilities usable and clean, thereby fostering their acceptance and the practice of healthy behaviours. Correctly documented cleaning schedules are a way to check the efficiency of cleaning procedures and ensure that they are carried out regularly.
CS10. In general, how clean are the pupils' toilets facilities? ☐ All or more than half of the facilities are clean ☐ All or more than half of the facilities are somewhat clean ☐ All or more than half of the facilities are not clean ☐ Not applicable *Note: if no toilets/latrines for pupils are available, select "not applicable". Visit as many of the pupils' toilets as possible and select the appropriate description based on general impression and the following definitions. "Clean": all toilets do not have a strong smell or significant numbers of flies or mosquitos, and no faeces, urine spots or litter are visible on the floor, walls, seat (or pan) or around the facility. "Somewhat clean": there is some smell and/or some sign of faecal matter in some of the toilets. "Not clean": there is a strong smell and/or presence of faecal matter in most toilets.* *The information should be compared with the data obtained through the questionnaire for pupils.* *These data can be used to answer JMP expanded question XS5.*	Studies document higher rates of infectious, gastrointestinal, neuro-cognitive and psychological illnesses where pupils are exposed to inadequate toilet facilities *(43)*. Facilities are often reported to be dirty, messy and beneath pupils' hygiene standards. Negative perception of school toilets due to inadequate cleanliness is one of the main reasons for toilet avoidance *(3; 50)*. The presence of dirt and/or litter may indicate insufficient frequency of maintenance measures such as cleaning and bins emptying.
CS11. Is lighting in the toilet facilities adequate and functional? ☐ All toilets have functional lighting ☐ Half or more of the toilets have functional lighting ☐ Very few or none of the toilets have functional lighting ☐ Not applicable *Note: if no toilets/latrines for pupils are available, select "not applicable". Visit as many of the pupils' toilets as possible and select the appropriate answer option. "Lighting" refers to both natural light and electric lighting (necessary for late hours and during the winter season).* *The information should be compared with the data obtained though the questionnaire for school staff and the questionnaire for pupils.* *These data can be used to answer JMP expanded question: XS11.*	Inadequate illumination may prevent toilet use. Lack of functional lighting in the school toilets hinders acceptability and use of toilet facilities, especially by younger pupils and girls. While this question is relevant in most settings, it may be especially appropriate for countries with prolonged periods of darkness during the school day.

Sanitation: quality of services, operation and maintenance

Question	Rationale
CS12. Are there signs of adequate ventilation in the toilet facilities? ☐ Yes, in all toilet facilities ☐ In a half or more than half of the toilet facilities ☐ In very few or none of the toilet facilities ☐ Not applicable *Note: if no toilets/latrines for pupils are available, select "not applicable". Visit as many of the pupils' toilets as possible and select the appropriate answer based on general impression and the definition of "adequate ventilation": absence of bad smell or visible mould.* *The information should be compared with the data obtained though the questionnaire for school staff.* *These data can be used to answer JMP expanded question XS5.*	Absence of a strong odours is one of the criteria to assess facilities cleanliness as well as the ventilation. Bas smells may indicate that school toilet is not properly maintained/cleaned or that it lacks ventilation systems. Bad smell is one reason pupils deem toilets to be unacceptable *(50)*. Inadequate ventilation can attract insects and facilitate growing of mould, which may have consequences for the health of the users.
CS13. Are means for anal cleansing provided in pupils' toilet cubicles? ☐ Yes, in all toilet cubicles ☐ Yes, in a half of or more of the toilet cubicles ☐ In a few or none of the toilet cubicles ☐ Not applicable *Note: if no toilets/latrines for pupils are available, select "not applicable". Visit as many of the pupils' toilet cubicles as possible and select the appropriate description based on general impression. In schools that have a multicultural student body, respond "yes" only if materials are provided to suit the needs of all students.* *The question may need to be adapted to reflect the adequate terminology and definitions of means for anal cleansing.* *The information should be compared with the data obtained through the questionnaire for school staff and the questionnaire for pupils.* *These data can be used to answer JMP expanded question XS10.*	Culturally appropriate means for anal cleansing should be available within the toilet. For example, this could be a water tap/hose or materials for wiping (e.g. toilet paper), including a disposal container where required *(27)*.

Sanitation: quality of services, operation and maintenance

Question	Rationale
CS14. Are there waste bins in the pupils' toilet facilities? ☐ Yes, there are waste bins in all toilet facilities ☐ There are waste bins in a half or more of the toilet facilities ☐ Waste bins can be found in a few or none of the toilet facilities ☐ Not applicable **CS15. If general waste bins are provided, are they adequate to prevent accumulation of litter on the floor?** ☐ Yes ☐ No ☐ Not applicable *Note: visit as many of the pupils' toilet facilities and toilet cubicles as possible and select the appropriate description based on general impression. Bins are inadequate if too small or made of large metal mesh and without a plastic bag preventing small litter from falling through the holes.* *If no toilet facilities for pupils are available, and for question CS15, if no toilet facilities or bins are available, select "not applicable".* *The information should be compared with the data obtained through the questionnaire for school staff.*	Inappropriate solid waste management practices may not only cause an unfavourable appearance of the school premises but can also pose a risk to the health of pupils and staff. Adequate waste disposal, including provision of covered bins and their regular emptying, is essential for keeping toilet facilities clean and functional.

Sanitation: education and practices

Question	Rationale
CS16. Are there any posters promoting healthy and/or hygienic use of the toilets/latrines? ☐ Yes ☐ No *Note: posters may be found in the toilet facilities or the toilet cubicles. Educational posters may be reminders, for example, to visit the toilets regularly, to wash hands after using the toilets or not to dispose of waste that could block the toilet, or information about how to keep the toilet clean.*	Educational interventions to promote health and hygienic use of toilets should be seen as an integral component of providing sanitation at school, as infrastructure services alone will not ensure health prevention and promotion *(4; 27)*. Visual reminders and educational activities at school can help to encourage pupils to practise healthy behaviours and maintain clean facilities.

Hygiene and menstrual hygiene management: availability, functionality

Question	Rationale
CH1. How many handwashing facilities are at the school? CH1.1 Total number of handwashing facilities CH1.2 Number that are functional CH1.3 Number of functional facilities with soap *Note: insert digits only. If there are no handwashing facilities at the school, insert "0".* *A "handwashing facility" is any device or infrastructure that enables students to wash their hands effectively using running/poured water, such as a sink with tap, a water tank with tap, a bucket with tap, a tippy tap or other similar device. A shared bucket used for dipping hands is not considered an effective handwashing facility.* *To be considered functional, handwashing facilities should not be physically broken, sinks should free of overflows and not blocked, taps should be working properly, and water should be running. Observation can be done during breaks, when pupils are using handwashing facilities, or by checking functionality during the inspection. To be considered available, soap (liquid soap in dispensers/solid soap) should be available at one or more of the handwashing facilities in the specific area of the school (e.g. female/male toilet facility, classroom, corridor) at the time of the inspection. Soapy water (a prepared solution of detergent suspended in water) can be considered an alternative to soap, but not as a replacement for water, as non-soapy water is needed for rinsing.* *Confirm functionality by checking whether water runs or can be poured from the handwashing facility.* *These data can be used to answer JMP core questions H1 and H2, as well as JMP expanded question XH4.*	Functional handwashing facilities with soap at school are essential to promote health and well-being of pupils and prevent infectious disease transmission *(18; 40)*. Handwashing facilities should be available in sufficient quantities to meet pupils' basic needs at all times. Minimum standards for availability are context specific: the pupil–handwashing facility ratio should be compared with national standards. Good hygiene behaviour and the effectiveness of hygiene promotion in schools are severely limited where both water and soap are not available and facilities non-functional. Handwashing with water and soap is much more effective in removing bacteria from hands than handwashing with water only *(40)*.
CH2. If handwashing facilities are not functional, what are the reasons? CH2.1 No water ☐ Yes ☐ No ☐ NA CH2.2 Broken/missing faucet ☐ Yes ☐ No ☐ NA CH2.3 Broken basin ☐ Yes ☐ No ☐ NA CH2.4 Clogged sinks ☐ Yes ☐ No ☐ NA CH2.5 No drainage in place ☐ Yes ☐ No ☐ NA CH2.6 Other (please specify):_____ ☐ Yes ☐ No ☐ NA _____ *Note: if there are no handwashing facilities at the school, select "NA" (not applicable).* *The answer options may need to be adapted to reflect alternative local types of handwashing facilities, such as a water tank with tap, bucket with tap, tippy tap or other similar device. A shared bucket used for dipping hands is not considered an effective handwashing facility.*	Functional handwashing facilities make it possible for pupils to practise good hygiene, regularly washing their hands with water and soap. The way pupils use handwashing facilities, and in some cases whether they use them at all, can depend on the physical quality of the facility. Reasons for lack of functionality may lie within or without the school responsibility and could be linked with inefficient operation and maintenance. Information about the specific issues may indicate possible gaps in resources, capacity or implementation practice and inform improvement measures.

Hygiene and menstrual hygiene management: availability, functionality

Question	Rationale
CH3. Is hot/warm running water provided at handwashing facilities? ☐ Yes, at all or more than half of handwashing facilities ☐ Yes, at less than half ☐ No ☐ Not applicable	Hands can be washed effectively without hot/warm water *(41)*, but availability of hot/warm water can increase acceptability and promote handwashing practice among pupils, especially during periods of cold weather *(42)*.

Note: if there are no handwashing facilities at the school or if no water is available for handwashing select "not applicable".

Confirm availability by checking whether warm water runs from taps.

Hygiene and menstrual hygiene management: accessibility

Question	Rationale
CH4. Where are handwashing facilities located? CH4.1 Near the toilets ☐ Yes ☐ No ☐ NA CH4.2 In food preparation areas ☐ Yes ☐ No ☐ NA CH4.3 In food consumption areas ☐ Yes ☐ No ☐ NA CH4.4 In classrooms ☐ Yes ☐ No ☐ NA CH4.5 In school yard ☐ Yes ☐ No ☐ NA CH4.6 Other (please specify):_____ ☐ Yes ☐ No ☐ NA	A crucial component of encouraging handwashing is making sure handwashing facilities are conveniently located. It has been demonstrated that pupils are more likely to wash their hands at critical times, such as before eating and after using the toilet, when handwashing facilities are located close to food consumption areas or toilets *(42)*.

Note: if there are no handwashing facilities at the school, select "NA". If handwashing facilities are located elsewhere than in the answer options , note this down under "other".

The answer options may need to be adapted to reflect any available requirements in the national standards on the location of handwashing facilities.

These data can be used to answer JMP expanded question: XH3.

CH5. Are handwashing facilities accessible to those with limited mobility? ☐ Yes ☐ No ☐ Not applicable	Handwashing facilities in schools should be physically accessible to everyone. Inaccessible handwashing facilities relate directly to the quality of the learning environment and may affect access to education, especially for those with limited mobility.

Note: if there are no handwashing facilities at the school, select "not applicable". To be considered accessible, handwashing facilities can be accessed via a clear path without stairs or steps, which is free of obstructions and has age-appropriate handrails; the tap and soap are reachable from a seated position; and the tap can be operated by feet and/or one closed fist with minimal effort.

The information should be compared with the data obtained through the questionnaire for pupils.

These data can be used to answer JMP expanded question XH1.

Hygiene and menstrual hygiene management: accessibility

Question	Rationale
CH6. Are handwashing facilities accessible to the smallest children at the school? ☐ Yes ☐ No ☐ Not applicable *Note: if there are no handwashing facilities at the school, select "not applicable". To be considered accessible, the smallest children should be able to reach the tap and soap, and be able to operate the tap on their own with minimal effort.* *The information should be compared with the data obtained through the questionnaire for pupils.* *The question may not be relevant in secondary schools.* *These data can be used to answer JMP expanded question XH2.*	This question explores possible obstacles in accessing handwashing facilities by younger pupils. Inaccessible handwashing facilities directly relate to the quality of learning environment and may affect access to education, especially for those with limited mobility.

Hygiene and menstrual hygiene management: quality of services, operation and maintenance

Question	Rationale
CH7. Are there any records of cleaning and maintenance schedule? ☐ Yes, satisfactory ☐ Yes, but incomplete or outdated ☐ No *Note: confirm by checking the date of last cleaning activity and how regular the records are. Cleaning and maintenance records provide proof of conducting the procedure. To be satisfactory, they should be signed by the responsible person and indicate date and time when the cleaning procedure was completed.* *The information is also investigated specifically for toilet facilities under question CS9.*	Schools should have a reliable system in place to keep toilets, handwashing and water facilities usable and clean. Regular maintenance, once a day, increases the lifetime of school WASH facilities, keeping them functional and preventing breakdown and expensive repairs *(18; 51)*.
CH8. Are any cleaning materials present on school premises? ☐ Yes, sufficient ☐ Yes, but insufficient ☐ There are no cleaning materials present on the premises *Note: answer "yes, sufficient" should be selected only if floor mops (one for toilets, one for other areas), bucket, broom(s), brush, sponges, gloves, a number of clothes and detergent (e.g. chlorine bleach or similar) are available for cleaning school toilet facilities.* *The number of cleaning cloths should be sufficient to clean different sanitary fixtures such as taps/basins, door handles and toilets with different cloths. If cleaning is contracted externally, a more basic set is sufficient.*	Cleaning is part of the operation and maintenance plan for WASH facilities in schools. Cleaning materials should be planned and budgeted for in each school to keep WASH facilities clean, functional and user-friendly.

Hygiene and menstrual hygiene management: quality of services, operation and maintenance

Question	Rationale
CH9. Are the handwashing facilities clean? ☐ All or more than half of the handwashing facilities are clean ☐ All or more than half of the handwashing facilities are somewhat clean ☐ All or more than half of the handwashing facilities are not clean *Note: observe as many handwashing facilities as possible and select the appropriate description based on the following definition of "clean": sinks and taps are free from dirt, with no spots of litter/waste at the day of the inspection.*	WASH facilities in schools are often reported to be dirty, messy and beneath pupils' hygiene standards *(4; 50)*. Negative perception of handwashing facilities due to inadequate cleanliness may be a reason for their avoidance, increasing the risk of unhealthy behaviours and disease transmission.
CH10. What hand drying materials are provided? CH10.1 Disposable paper towels ☐ Yes ☐ No CH10.2 Reusable fabric hand towels ☐ Yes ☐ No CH10.3 Individual towels ☐ Yes ☐ No CH10.4 Air dryer/electric hand dryer ☐ Yes ☐ No CH10.5 Other (please specify):_____ ☐ Yes ☐ No _____ *Note: "air dryer/electric hand dryer" should be selected only if the equipment is functional.*	To prevent the transmission of infectious diseases efficiently, children should dry their hands after washing them. Hands can easily be re-contaminated by not being dried or by incorrect drying (with dirty towels or on clothes). As with water and soap, hygienic hand drying materials should be available to pupils on a regular basis. Depending on the means provided, different procedures for operation and maintenance may be required. For example, electric air dryers are more prone to bacterial contamination and require regular maintenance procedures. Reusable fabric hand towels do not represent a hygienic means for hand drying.

Hygiene and menstrual hygiene management: education and practices

Question	Rationale
CH11. Is any information about handwashing/hand hygiene visible at the school? ☐ Yes ☐ No *Note: information may include posters encouraging handwashing at critical times (before eating and after using the toilet) or explaining how handwashing should be done, and may be located in classrooms, canteen, toilet facilities or elsewhere.*	Educational interventions to promote handwashing in school settings aim to improve knowledge and awareness about healthy hand hygiene to reduce the spread of infections. Handwashing promotion has been associated with reduced absenteeism and lower risk of gastrointestinal infections, as well as increased compliance with handwashing practice *(4; 41)*.

Hygiene and menstrual hygiene management: menstrual hygiene management (MHM)

(not applicable in schools with boys only and preschools)

Question	Rationale
CH12. Is a private space available for MHM at the school? ☐ Yes ☐ No *Note: private spaces for girls may be separate from latrines and toilets, and their design may vary based on local context, but at minimum they should ensure availability of water and soap for personal hygiene in a private space (have closable doors that lock from the inside, and no holes, cracks, windows or low walls that would permit others to see in).* *The information should be compared with the data obtained through the questionnaire for pupils.* *The question may need to be adapted to reflect additional categories in the local context or available requirements in national standards, such as availability of a private bathing area for personal hygiene.* *These data can be used to answer JMP expanded question XS1.*	Girls should be able to manage their periods hygienically in a private space, without disturbance by others. Ensuring a space for MHM with closable doors, locks and ensuring privacy from other pupils safeguards girls' dignity and comfort during their period.
CH13. Are water and soap available in a private space for MHM? ☐ Water only ☐ Soap only ☐ Water and soap ☐ Not applicable *Note: if no private space for MHM is available at the school, select "not applicable".* *The information should be compared with the data obtained through the questionnaire for pupils.*	If girls are to practise proper MHM, water and soap should available for discreet personal hygiene (hand and body washing), cleaning clothes/ uniform and washing reusable menstrual hygiene products (as applicable) at all times. Ideally, soap should be provided by the school.
CH14. Are there sanitary bins for disposal of used menstrual hygiene products in girls' toilet cubicles? ☐ Yes, in all girls' toilet cubicles ☐ Yes, more than half of girls' toilet cubicles ☐ Yes, in few girls' toilet cubicles ☐ There are no sanitary bins in the girls' toilet cubicles ☐ Not applicable *Note: if no toilets/latrines are available, select "not applicable". Visit as many girls' toilet cubicles as possible and select the appropriate description based on general impression and the definition of "sanitary bins" as bins with a lid for safe and appropriate disposal of menstrual waste.* *The answers may need to be adapted to reflect any available requirements in the national standards or guidelines.* *These data can be used to answer JMP expanded question XS2.*	Lack of sanitary bins encourages inappropriate disposing habits among girls, such as throwing used menstrual hygiene products in regular waste bins or leaving them wrapped or unwrapped in the corners of toilet cubicles, making cubicles dirty, breeding site for flies and unhygienic for other pupils and cleaning staff. Inappropriate disposal of menstrual hygiene products (e.g. flushing them in the toilets) can also result in failure of sanitation systems *(25)*, eventually causing a sewage backflow, and possibly causing exposure to faecal matter and/or costs of operation and maintenance of sanitation facilities.

Hygiene and menstrual hygiene management: menstrual hygiene management (MHM)

(not applicable in schools with boys only and preschools)

Question	Rationale
CH15. Are there clear signs instructing girls to dispose of menstrual waste in the sanitary bins? ☐ Yes ☐ No ☐ Not applicable *Note: if there are no sanitary bins available in the girls' toilet cubicles, select "not applicable".*	The purpose of instruction materials such as posters or signs is to draw girls' attention to safe and hygienic disposal of menstrual hygiene materials. Pupils tend to practise adequate hygiene behaviour if reminded/instructed to do so. Clear instructions should remind them how to dispose of menstrual waste and not to throw it in the toilet.
CH16. Are sanitary bins emptied regularly? ☐ Yes ☐ No ☐ Not applicable *Note: "yes" should be selected only if more than half the bins are not completely full – around two thirds full or less – on the day of the inspection. If there are no sanitary bins available in the girls' toilet cubicles, select "not applicable".* *The information should be compared with the data obtained through the questionnaire for pupils.*	Safe and environmentally managed disposal remains a neglected aspect of MHM in schools *(46)*. If not emptied regularly, sanitary disposal units or bins become over-full and smelly, which creates an unhygienic environment, leading to toilet avoidance.
CH17. Are menstrual hygiene products freely available at the school? ☐ Yes, available free of charge in the toilet facilities or a dedicated area ☐ Yes, available for purchase in the toilet facilities or a dedicated area ☐ Not observed *Note: menstrual hygiene products may be made available or distributed by the school staff upon request and may thus not be observed.* *The question may need to be adapted to reflect types of menstrual hygiene products (e.g. sanitary pads) relevant to the local context.* *The information should be compared with the data obtained through the questionnaire for pupils.*	Availability of hygienic materials to absorb or collect menstrual blood allows adequate MHM. A lack of adequate menstrual hygiene products can be a reason for embarrassment and discomfort, and may force some girls to use unhygienic materials, potentially increasing urogenital symptoms and infections. Girls lacking menstrual hygiene products at school in case of emergency, or lacking the means to purchase them, may need to miss classes and face unequal learning opportunities. Different types of menstrual hygiene products are accepted by girls depending on their cultural and religious background; offering different types of product ensures equal opportunities.

Questionnaire for pupils

This questionnaire is a ready-to-use instrument to capture the perspective of the majority of users of WASH services in schools: the pupils. It can be given as a paper-based questionnaire to be completed by a small group of pupils. Alternatively, the questions can be used for structured interviews with a number of individuals, one at a time. The questionnaire has been structured to enable the respondent/assessor to select only one answer for each question or subquestion, for ease of completion.

Suggested interviewees are:

- a whole class, randomly selected (more suitable if the data collection methodology consists of a paper-based questionnaire);
- a random choice of pupils before classes start/during the break, for individual structured interviews;
- elected representatives of the pupils, for individual structured interviews.

It is recommended to involve at least two pupils (one at a time). Pupil participation should be gender balanced and age sensitive, involving at least one male and one female and different age classes. Student representatives or pupils participating in a WASH or health club, if any, may be more willing to answer the questions and better informed about the topic.

The questionnaire covers aspects such as usability of the toilet facilities in the school, accessibility, acceptability of WASH services from the pupils' perspective, education and knowledge of WASH-related behaviours, and healthy habits and practice.

The methodology for the data collection, whether a structured interview, paper-based questionnaire or both, should be decided during the surveillance planning phase, prior to the school visit. The same methodology should be applied to all schools involved in the routine surveillance, including involving approximately the same number of pupils per school.

Before starting, assessors should obtain consent from the headteacher or school manager to talk with the pupils, especially if respondents are underage children (i.e. younger than 18 years old or relevant age according to the national law). If visits are planned in advance, obtaining informed consent from parents of underage children is recommended. Pupils should be asked for their consent and reminded of their free choice to participate – pupil involvement is voluntary, and they do not have to answer any questions if they feel uncomfortable. There should be no penalty or consequence for not participating. Pupils' privacy needs to be ensured by anonymizing the data collected – no personal identifiers should be used in the questionnaire except sex and age. Data should be kept confidential *(52)*.

The questions are formulated in an indirect manner, addressing pupils in general (e.g. "Do pupils usually drink water while at school?") rather than individual respondents (e.g. "Do you usually drink water while at school?") in an effort not to place pupils under pressure to respond in a socially acceptable way. Using this kind of question formulation in both paper-based questionnaires and structured interviews helps reduce the risk of bias in self-reported data. Depending on cultural norms surrounding menstruation, female pupils might be reluctant to discuss menstruation hygiene management issues openly in front of their peers. To help girls feel more comfortable, these issues should be discussed in a private place and, if possible, with a female assessor.

During the interviews, pupils should be left to answer the questions honestly to the best of their ability, without hints or suggestions about what the "correct" answer should be. Younger pupils might need help and guidance to make sure they understand the questions.

To allow analysis of overall pupil perceptions and compare across schools, individual responses should be compiled and analysed at the school level (for example, considering percentages of pupils' positive or negative answers), keeping data on sex and age segregated. Some questions should be complemented with direct observations of the WASH facilities, as noted in the other instruments. Triangulation of pupils' responses with responses from the questionnaire for school staff is recommended.

General information about the respondent	
Question	**Rationale**
PG1. Sex of the pupil ☐ Female ☐ Male ☐ No answer *Pupils may wish not to respond: remind them of their freedom to choose whether or not to answer a question.*	Collecting information about a pupil's sex allows gender-sensitive situation analysis, along with identification of gender-related barriers and bottlenecks in accessing or using WASH services. If referring to separate toilets, data on the sex of the pupil can show whether there are specific issues in female or male toilets.
PG2. Age of the pupil (How old are you?) _____ years *Note: insert number.*	Collecting information about a pupil's age and grade forms a basis for age-sensitive situation analysis and disaggregation of WASH practices and challenges by age.
PG3. What grade are you in? _____ grade *Note: insert number.* *The question may not be relevant to preschools.*	

Water: availability; functionality	
Question	**Rationale**
PW1. Pupils spend a lot of their time at school. Do they usually drink water while at school? ☐ Yes, always ☐ Most of the time ☐ Rarely ☐ No, never ☐ I don't know *Note: if the answer is "yes, always", confirm by asking whether they observed classmates drinking water at school on the day of the inspection or the day before.*	Drinking-water is essential to good health, and a lack of safe drinking-water at school affects children's health and learning *(1; 18; 34)*. Adequate hydration plays a positive role in improving children's memory and attention, and ensures healthy development and functioning of body. Hydrated pupils perform better at school *(1; 53)*.

Water: availability; functionality

Question	Rationale
PW2. Is water available for drinking at school? ☐ Yes, always ☐ Most of the time ☐ Rarely ☐ No, never ☐ I don't know *Note: The information should be compared with the data obtained through the questionnaire for school staff. .* *This data can be used to answer JMP expanded question: XW2.*	Drinking-water should be available throughout the school day, and pupils encouraged to drink it, because dehydration reduces pupils' ability to concentrate, and may have a negative effect on their health in the long term *(18)*. Further, intermittent water, interrupted for hours or days, may have lower quality and pose higher risk to users *(33)*. This question explores the reliability of the school water source and continuity of water provision to pupils. If functionality is intermittent, authorities might consider providing alternative solutions for specific situations and implementing long-term improvement measures.
PW3. If pupils want to drink water at the school, where do they get it from? PW3.1 We get it free from the school (from the taps/ fountains inside the toilet facilities or in the classroom, corridor, atrium, canteen) ☐ Yes ☐ No PW3.2 We bring it from home ☐ Yes ☐ No PW3.3 We purchase it at the canteen/kiosk/vending machine inside the school ☐ Yes ☐ No PW3.4 We purchase it outside the school ☐ Yes ☐ No PW3.5 We cannot obtain drinking water at school ☐ Yes ☐ No PW3.6 Other (please specify):_____ _____ ☐ Yes ☐ No *Note: don't give hints. Let the pupil try to give their answer(s) first, then read the remaining answers out loud in random order.* *The answer options may need to be adapted to reflect any additional drinking-water points such as water coolers, filtered water stations, pitchers of water in the school canteen, as well as purchasing options relevant to the local context.* *The information should be compared with the data obtained through the questionnaire for school staff.*	Drinking-water at school should be as freely and easily available as possible. Schools, particularly in rural areas, often lack drinking-water facilities *(4)*, compromising pupils' health and well-being. This question explores the type of drinking-water provision by the school and the existence of drinking-water points available to pupils. In schools without a safe drinking-water supply or where water is not easily available, pupils may have to carry their drinking-water from home. If pupils bring water from home, it may be an indication of poor provision of drinking-water or pupils may consider water at school not safe for drinking purposes.

Water: accessibility

Question	Rationale
PW4. There may be pupils in your school that are smaller than you. Can the youngest or smallest pupils in your school mates get drinking-water by themselves without the help of others? ☐ Yes ☐ No ☐ I don't know *Note: if the respondents are the youngest pupils themselves (from the first age grade available at the school), you may wish to rephrase the question and ask: "Can you get drinking-water by yourself while at school?"* *The information should be compared with the data obtained through the checklist for observations.* *This question may not be relevant in secondary schools.* *These data can be used to answer JMP expanded question XW4.*	Schools should provide water that is accessible to all. This is not the case if younger or more vulnerable pupils cannot access it. Drinking-water is considered accessible by the smallest children in school if they can reach and easily open/close the water tap *(16)*.
PW5. Sometimes pupils may have limited mobility as they might need help to walk from sticks or a wheelchair. Can pupils with limited mobility get drinking-water by themselves without the help of others in your school? ☐ Yes ☐ No ☐ There are no such children in our school ☐ I don't know *Note: if the respondents are pupils with limited mobility themselves, you may wish to rephrase the question and ask: "Can you get drinking-water by yourself while at school?"* *The information should be compared with the data obtained through the checklist for observations.* *These data can be used to answer JMP expanded question XW3.*	Pupils with limited mobility or vision are likely to be affected in different ways by inadequate access to water and this may contribute to unequal learning opportunities *(5)*. Inaccessible toilets and drinking-water facilities are major contributing factors for school dropout among children with disabilities. Drinking-water facilities need to be customized to meet the wide range of pupils' needs.

Water: quality of services, operation and maintenance

Question	Rationale

PW6. We know that many people do not drink water regularly. If you don't drink water regularly at school, what are the reasons?

PW6.1	There is no water available	☐ Yes	☐ No	☐ NA
PW6.2	I don't think water at school is good for drinking (bad smell/bad taste/ unappealing colour)	☐ Yes	☐ No	☐ NA
PW6.3	Drinking-water points are too far away	☐ Yes	☐ No	☐ NA
PW6.4	Drinking-water points are always too crowded	☐ Yes	☐ No	☐ NA
PW6.5	Drinking-water points are broken or dirty	☐ Yes	☐ No	☐ NA
PW6.6	I feel shy to ask permission from a teacher to drink water	☐ Yes	☐ No	☐ NA
PW6.7	We are not allowed to drink in class	☐ Yes	☐ No	☐ NA
PW6.8	So I don't have to go to the toilet	☐ Yes	☐ No	☐ NA
PW6.9	I don't have time	☐ Yes	☐ No	☐ NA
PW6.10	I forget	☐ Yes	☐ No	☐ NA
PW6.11	I don't know	☐ Yes	☐ No	☐ NA
PW6.12	Other (please specify):_____ _____	☐ Yes	☐ No	☐ NA

Note: if the respondent drinks water regularly at school, select "NA" (not applicable).

Don't give hints. Let the pupil try to give their answer(s) first, and then read the remaining answers out loud in random order.

This question explores potential barriers to accessing drinking-water in schools, such as concern that water is not safe, inconvenient location, poor maintenance of drinking-water facilities (e.g. broken or dirty water fountains), or unacceptable water taste. Gaining an understanding of the barriers pupils perceive in accessing drinking-water points at school is necessary to implement effective strategies to encourage regular hydration. Responses to this question could be used to improve operation and maintenance procedures and to harvest pupils' suggestions for improvement of drinking-water facilities.

Water: education and practices

Question	Rationale
PW7. Think of the last week you spent at school. Can you try to remember how often you drank water while at school? ☐ Twice or more every school day ☐ Once every school day or less often ☐ I never drink water at school PW7.1 Please quantify how many glasses of water you had during the school day. _____glasses *Note: for PW7.1, insert a digit.* *The answers may need to be adapted to reflect any available requirements from national guidelines on nutrition or drinking-water in schools (e.g. recommended number of glasses of water per day or minimum recommended water intake, according to age and sex).*	Research shows the amount of fluid consumed by most young people is below the recommended levels for good health and well-being *(4; 54)*. The resulting dehydration contributes to problems with healthy physical and intellectual development, as well as to lower concentration and attention in class. It is therefore important to ensure sufficient and regular water intake during the school day *(55)*. Children need as much or more water than adults, depending on age. It is thus important that during the school day at least 0.5–1 litre of water is available for each child to drink, depending on the length of the school day and whether physical activities are done. Frequency of water drinking and quantity can be used as proxies to evaluate whether sufficient water is available and accessible, and to explore whether drinking-water is promoted at school.
PW8. Can pupils drink water during classes? ☐ Yes, always without asking for permission ☐ Yes, but we need to ask for permission ☐ It depends on the teacher ☐ No, we are allowed to drink water only at specific times (breaks, after class, lunch break) *Note: don't give hints. Let the pupil try to give their answer(s) first, then read the remaining answers out loud in random order.* *The information should be compared with the data obtained through the questionnaire for school staff.*	Even if water is available, pupils are not always encouraged to drink on a regular basis due to concerns that water spills or additional trips to the water fountain or toilet will disrupt the class *(56)*. Some schools have set times for water drinking, such as only during breaks. Limitations in water access may highlight lack of knowledge about the role of water for good concentration and attention during classes and for health by teachers; it may indicate a need for staff training or awareness campaigns.

Water: education and practices

Question	Rationale
PW9. In your opinion, when should pupils have access to drinking-water? PW9.1 Any time they feel thirsty ☐ Yes ☐ No PW9.2 During mealtime/breaks ☐ Yes ☐ No PW9.3 During classes ☐ Yes ☐ No PW9.4 Before classes start ☐ Yes ☐ No PW9.5 After school ☐ Yes ☐ No PW9.6 After sports ☐ Yes ☐ No PW9.7 I don't know ☐ Yes ☐ No PW9.8 Other (please specify):_____ ☐ Yes ☐ No _____ *Note: don't give hints. Let the pupil try to give their answer(s) first, then read the remaining answers out loud in a random order.*	It is important that children learn what healthy habits are and the school can contribute to this education. Learning to regularly drink sufficient amounts of water will help them stay healthy and perform better. This question explores pupils' knowledge about access to drinking-water at school and can be used as a proxy for water consumption habits.
PW10. Have you ever talked about the importance of drinking-water at the school with your teachers? ☐ Yes ☐ No ☐ I don't remember *Note: if the answer is "yes", confirm by asking what they learnt from the lessons and whether they can name any benefit of regular hydration (e.g. better concentration, better physical performance, prevention of health risks).*	Teachers and school staff can set a positive example and actively promote and encourage hydration throughout the school day, in particular following exercise and in warm weather. This will educate pupils about an important healthy practice for life. Further, pupils tend to drink more water when it is available and promoted *(4; 53)*.

Sanitation: availability

Question	Rationale
PS1. Do you ever visit the toilets/latrines while at school? ☐ Yes, whenever I need to ☐ Yes, only when I absolutely cannot hold on anymore ☐ No, never ☐ There are no toilets/latrines at the school *Note: if the answer is "yes, whenever I need to", confirm by asking whether they have visited the toilet at school on the day of the inspection or the day before.*	Not having access to toilets or avoiding going to school toilets even when they are available is linked to reduced ability to concentrate *(39)*, constipation and urinary tract infections *(3)*. This is an introductory question that explores pupils' use of the toilets at school, if they are available.

Sanitation: functionality, quality of services

Question					Rationale
PS2. If you don't use the toilets/latrines at school any time you need to, what are the reasons?					This question explores possible barriers to using toilets at school and reasons for toilet avoidance. Gaining an understanding of the barriers pupils perceive to accessing/using toilets when needed may highlight potential functionality and quality issues and inform implementation of effective improvement strategies.
PS2.1	Toilets are broken	☐ Yes	☐ No	☐ NA	
PS2.2	Toilets are locked/key is Not available all the times	☐ Yes	☐ No	☐ NA	
PS2.3	Toilets are too smelly	☐ Yes	☐ No	☐ NA	
PS2.4	Toilets are too dirty	☐ Yes	☐ No	☐ NA	
PS2.5	Toilets are too far from classrooms	☐ Yes	☐ No	☐ NA	
PS2.6	There is no toilet paper	☐ Yes	☐ No	☐ NA	
PS2.7	There are too many pupils using them and I need to wait	☐ Yes	☐ No	☐ NA	
PS2.8	Toilets are too dark inside	☐ Yes	☐ No	☐ NA	
PS2.9	I can not lock the door of the toilet cubicles	☐ Yes	☐ No	☐ NA	
PS2.10	Other pupils can see from above or beneath the door/walls inside the cubicles	☐ Yes	☐ No	☐ NA	
PS2.11	I don't feel safe when I use the toilets at school	☐ Yes	☐ No	☐ NA	
PS2.12	Not enough time to use the toilet	☐ Yes	☐ No	☐ NA	
PS2.13	Toilet facilities are too cold	☐ Yes	☐ No	☐ NA	
PS2.14	There are physical barriers on the way to the toilet	☐ Yes	☐ No	☐ NA	
PS2.15	There are no means for menstrual hygiene management (girls only)	☐ Yes	☐ No	☐ NA	
PS2.16	Other (please specify):_____ _____	☐ Yes	☐ No	☐ NA	

Note: if the pupil uses the toilet every time they need to, or if there are no toilets at school, select "NA" (not applicable).

Don't give hints. Let the pupil try to give their answer(s) first, then read the remaining answers out loud in random order.

Sanitation: privacy, security

Question	Rationale
PS3. Are toilets/latrines separate for boys and girls? ☐ Yes ☐ No ☐ Not applicable *Note: if no toilets/latrines are available at school, select "not applicable".* *The information should be compared with the data obtained through the checklist for observations and the questionnaire for school staff.* *This question may not be relevant in preschools.* *These data can be used to answer JMP core question S3.*	Lack of gender-separated facilities and/or missing or inadequate doors and partitioning are common issues reported by pupils across the region *(4)*. This question explores the extent to which girls' and boys' privacy needs are being met.
PS4. If toilets/latrines are not separated for boys and girls, is that a problem for you and your classmates? ☐ Yes ☐ No ☐ I don't know ☐ Not applicable *Note: if no toilets/latrines are available at school, or if the toilets are separated by gender, select "not applicable".* *This question may not be relevant in preschools.* *These data can be used to answer JMP core question S3.*	
PS5. Can pupils use toilets/latrines at school without feeling disturbed by others? ☐ Yes, always ☐ Most of the times ☐ Rarely ☐ No, never ☐ I don't know ☐ No answer ☐ Not applicable *Note: if no toilets/latrines are available at school, select "not applicable".* *If the answer is "yes, always", confirm by asking "Can other pupils look under/over doors when you are in the toilet?/Have you ever been bothered by other pupils while in the toilet?/Can you lock the door of the toilet cubicle?"* *Pupils may wish not to respond: remind them of their freedom to choose whether or not to answer a question.* *These data can be used to answer JMP core question S2.*	A usable toilet should be available, functional and private. Privacy is important to ensure dignity and facilitate acceptability of the school toilets. School toilet facilities should have walls and doors that cannot be peered over or under wherever possible. Pupils should be able to use toilets without disturbance of others.

Sanitation: privacy, security

Question	Rationale
PS6. Have any of your classmates ever had a bad experience in the school toilets? ☐ Yes, this happens often ☐ Yes, but this happens very rarely ☐ No, this has never happened ☐ I don't know ☐ No answer PS6.1 What about you? Have you ever had a bad experience in the school toilets? ☐ Yes ☐ No ☐ No answer	School toilets can be an adult-free zone. It is important that pupils feel safe to use toilet facilities at all times. This question explores to what extent pupils' security needs are being met. Bullying is prevalent in school toilets *(38; 39)*. Being bullied or the subject of mean messages can make pupils feel vulnerable, and cause discomfort and avoidance of toilet facilities.

Note: you may wish to facilitate answering by giving examples of what a "bad experience" means: other pupils hurting them, writing something mean on the walls (teasing, bad words) or saying something mean.

Pupils may wish not to respond: remind them of their freedom to choose whether or not to answer a question.

Sanitation: accessibility

Question	Rationale
PS7. There may be pupils in your school that are smaller than you. Can the youngest or smallest pupils in your school use the toilet by themselves, without the help of others? ☐ Yes ☐ No ☐ I don't know ☐ Not applicable	Easily accessible sanitation infrastructure is crucial for ensuring equal learning opportunities. Schools should provide toilets that are within physical reach of all pupils, including the youngest. This question explores possible issues with accessing toilet facilities for younger pupils and may not be applicable in secondary schools.

Note: if no toilets/latrines are available at school, select "not applicable".

If the respondents are the youngest pupil themselves, you may wish to rephrase the question and ask: "Can you use the toilet while at school all by yourself?"

The information should be compared with the data obtained through the checklist for observations and the questionnaire for school staff.

These data can be used to answer JMP expanded question XS6.

Sanitation: accessibility

Question	Rationale
PS8. Sometimes pupils may have limited mobility as they might need help to walk from sticks or a wheelchair. Can pupils with limited mobility use the toilet by themselves without additional support? ☐ Yes ☐ No ☐ There are no such children in our school ☐ I don't know ☐ Not applicable	Pupils with a disability are less likely to have access to a school toilet: in both high- and middle-income countries, schools are often observed not providing accessible sanitation *(4)*. Inaccessible toilets and drinking-water facilities are major contributing factors for school dropout among children with disabilities. Sanitation facilities need to be customized to meet the wide range of pupils' needs.

Note: if no toilets/latrines are available at school, select "not applicable".

If the respondents are pupils with limited mobility themselves, you may wish to rephrase the question and ask: "Can you use the toilet while at school by yourself?"

The information should be compared with the data obtained through the checklist for observations and the questionnaire for school staff.

These data can be used to answer JMP expanded question XS7.

Sanitation: operation and maintenance

Question	Rationale
PS9. Think about today and yesterday. Was toilet paper provided in the toilet cubicles? ☐ Yes, toilet paper is always provided ☐ Toilet paper is provided most of the time ☐ Toilet paper is rarely provided ☐ I can never find toilet paper in the toilets ☐ I don't know/I don't use the toilets ☐ Not applicable	There is evidence that the absence of toilet paper is common in all countries in the pan-European region *(4)*. Inadequate provision of culturally appropriate means for anal cleansing encourages toilet avoidance and may consequently compromise healthy behaviours that include regular bladder and bowel emptying, affecting pupils' health. The use of toilet paper may also help prevent hands contamination, which should then be cleaned with water and soap.

Note: if no toilets/latrines are available at school, select "not applicable".

The question and answer options may need to be adapted to reflect local practices and terminology with respect to culturally appropriate means for anal cleansing.

The information should be compared with the data obtained through the checklist for observations and the questionnaire for school staff.

These data can be used to answer JMP expanded question XS10.

Sanitation: operation and maintenance

Question	Rationale
PS10. Is there enough light in the school toilet facilities? ☐ Yes, always ☐ Most of the time ☐ Rarely ☐ No, never ☐ I don't know/I don't use the toilets ☐ Not applicable *Note: if no toilets/latrines are available at school, select "not applicable".* *The information should be compared with the data obtained through the checklist for observations.* *These data can be used to answer JMP expanded question XS11.*	Inadequate illumination may prevent toilet use. Lack of functional lighting in school toilets hinders acceptability and use of the toilet facilities, especially by younger pupils and girls, as it may facilitate accidents or episodes of harassment or bullying. This question may highlight possible bottlenecks in maintenance and may be especially appropriate for countries with prolonged periods of darkness during the school day.
PS11. What would you say about the cleanliness of the school toilets? ☐ They are always clean ☐ They are clean most of the time ☐ They are rarely clean ☐ They are never clean ☐ I don't know/I don't use the toilets ☐ Not applicable *Note: if no toilets/latrines are available at school, select "not applicable".* *You may wish to explain what clean toilet means: toilets do not have a strong smell or significant numbers of flies or mosquitos, and there are no visible faeces, urine spots or litter on the floor, walls, seat or around the facility.* *The information should be compared with the data obtained through the checklist for observations.* *These data can be used to answer JMP expanded question XS5.*	Facilities are often reported to be dirty, messy and beneath pupils' hygiene standards. Negative perceptions of school toilets due to inadequate cleanliness, including a strong bad smell, are one of the main reasons for toilet avoidance *(3; 50)*.
PS12. In general, what do you think about the toilet facilities in your school? ☐ They are nice ☐ They are okay ☐ They are quite bad ☐ They are horrible and I avoid using them ☐ Not applicable *Note: if no toilets/latrines are available at school, select "not applicable".* *Read all the answer options out loud and let the pupil select one.*	This question examines general pupils' perception of school toilet facilities. Pupils' perceptions affect their toilet habits and some would rather endure physical discomfort than the psychological and social discomfort of using the school toilet *(3)*.

Sanitation: education and practices

Question	Rationale
PS13. If you would like to visit the toilet in your school, when can you do it? ☐ Whenever I need to, including during classes ☐ I can go during breaks, before or after classes but not during classes ☐ It depends on teachers ☐ Not applicable *Note: if no toilets/latrines are available at school, select "not applicable".* *Read all the answer options out loud and let the pupil select one.* *The information should be compared with the data obtained through the questionnaire for school staff.* *These data can be used to answer JMP expanded question XS9.*	It is important to allow pupils to use the toilet whenever they need to. There are occasions when pupils will need to "hold on" before they can visit the toilet, but repeated prolonged delays can cause distress and health problems *(3; 37)*. A significant number of pupils (especially girls) feel uncomfortable when they need to ask for permission to use a toilet (4; 38), and for some pupils with specific health conditions any delay may be impossible.
PS14. If you or your classmates find a problem in the toilet area would you openly talk to a member of the school staff about it? ☐ Yes, pupils usually do that on their own initiative ☐ Yes, pupils are asked to report any problems in the toilet facilities ☐ No ☐ I don't know **PS15. Do you remember of any positive change that was introduced after pupils complained about something or reported that something was broken?** ☐ Yes ☐ No ☐ I don't know *Note: for PS14, if the answer is "no", consider clarifying the reasons for not reporting; e.g. the pupil does not feel like reporting it because such practices are discouraged.* *The answers may need to be adapted to reflect local requirements and conditions. For example, if a school policy envisions a member of a school staff (such as a counsellor) as the reference point for pupils, this question could be used to see whether pupils do indeed feel free to ask this person.* *The information should be compared with the data obtained through the questionnaire for school staff.*	These questions examine the existence of a complaint mechanism in the school and opportunities for pupils to report inadequate sanitation conditions such as poor maintenance, broken toilet seats or lack of toilet paper. It is important that the school management listens to complaints and suggestions from pupils about how school toilets can be improved.
PS16. Have you ever talked about toilet hygiene and proper hygiene behaviours when using toilets at school? ☐ Yes ☐ No ☐ I don't remember *Note: if the answer is "yes", confirm by asking what they learnt from these experiences or lessons.* *The information should be compared with the data obtained through the checklist for observations.*	Pupils are more likely to practise appropriate toilet use and hygiene behaviours when they understand why to do so. Knowledge about disease transmission and infection control may influence individual hygiene practices.

Hygiene and menstrual hygiene management: availability, functionality

Question	Rationale
PH1. Investigations have shown that many pupils do not wash their hands while at school for various reasons. Do pupils in your school wash their hands after using the toilet? ☐ Yes, everyone does it ☐ Yes, but only some ☐ No ☐ I don't know *Note: if the answer is "yes", confirm by asking whether they have observed classmates washing their hands at school on the day of the inspection or the day before.*	One of the most important hygiene behaviours to prevent the spread of infectious illness among schoolchildren is handwashing with water and soap – at least before eating and after using the toilet *(40)*. This is an introductory question that explores the general tendency among pupils to wash their hands while at school.
PH2. If you want to wash your hands at school after using the toilet, is water available for handwashing? ☐ Yes, always ☐ Most of the time ☐ Rarely ☐ Never ☐ I don't know **PH3. If you want to wash your hands at school, is soap available for handwashing?** ☐ Yes, always ☐ Most of the time ☐ Rarely ☐ Never ☐ I don't know *Note: read all the answer options out loud and let the pupil select one.* *A question may be added to reflect additional handwashing agents relevant to the local context, such as ash or alcohol-based handrub, which should be kept as separate categories from soap.* *The information should be compared with the data obtained through the questionnaire for school staff.* *These data can be used to answer JMP core question H2.*	Good hygiene behaviour and the effectiveness of hygiene promotion in schools can be severely limited where water supply for handwashing is inadequate or non-existent. Handwashing with water and soap is much more effective in removing bacteria from hands than handwashing with water only *(40)*. If pupils are to practise proper handwashing and effectively reduce the risk of infectious diseases, water and a handwashing agent such as soap should be available at all times.
PH4. Think about the last week you attended school. Was there something to dry your hands with after handwashing? ☐ Yes, there is always something for drying hands ☐ Yes, most of the time ☐ Rarely ☐ Never ☐ I don't know *Note: you may wish to give an example of hygienic methods for drying hands, such as single-use paper towels or electric hand dryers.* *The information should be compared with the data obtained through the checklist for observations.*	To prevent the transmission of infectious diseases efficiently, children should dry their hands after washing them. Hands can easily be re-contaminated by not being dried or by incorrect drying (such as dirty roller towels or failing to dry hands thoroughly under warm air dryers). As with water and soap, hygienic hand drying materials should be available to pupils on a regular basis.

Hygiene and menstrual hygiene management: functionality, quality of services

Question	Rationale
PH5. When pupils don't wash their hands while at school, what are the reasons? PH5.1 They forget about it ☐ Yes ☐ No PH5.2 They have more important ☐ Yes ☐ No PH5.3 They do not have a time to do it ☐ Yes ☐ No PH5.4 They do not understand why to wash hand ☐ Yes ☐ No PH5.5 There is no place for washing hands ☐ Yes ☐ No PH5.6 There is no water available ☐ Yes ☐ No PH5.7 There is only cold water available ☐ Yes ☐ No PH5.8 There is no soap ☐ Yes ☐ No PH5.9 There is nothing to dry hands with ☐ Yes ☐ No PH5.10 The queue for handwashing is too long ☐ Yes ☐ No PH5.11 Facilities for handwashing are too far away ☐ Yes ☐ No PH5.12 Facilities for handwashing are broken ☐ Yes ☐ No PH5.13 Facilities for handwashing look dirty ☐ Yes ☐ No PH5.14 I don't know ☐ Yes ☐ No PH5.15 Other (please specify):_____ ☐ Yes ☐ No _____ *Note: don't give hints. Let the pupil try to give their answer(s) first, then read the remaining answers out loud in random order.*	This question explores structural and social factors that may influence handwashing behaviour among pupils. Gaining an understanding of the barriers pupils perceive that prevent good handwashing practice may highlight possible functionality and quality issues in service provision. It is also necessary to inform implementation of effective hygiene promotion strategies.
PH6. In general, what do you think about handwashing facilities in your school? ☐ They are nice ☐ They are okay ☐ They are quite bad ☐ They are horrible and I avoid using them ☐ Not applicable *Note: if there are no handwashing facilities in the school, select "not applicable".* *Read all the answer options out loud and let the pupil select one.*	Being dissatisfied with WASH facilities in schools and avoiding them prevents pupils from adopting proper hygiene behaviour. This question explores pupils' perceptions and satisfaction with handwashing facilities.

Hygiene and menstrual hygiene management: accessibility

Question	Rationale
PH7. There may be pupils in your school that are smaller than you. Can the youngest or smallest pupils in your school use handwashing facilities without the help of others? ☐ Yes ☐ No ☐ I don't know ☐ Not applicable *Note: if there are no handwashing facilities in the school, select "not applicable".* *If you ask younger or small pupils directly, you may wish to rephrase the question and ask: "Can you reach the tap and soap to wash your hands all by yourself?"* *The information should be compared with the data obtained through the checklist for observations and the questionnaire for school staff.* *The question may not be relevant in secondary schools.* *These data can be used to answer JMP expanded question XH2.*	Handwashing facilities should be accessible to all pupils, including the youngest ones. To be considered accessible, the youngest pupils should be able to reach the tap and soap, and be able to operate the tap on their own with minimal effort *(16)*.
PH8. Sometimes pupils may have limited mobility as they might need help to walk by sticks or a wheelchair. Can pupils with limited mobility use handwashing facilities without the help of others? ☐ Yes ☐ No ☐ There are no such children in our school ☐ I don't know ☐ Not applicable *Note: if there are no handwashing facilities in the school, select "not applicable".* *If the respondents are pupils with limited mobility themselves, you may wish to rephrase the question and ask: "Can you reach the tap and soap to wash your hands all by yourself?"* *The information should be compared with the data obtained through the checklist for observations and the questionnaire for school staff.* *These data can be used to answer JMP expanded question XH1.*	Schools should provide access to handwashing facilities for all. To be considered accessible, handwashing facilities can be accessed via a clear path without stairs or steps, which is free of obstructions and has age-appropriate handrails; the tap and soap are reachable from a seated position; and the tap can be operated by feet and/or one closed fist with minimal effort *(16)*.

Hygiene and menstrual hygiene management: education and practices

Question	Rationale

PH9. Can you name the usual times when your classmates wash their hands?

PH9.1	Whenever they are dirty	☐ Yes	☐ No
PH9.2	Before eating	☐ Yes	☐ No
PH9.3	After using the toilet	☐ Yes	☐ No
PH9.4	After playing with a pet	☐ Yes	☐ No
PH9.5	After contact with a friend that is not feeling well	☐ Yes	☐ No
PH9.6	After taking the bus/public transportation	☐ Yes	☐ No
PH9.7	After coming back home	☐ Yes	☐ No
PH9.8	My classmates do not wash their hands	☐ Yes	☐ No
PH9.9	I don't know	☐ Yes	☐ No
PH9.10	Other (please specify):_____ _____	☐ Yes	☐ No

Note: don't give hints. Let the pupil try to give their answer(s) first, then read the remaining answers out loud in random order.

Regular handwashing, particularly before and after certain activities, is one of the best ways to remove bacteria, avoid getting sick and prevent the spread of bacteria to others *(57)*. This question explores pupils' knowledge of key times for handwashing. Key times for handwashing in the context of schools are immediately after defecation/using the toilet and before eating.

PH10. If both water and soap are available, how do you usually wash your hands?

- ☐ With water only
- ☐ With water and soap
- ☐ I don't wash my hands

Note: read all the answer options out loud and let the pupil select one.

It has been demonstrated that handwashing with soap is much more effective in removing bacteria from hands than handwashing with water only *(40)*. This question examines pupils' practice of using soap for handwashing, when it is available.

PH11. Have you ever talked about the importance of handwashing at the school?

- ☐ Yes
- ☐ No
- ☐ I don't remember

PH12. Have you ever practised handwashing with your teachers and/or in a group with other pupils?

- ☐ Yes
- ☐ No
- ☐ I don't remember

Note: for PH11, if the answer is "yes", confirm by asking what they learnt from these experiences or lessons.

The information should be compared with the data obtained through the questionnaire for school staff.

Educational interventions to promote handwashing in school settings aim to improve knowledge and awareness about healthy hand hygiene to reduce the spread of infections and have been associated with reduced absenteeism and gastrointestinal infections and increased compliance with handwashing *(42)*.

Hygiene interventions with fixed schedules have proven to improve handwashing practice *(4)*. Group handwashing or other routine activities can be a way to promote skills-based education and healthy behaviours. Group handwashing consists of a joint activity of a class or a group of classes at critical time, such as before lunch or after the break. It might not be feasible in schools with a limited number of handwashing facilities.

Hygiene and menstrual hygiene management: education and practices

Question	Rationale
PH13. Do you know what can happen if you don't wash your hands? ☐ Yes ☐ No *Note: if the answer is "yes", confirm by asking for an elaborated answer (for example, that illness(es) can be transmitted by dirty hands: diarrhoea, gastrointestinal infections such as Salmonella, respiratory infections such as influenza).*	Pupils are more likely to wash their hands when they understand why to do so. Knowledge about disease transmission and infection control may influence individual choices about handwashing.

Hygiene and menstrual hygiene management: menstrual hygiene management (MHM)

(for female pupils in primary and secondary schools ONLY)

Female pupils might be reluctant to discuss MHM issues openly in front of their peers. To help girls feel more comfortable, the following set of questions should be discussed in a private place and, if possible, with a female assessor. The questions may be adapted to reflect the common/accepted terminology in the local context.

Question	Rationale
PH14. You may know that girls growing start experiencing a natural phenomenon monthly, called menstruation or period. Do you know of any girl in your class that has got her period? ☐ Yes ☐ No	This is an introductory icebreaker question that should help create a relaxed environment and make pupil feel comfortable talking about MHM.
PH15. Sometimes girls are ashamed to talk about menstruation or keep it secret. Can girls openly talk about menstruation in this school? ☐ Yes, they can ☐ No, they avoid talking about it ☐ I don't know	Stigma and taboos around menstruation directly affect girls' dignity, confidence and self-esteem *(44)*. Menstruation is a culturally sensitive issue, and is sometimes poorly understood by both men and women. Misconceptions and taboos around menstruation usually result in discomfort or even unwillingness to address the issue openly. Girls of younger ages and at the beginning of their menstruation period usually feel embarrassed talking about menstruation.

Hygiene and menstrual hygiene management: menstrual hygiene management (MHM)

(for female pupils in primary and secondary schools ONLY)

Question	Rationale
PH16. Girls may miss classes or leave school early when they are menstruating. Do girls regularly come to your school when they are menstruating? ☐ Yes, always ☐ Most of the time ☐ Rarely ☐ Never ☐ I don't know **PH17. If girls rarely or never attend classes when they are menstruating, what do you think are the reasons?** PH17.1 Menstruation is too painful ☐ Yes ☐ No ☐ NA PH17.2 Pupils are teasing girls who are menstruating ☐ Yes ☐ No ☐ NA PH17.3 Girls are not allowed to visit toilets during classes to change their menstrual hygiene products ☐ Yes ☐ No ☐ NA PH17.4 Girls cannot manage their periods in a private, discreet manner ☐ Yes ☐ No ☐ NA PH17.5 There is no place to dispose of used menstrual hygiene products ☐ Yes ☐ No ☐ NA PH17.6 There is no water and/or soap for menstrual hygienemanagement ☐ Yes ☐ No ☐ NA PH17.7 There are no menstrual hygiene products available at the school ☐ Yes ☐ No ☐ NA PH17.8 I don't know ☐ Yes ☐ No ☐ NA PH17.9 Other (please specify):_____ _____ ☐ Yes ☐ No ☐ NA *Note: for PH16, if the answer is "rarely" or "never", explore the reasons by asking PH17. For PH17, if the pupil reports girls regularly come to school when they are menstruating, select "NA" (not applicable).* *For PH16, the information should be compared with the data obtained through the questionnaire for school staff.*	It has been demonstrated that periods can cause girls to be absent from school *(44; 48)*. This question examines whether issues relating to menstruation affect girls' school attendance.

Hygiene and menstrual hygiene management: menstrual hygiene management (MHM)

(for female pupils in primary and secondary schools ONLY)

Question	Rationale
PH18. Can girls change their menstrual hygiene products while at school? ☐ Yes, always ☐ Most of the time ☐ Rarely ☐ Never ☐ I don't know *Note: to facilitate answering, you may wish to provide prompts (napkins, tampons, pads, rags etc.).*	Girls who started menstruating should be able to manage their periods comfortably and in sanitary conditions. If toilet facilities or other separate private spaces are inadequate or lacking, girls may decide not to change menstrual hygiene products while at school, which is an unhealthy hygiene behaviour.
PH19. If a girl in your school needs menstrual hygiene products during a school day, would you know how she could obtain them? ☐ Yes ☐ No PH19.1 If so, how could she obtain them? ☐ They are distributed free of charge by the school ☐ They are available for purchase ☐ In case of emergency, we could get them from a school nurse ☐ Other (please specify): _____ ☐ Not applicable *Note: for PH19.1, if the pupil does not know how to obtain menstrual hygiene products during a school day select "not applicable".* *For PH19.1, the information should be compared with the data obtained through the questionnaire for school staff.*	Availability of menstrual hygiene products is important to ensure that girls can attend classes without risk of discomfort and embarrassment. Girls may be regularly informed at school, for example at the beginning of every school year, how and where to obtain menstrual products in a discreet manner. Girls lacking menstrual hygiene products at school in case of emergency, or lacking the means to purchase them, may need to miss classes and face unequal learning opportunities. Different types of menstrual hygiene products are accepted by girls depending on their cultural and religious background; offering different types of product ensures equal opportunities.
PH20. If girls need to change menstrual hygiene products during a school day, can they do it in a private, discreet manner? ☐ Yes, there is a separate private space for girls to manage their periods ☐ Yes, girls' toilet cubicles have lockable doors and provide enough privacy for menstrual hygiene ☐ Not really, I wish the toilet cubicles were more private ☐ They never change menstrual hygiene products while at school ☐ I don't know *Note: read all the answer options out loud and let the pupil select one.*	Lack of privacy for changing in many schools continue to leave girls with limited options for safe and proper personal hygiene *(46).* Broken locks and gaps in toilet doors and walls can make girls avoid using toilets to change their sanitary pads or miss classes during menstruation.

Hygiene and menstrual hygiene management: menstrual hygiene management (MHM)

(for female pupils in primary and secondary schools ONLY)

Question	Rationale
PH21. How do the girls in your school usually dispose of their menstrual hygiene products? PH21.1 Flushed in the toilet ☐ Yes ☐ No PH21.2 Thrown in the pit latrine ☐ Yes ☐ No PH21.3 In the regular waste bin ☐ Yes ☐ No PH21.4 In the sanitary bin ☐ Yes ☐ No PH21.5 I don't dispose of them but I wash/reuse them ☐ Yes ☐ No PH21.6 In the open ☐ Yes ☐ No PH21.7 I don't know ☐ Yes ☐ No PH21.8 Other (please specify):_____ ☐ Yes ☐ No _____ *Note: select "yes" or "no" for each subquestion.* *Don't give hints. Let the pupil try to give their answer(s) first, then read the remaining answers out loud in random order.*	Lack of sanitary bins may affect girls' dignity because of embarrassment and because it does not allow safe disposal of used products. Inappropriate disposal of menstrual hygiene products (e.g. flushing them in the toilets) can also result in failure of sanitation systems *(25)*, eventually causing a sewage backflow, and possibly causing exposure to faecal matter and/or costs of operation and maintenance of sanitation facilities.
PH22. Is there a place in the girls' toilets facilities or cubicles to throw away used menstrual hygiene products? ☐ Yes, there are sanitary bins ☐ Yes, there are regular waste bins ☐ I don't know/I don't use the toilets ☐ No ☐ Not applicable **PH23. If yes, are bins emptied often enough to prevent them from becoming over-full and smelly?** ☐ Yes ☐ No ☐ Not applicable *Note: for PH21, if no toilets/latrines are available at the school, select "not applicable". If the answer is "yes", ask question PH22. For PH22, if there are no bins or if the pupil does not know whether there are bins or not select "not applicable".* *The information should be compared with the data obtained through the questionnaire for school staff.* *These data can be used to answer JMP expanded questions XS2 and XS3.*	Lack of disposal facilities may affect girls' dignity because of embarrassment and because it does not allow safe disposal of used products. Inappropriate disposal of menstrual hygiene products can pose a risk to the personnel handling waste or result in failure of sanitation systems *(25)*, which increases the costs of operation and maintenance of sanitation facilities and may lead to public health issues. Proper waste disposal services, including provision of bins and emptying, are crucial to enable schoolgirls to manage their menstruation hygienically with safety and dignity.

Hygiene and menstrual hygiene management: menstrual hygiene management (MHM)

(for female pupils in primary and secondary schools ONLY)

Question	Rationale
PH24. Are girls allowed to visit toilets during classes to change menstrual hygiene products? ☐ Yes, girls are free to go any time ☐ Yes, but girls need to ask permission from the teacher ☐ It depends on the teacher ☐ No ☐ I don't know ☐ Not applicable *Note: if no toilets/latrines are available at the school, select "not applicable".* *The information should be compared with the data obtained through the questionnaire for school staff.*	It is important to allow pupils to use the toilet whenever they need to. A number of pupils feel uncomfortable when they need to ask for permission to use a toilet *(38)*. Girls in particular may feel embarrassed, and asking permission might be an additional source of worry for them when menstruating.
PH25. In many schools, girls get teased if it is known they are menstruating. Have you ever been teased/bullied by boys or other girls in your school when you were menstruating? ☐ Yes ☐ No ☐ I don't know ☐ No answer *Note: the pupil may not wish to respond: remind her of her freedom to choose whether or not to answer a question.*	Beside the lack of infrastructure, an enabling environment through girl-friendly policies and education should be in place to avoid male pupils having little understanding about menstruation, and as a consequence teasing and bullying girls during menstruation days. This further contributes to unsupportive environment at school for MHM and affect girls' equal learning opportunities *(45)*.
PH26. Would you mind if anyone found out that you were menstruating? ☐ I would not mind ☐ I would feel uncomfortable ☐ It would be horrible ☐ No answer *Note: the pupil may wish not to respond: remind her of her freedom to choose whether or not to answer a question.*	School staff and education can contribute to ensuring a comfortable and inclusive environment for girls that have reached puberty. Taboos and stigma associated with menstruation, combined with an overall culture of silence around the topic, limit information-sharing on menstrual hygiene and hinder the ability of adolescent girls to participate in education fully and equally.

Hygiene and menstrual hygiene management: menstrual hygiene management (MHM)

(for female pupils in primary and secondary schools ONLY)

Question	Rationale
PH27. Did you receive any information at school about menstruation? ☐ Yes ☐ No ☐ I don't remember PH27.1 If you received information about menstruation at school, who did you get it from? PH27.1.1 From the teachers ☐ Yes ☐ No ☐ NA PH27.1.2 From classmates ☐ Yes ☐ No ☐ NA PH27.1.3 From companies that produce menstrual hygiene products ☐ Yes ☐ No ☐ NA PH27.1.4 Other (please specify): _____ ☐ Yes ☐ No ☐ NA PH27.2 If you received information about menstruation at school, what were you told? PH27.2.1 What menstruation is and why it happens ☐ Yes ☐ No ☐ NA PH27.2.2 What to do during menstruation ☐ Yes ☐ No ☐ NA PH27.2.3 How to obtain menstrual hygiene products at school ☐ Yes ☐ No ☐ NA PH27.2.4 How to dispose of used menstrual hygiene products at the school ☐ Yes ☐ No ☐ NA PH27.2.5 Other (please specify): _____ ☐ Yes ☐ No ☐ NA *Note: for PH27, if the answer is "yes", ask questions PH27.1 and PH27.2. If girls did not receive any information at the school about menstruation, select "NA".* *The information should be compared with the data obtained through the questionnaire for school staff.*	Receiving factual and comprehensive information about puberty, the associated biology and proper hygiene, including different aspects of good MHM, is crucial to ensure that girls can act on their needs.

9. Glossary

Assessor	An assessor refers to the person who collects data by asking questions in an interview and registering observations during an onsite inspection. They should be knowledgeable of the methodology, technical and sanitary requirements and of the questions in the tool to ensure good quality data and ethical considerations. Synonyms include interviewer.
Operation and maintenance	Operation and maintenance refers to work planned and carried out on a regular basis to keep the infrastructure in a good condition. This may include, but is not limited to: cleaning, conducting routine procedures to ensure good operation of systems (e.g. pit emptying, water system flushing), supervision of the functionality and integrity of the infrastructure, water testing and treatment, minor repairs and provision of hygiene consumables.

Water

Drinking-water	Drinking-water refers to water suitable for human consumption, which is safe for the purposes of drinking, cooking and food preparation.
Drinking-water point	A drinking-water point refers to any point where staff and pupils can get water to drink when needed. These may include, but are not limited to, piped taps, water fountains, jugs, water coolers and buckets with taps, as well as protected wells, springs or rainwater tanks if children get water directly from those sources. A safe drinking-water point should prevent contamination by provision of a tap and piped water or a closed container with well maintained structure and cover. Drinking-water points should also have a proper drainage system.
Potentially safe drinking-water source	A potentially safe (or improved) drinking-water source refers to a water supply that, by the nature of its construction, has the potential to deliver safe water by protecting the source from outside contamination. Potentially safe (or improved) drinking-water source types may include piped, protected well or spring, rainwater catchment, bottled water and delivered water, tanker-trucks and small carts *(18)*. An unprotected well or spring and surface water are sources that do not ensure the safety of the water quality and may pose health risks to users. Depending on the water source, different maintenance procedures should be implemented at the school level.

Sanitation

Faecal sludge	Faecal sludge comes from onsite sanitation technologies (e.g. latrines, non-sewered public toilets, septic tanks and aqua privies) and has not been conveyed in a sewer. It can be raw or partially digested, a slurry or semisolid, and results from the collection and storage/treatment of excreta or backwater, with or without greywater. Septage is the contents collected from septic tanks and is included in this term.
Safe sanitation facility	A safe (improved) sanitation facility refers to a toilet/latrine with a structure and system that hygienically separates human excreta from human contact. Safe (improved) facilities in a school setting include both network and onsite systems: flush and pour-flush toilets connected to sewers, flush and pour-flush toilets or latrines connected to septic tanks or pits, ventilated improved pit latrines, pit latrines with slabs, and composting toilets, including twin pit latrines and container-based systems *(58)*. The toilet seat/slab should be made from concrete, fibreglass, porcelain or stainless steel for ease of cleaning. Technologies that do not meet requirements for improved sanitation are unhygienic onsite systems, such as pit latrines without slabs, hanging latrines, bucket latrines or areas for open defecation without a facility.
Solid waste	Solid waste refers to all non-liquid waste (e.g. rubbish or garbage) generated in the school and is generally non-infectious. Sometimes solid waste may contain faeces, as in the case of used diapers.
Solid waste management	Solid waste management refers to the process of collection and separation of waste (such as garbage and litter), transport to and management of the storage area and supervision of waste collection; it may also include waste disposal of (and treatment). It includes the provision of means for disposal and separation for waste, including solutions for recycling items that do not belong to garbage.
Slab	A slab refers to a pedestal for a squat toilet or latrine that fully covers the pit with a squatting hole. The slab should have a smooth surface to allow easy cleaning and have a slope for easy drainage for urine and water. It should be made from reinforced concrete, fibreglass, porcelain or stainless steel. In low-cost settings, rot-resistant wood or bamboo covered with a layer of mud and cement mortar could be used *(59)*.
Toilet/latrine	A toilet/latrine refers to the user interface of the sanitation system, where excreta is captured; it can be any type of toilet seat or latrine slab, pedestal or urinal. There are several types of toilet, such as pour- and cistern-flush toilets, dry toilets and urine-diverting toilets *(27)*. It does not include an area for open defecation.

Available toilet/latrine	An available toilet/latrine refers to an individual toilet seat/squat-plate or latrine that is present and can be accessed any time during the school day, meaning that it has a door that is unlocked or for which a key is available at all times.
Clean toilet/latrine	A clean toilet/latrine refers to facilities that are not smelly, where there is no visible faeces in (on the floor, walls, seat or slab) or around the facility, no flies and no litter.
Functional toilet/latrine	A functional toilet/latrine refers to a facility that can be used during the school day, which means that it is not broken, its hole is not blocked, and water is available for flush/pour-flush toilets.
Private toilet/latrine	A private toilet/latrine refers to an individual toilet seat/squat-plate or latrine that allows use undisturbed by other users during the school day. This means that it has (partitioning) walls on three sides and a door with a functional lock that can be locked from the inside, and no large gaps in the structure.
Usable toilet/latrine	A usable toilet/latrine refers to a facility that is: • available to students (doors are unlocked or a key is available at all times); • functional (the toilet is not broken, the toilet hole is not blocked, and water is available for flush/pour-flush toilets); • private (there are closable doors that lock from the inside and no large gaps in the structure).
Single-sex toilets	Single-sex toilets refer to toilet facilities dedicated exclusively to female use or male use as indicated by visible signs, and that are separated from each other by distance or a wall providing sufficient privacy from the opposite sex. This definition should be further defined based on the local context, as needed. A separate single room with one toilet only that can be used by one student at a time, ensuring their privacy (a gender-neutral toilet) can be considered a single-sex toilet. The opposite is mixed/unisex toilets.
Toilet cubicle	A toilet cubicle refers to an individual compartment provided with (partitioning) walls on three sides and a door that can be locked from inside, with a toilet seat/squat-plate or latrine where a single child can urinate or defecate in private. The toilet cubicle could be a toilet room with a single toilet or an individual compartment inside a room with multiple cubicles. It is also referred to as a toilet stall.
Toilet facility	A toilet facility refers to a common room or area provided with toilet cubicles, urinals and handwashing facilities and, in girls' toilet facilities, private facilities for menstrual hygiene. Synonyms include bathroom, toilet block and washroom.

Waste disposal	Waste disposal refers to a mechanism in place for the management of waste after collection from bins in the toilets. The mechanism could be outsourced, when waste is transported to an external disposal facility, or on the premises. Safe disposal mechanisms on premises include incineration; burning in a protected pit; and burial in a lined, protected pit. The disposal mechanism does not include the practice of waste collection and storage inside the school premises.

Hygiene and menstrual hygiene management

Handwashing facility	A handwashing facility refers to a device or infrastructure that enables pupils to wash their hands. An adequate handwashing facility is provided with running water (such as sink with tap, water tank with tap, bucket with tap, tippy-taps) and any form of soap (bar soap, liquid soap, foam or soapy water).
Hygiene consumables	Hygiene consumables refer to materials needed for personal hygiene that are meant to be used up and then replaced. Regular controls and fill-ups are needed to ensure availability. Hygiene consumables include, but are not limited to, soap for handwashing (bar soap, liquid soap, foam or soapy water), toilet paper, paper towels and menstrual hygiene products.
Means for anal cleansing	Means for anal cleansing refer to water, tissue or toilet paper, or other means present in the toilet cubicle, to allow hygiene practices after urinating or defecating. These will likely vary between countries and over time, and should be defined based on the local context.
Menstrual hygiene management (MHM)	MHM refers to "women and adolescent girls using a clean menstrual management material to absorb or collect menstrual blood, that can be changed in privacy as often as necessary for the duration of a menstrual period, using soap and water for washing the body as required, and having access to safe and convenient facilities to dispose of used menstrual management materials" *(60)*. Provisions for MHM for women and adolescent girls include: • timely and adequate information about the menstrual cycle and on hygienic practices; • accessible sanitation; • clean menstrual hygiene products to absorb and collect blood; • a private space for hygiene and changing menstrual products; • access to soap and water for washing hands and cloths; • sanitary bins to dispose of used menstrual hygiene products safely.

Means for MHM	Means for MHM in a school WASH facility refer to: • a bin with a lid for safe disposal of used menstrual hygiene products; • water and soap available in a private space for washing, inside the cubicle or separately. Means for MHM in schools also include the provision of menstrual hygiene products in case of urgent need by girls having their period at school.
Menstrual hygiene products	Menstrual hygiene products refer to personal care items used during menstruation to absorb and/or collect blood (also referred to as menstrual hygiene materials or feminine hygiene products). These may vary between countries; preferences will also vary over time and generations, and should be defined based on the local context. Safe menstrual hygiene products may include, but are not limited to, tampons, clean reusable cloth pads, disposable sanitary pads, menstrual cups and menstrual underwear.
Menstrual waste	Menstrual waste refers to materials contaminated with menstrual blood and body fluids, and used disposable menstrual hygiene products. Safe disposal of menstrual waste is ensured by providing a bin with lid in the private place for personal hygiene and the female toilet cubicle.
Sanitary bin	A sanitary bin refers to a bin with a lid for safe and appropriate disposal of menstrual waste.

References

1. Masento NA, Golightly M, Field DT, Butler LT , van Reekum CM. Effects of hydration status on cognitive performance and mood. Br J Nutr. 2014;111(10):1841–52.
2. Guinan M, McGuckin M, Ali Y. The effect of a comprehensive handwashing program on absenteeism in elementary schools. Am J Infect Control. 2002;30(4):217–20.
3. Lundblad B, Hellstrom AL. Perceptions of school toilets as a cause for irregular toilet habits among schoolchildren aged 6 to 16 years. J Sch Health. 2005;75(4):125–8.
4. Grossi V, Klimschak E, Rechenburg A, Shinee E, Schmoll O. The situation of water, sanitation and hygiene in schools in the pan-European region. Copenhagen: WHO Regional Office for Europe; 2016 (http://www.euro.who.int/en/publications/abstracts/situation-of-water,-sanitation-and-hygiene-in-schools-in-the-pan-european-region-the-2016, accessed 18 July 2019).
5. van Maanen P, Shinee E, Grossi V, Vargha M, Gabriadze N, Schmoll O. Prioritizing pupils' education, health and well-being: water, sanitation and hygiene in schools in the pan-European region. Copenhagen: WHO Regional Office for Europe; 2016 (http://www.euro.who.int/en/publications/abstracts/prioritizing-pupils-education,-health-and-well-being.-water,-sanitation-and-hygiene-in-schools-in-the-pan-european-region-2016, accessed 18 July 2019).
6. Rapport annuel 2013 [Annual report 2013]. Paris: Observatoire national de la sécurité et de l'accessibilité des établissements d'enseignement (http://www.education.gouv.fr/cid85820/les-publications-de-l-ons.html, accessed 26 September 2016).
7. Transforming our world: the 2030 Agenda for Sustainable Development. Geneva: United Nations (A/RES/70/1; https://sustainabledevelopment.un.org/post2015/transformingourworld, accessed 18 July 2019).
8. Gustafsson JE, Ehren MCM, Conyngham G, McNamara G, Altrichter H, O´Hara J. From inspection to quality: ways in which school inspection influences change in school. Stud Educ Eval. 2015;47:47–57.
9. Drinking water, sanitation and hygiene in schools: global baseline report 2018. New York: United Nations Children's Fund and World Health Organization; 2018 (https://data.unicef.org/resources/wash-in-schools/, accessed 18 July 2019).
10. Penninckx M. Effects and side effects of school inspections: a general framework. Stud Educ Eval. 2017;52:1–11.
11. Advancing WASH in schools monitoring. New York: United Nations Children's Fund; 2015 (https://www.unicef.org/wash/schools/washinschools_53115.html, accessed 31 January 2019).
12. Declaration of the Sixth Ministerial Conference on Environment and Health [Ostrava Declaration]. Copenhagen: WHO Regional Office for Europe; 2017 (http://www.euro.who.int/en/media-centre/events/events/2017/06/sixth-ministerialconference-on-environment-and-health/documentation/declaration-of-the-sixth-ministerial-conference-on-environment-and-health, accessed 28 January 2019).
13. Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes. Geneva: United Nations Economic Commission for Europe and WHO Regional Office for Europe; 2006 (http://www.euro.who.int/en/publications/policy-documents/protocol-on-water-and-health-to-the-1992-convention-on-the-protection-and-use-of-transboundary-watercourses-and-international-lakes, accessed 18 July 2019).

14. Health promoting schools. In: World Health Organization [website]. Geneva: World Health Organization; 2019 (https://www.who.int/health-promoting-schools/en/, accessed 30 July 2019).

15. Health promoting schools. In: Schools for Health in Europe [website]. Haderslev: Schools for Health in Europe; 2019 (https://www.schoolsforhealth.org/resources/materials-and-tools/how-be-health-promoting-school, accessed 1 August 2019).

16. Core questions and indicators for monitoring WASH in schools in the Sustainable Development Goals. Geneva: United Nations Children's Fund and World Health Organization; 2016 (https://www.washinschoolsindex.com/document/148, accessed 30 January 2019).

17. Declaration: partnerships for the health and well-being of our young and future generations [Paris Declaration]. Copenhagen: WHO Regional Office for Europe; 2016 (http://www.euro.who.int/en/media-centre/events/events/2016/12/paris-high-level-conference/documentation/working-papers/outcome-documents/declaration.-partnerships-for-the-health-and-well-being-of-our-young-and-future-generations, accessed 18 July 2019).

18. Adams J, Bartram J, Chartier Y, Sims J. Water, sanitation and hygiene standards for schools in low-cost settings. Geneva: World Health Organization; 2009 (https://www.who.int/water_sanitation_health/publications/wsh_standards_school/en/, accessed 18 July 2019).

19. Environmental assessment checklist for healthy schools. Washington, DC: United States Environmental Protection Agency; 2012 (http://www.kdheks.gov/olrh/School_Inspections/EPA_school_assessment_checklist.pdf, accessed 18 July 2019).

20. Ceredigion schools hygiene and toilet survey. In: School toilets: good practice guidance for schools in Wales. Cardiff: Welsh Government; 2012 (https://gov.wales/school-toilets-good-practice-guidance, accessed 18 July 2019).

21. Water and sanitation: a checklist for the environment and supplies in schools. Paris: United Nations Educational, Scientific and Cultural Organization; 2004 (https://www.susana.org/en/knowledge-hub/resources-and-publications/library/details/1358, accessed 30 July 2019).

22. WASH in schools monitoring package. New York: United Nations Children's Fund; 2011 (http://www.unicef.org/wash/schools/washinschools_53115.html, accessed 18 July 2019).

23. Realising the human rights to water and sanitation: a handbook. Nairobi: UN-Habitat; 2014 (https://unhabitat.org/books/realizing-the-human-rights-to-water-and-sanitation-checklists/, accessed 18 July 2019).

24. WASH in schools empowers girls' education: tools for assessing menstrual hygiene management in Schools. New York: United Nations Children's Fund; 2013 (http://www.wins4girls.org/resources/2013%20UNICEF%20Emory%20Tools%20for%20Assessing%20MHM%20in%20Schools.pdf, accessed 18 July 2019).

25. House S, Mahon T, Cavill S. Menstrual hygiene matters: a resource for improving menstrual hygiene around the world. London: WaterAid; 2012 (https://washmatters.wateraid.org/publications/menstrual-hygiene-matters, accessed 18 July 2019).

26. Guidelines for drinking-water quality, 4th edition, incorporating the 1st addendum. Geneva: World Health Organization; 2017 (https://www.who.int/water_sanitation_health/publications/drinking-water-quality-guidelines-4-including-1st-addendum/en/, accessed 18 July 2019).

27. Guidelines on sanitation and health. Geneva: World Health Organization; 2018 (https://www.who.int/water_sanitation_health/publications/guidelines-on-sanitation-and-health/en/, accessed 18 July 2019).

28. The physical school environment: an essential component of a health-promoting school. Geneva: World Health Organization; 2003 (https://www.who.int/ceh/publications/cehphysical/en/, accessed 18 July 2019).

29. Improving health and learning through better water, sanitation and hygiene in schools: an information package for school staff. Copenhagen: WHO Regional Office for Europe; 2019. (http://www.euro.who.int/en/publications/abstracts/improving-health-and-learning-through-better-water,-sanitation-and-hygiene-in-schools.-an-information-package-for-school-staff-2019, accessed 1 October 2019).

30. Chatterley C, Javernick-Will A, Linden KG, Alam K, Bottinelli L, Venkatesh M. A qualitative comparative analysis of well-managed school sanitation in Bangladesh. BMC Public Health. 2014; 14:6.

31. Groenwall J, Mulenga M, Mcgranahan G. Groundwater, self-supply and poor urban dwellers: a review with case studies of Bangalore and Lusaka (Human Settlements Working Paper, 24). London: International Institute for Environment and Development; 2010.

32. Kumpel E, Nelson KL. Intermittent water supply: prevalence, practice, and microbial water quality. Environ Sci Technol. 2016;50(2):542–53.

33. Bivins AW, Sumner T, Kumpel E, Howard G, Cumming O, Ross I et al. Estimating infection risks and the global burden of diarrheal disease attributable to intermittent water supply using QMRA. Environ Sci Technol. 2017;51(13):7542–51.

34. Villanueva CM, Kogevinas M, Cordier S, Templeton MR, Vermeulen R, Nuckols JR et al. Assessing exposure and health consequences of chemicals in drinking water: current state of knowledge and research needs. Environ Health Perspect. 2014;122:213–21.

35. Cárdenas-González M, Osorio-Yáñez C, Gaspar-Ramírez O, Pavković M, Ochoa-Martínez A, López-Ventura D et al. Environmental exposure to arsenic and chromium in children is associated with kidney injury molecule-1. Environ Res. 2016;150:653–62.

36. Council on Environmental Health. Prevention of childhood lead toxicity. Pediatrics. 2016;38(1):e20161493.

37. Inan M, Aydiner CY, Tokuc B, Aksu B, Ayvaz S, Ayhan S et al. Factors associated with childhood constipation. J Paediatr Child Health. 2007;43(10):700–6.

38. Burton S. Toilets unblocked: a literature review of schools toilets. Edinburgh: Scotland's Commissioner for Children and Young People; 2013.

39. Lundblad B, Berg M, Hellström AL. Experiences of children treating functional bladder disturbances on schooldays. J Pediatr Urol. 2007;3(3):189–93.

40. Burton M, Cobb E, Donachie P, Judah G, Curtis V, Schmidt WP. The effect of handwashing with water or soap on bacterial contamination of hands. Int J Environ Res Public Health. 2011;8(1):97–104.

41. Jensen DA, Macinga DR, Shumaker DJ, Bellino R, Arbogast JW, Schaffner DW. Quantifying the effects of water temperature, soap volume, lather time, and antimicrobial soap as variables in the removal of Escherichia Coli Atcc 11229 from hands. J Food Prot. 2017;80(6):1022–31.

42. Chittleborough C, Nicholson AL, Basker E, Bell S, Campbell R. Factors influencing hand washing behaviour in primary schools: process evaluation within a randomized controlled trial. Health Educ Res. 2012;27(6):1055–68.

43. Jasper C, Le TT, Bartram J. Water and sanitation in schools: a systematic review of the health and educational outcomes. Int J Environ Res Public Health. 2012;9(8):2772–87.

44. Keatman T, Cavill S, Mahon T. Menstrual hygiene management in schools: South Asia. New York: United Nations Children's Fund; 2017 (https://washmatters.wateraid.org/publications/menstrual-hygiene-management-in-schools-south-asia, accessed 18 July 2019).

45. Kirk J, Sommer M. Menstruation and body awareness: linking girls' health with girls' education. Amsterdam: Royal Tropical Institute; 2006. (https://www.susana.org/en/knowledge-hub/resources-and-publications/library/details/1200, accessed 18 July 2019).

46. Sommer M, Caruso BA, Sahin M, Calderon T, Cavill S, Mahon T et al. A time for global action: addressing girls' menstrual hygiene management needs in schools. PLoS Med. 2016;13(2):e1001962.

47. Phillips-Howard PA, Caruso B, Torondel B, Zulaika G, Sahin M, Sommer M. Menstrual hygiene management among adolescent schoolgirls in low- and middle-income countries: research priorities. Glob Health Action. 2016;9:33032.

48. Always is on a mission to #EndPeriodPoverty. In: P&G UK and Ireland News [website]. Weybridge: Procter & Gamble; 2018 (https://www.pgnewsroom.co.uk/press-release/uk-news-releases/always-mission-endperiodpoverty, accessed 1 August 2019).

49. Jones H, Reed B. Water and sanitation for disabled people and other vulnerable groups: designing services to improve accessibility. Loughborough: WEDC, Loughborough University; 2005 (https://www.ircwash.org/resources/water-and-sanitation-disabled-people-and-other-vulnerable-groups-designing-services, accessed 18 July 2019).

50. Ciobanu N, Dodos J, Adamonyte D. Survey on hygiene knowledge, attitude and practice 2014–2015. Vilnius: European Environment and Health Youth Coalition; 2016 (https://www.unece.org/fileadmin/DAM/env/documents/2016/wat/06Jun_29-30_WG_on_Water_and_Health/4_EEHYC_WASH_in_Schools_survey_report_FINAL.pdf, accessed 15 May 2018).

51. WASH in schools operation and maintenance manual. Bonn: Deutsche Gesellschaft für Internationale Zusammenarbeit; 2017 (https://resourcecentre.savethechildren.net/library/wash-schools-operation-and-maintenance, accessed 30 July 2019).

52. Felzmann H. Ethical issues in school-based research. Res Ethics Rev. 2009;5(3):104–9.

53. Edmonds CJ, Burford D. Should children drink more water? The effects of drinking water on cognition in children. Appetite 2009;52(3):776–9.

54. Popkin BM, D'Anci KE, Rosenberg IH. Water, hydration, and health. Nutr Rev. 2010;68(8):439–58.

55. Patel AI, Hampton KE. Encouraging consumption of water in school and child care settings: access, challenges, and strategies for improvement. Am J Public Health. 2011;101(8):1370–9.

56. Molloy CJ, Gandy J, Cunningham C, Slattery G. An exploration of factors that influence the regular consumption of water by Irish primary school children. J Hum Nutr Diet. 2008;21(5):512–5.

57. Curtis V, Cairncross S. Effect of washing hands with soap on diarrhoea risk in the community: a systematic review. Lancet Infect Dis. 2003;3:275–81.

58. Facility types. In: WHO/UNICEF JMP [website]. Geneva: United Nations Children's Fund and World Health Organization; 2019 (https://washdata.org/monitoring/methods/facility-types, accessed 25 February 2019).

59. Fact sheet 3.4: simple pit latrines. Geneva: World Health Organization; 2005 (https://www.who.int/water_sanitation_health/publications/envsanfactsheets/en/index2.html, accessed 18 July 2019).

60. Report of the second consultation on post-2015 monitoring of drinking-water, sanitation and hygiene. The Hague: WHO/UNICEF Joint Monitoring Programme for Drinking-water and Sanitation; 2012 (https://www.ircwash.org/resources/report-second-consultation-post-2015-monitoring-drinking-water-sanitation-and-hygiene, accessed 18 July 2019).

Auxiliary tables for the checklist for observations

The auxiliary tables give space to note down observations during the visit to the toilet facilities and different areas of the school. They thus assist with the calculations of usable water, handwashing and sanitation fixtures and with checking the overall status of the WASH services, such as cleanliness. They are not meant for data collection and evaluation but complement the checklist to facilitate data collection.

During the inspection, the tables can be filled in with the status or numbers related to each room or area of the school visited. They can then be used to calculate the final numbers to complete the checklist.

An example is set out below.

Question CS13. Are means for anal cleansing provided in pupils' toilet cubicles?

Answer options

- ☐ Yes, in all toilet cubicles
- ☐ Yes, in a half of or more of the toilet cubicles
- ☐ In a few or none of the toilet cubicles
- ☐ Not applicable

To answer question CS13, all toilet cubicles should be visited and availability of toilet paper or other means for anal cleansing observed. The auxiliary table for sanitation provides space to keep track during the inspection of the total number of toilet cubicles/latrines and the number of toilet cubicles/latrines with anal cleansing materials: this will assist in answering question CS13 with accuracy.

Water

	Facility/area identification (adapted to the local context, using room number ID or location, for example)	Total number of available drinking-water points [a]	Number of functional drinking-water points [b]
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
Total			

[a] Available drinking-water points include any points where staff and pupils can get water to drink when needed.

[b] Functional drinking-water points should be in use and not broken down, and should have running water.

Sanitation

	Facility/area identification (adapted to the local context, using room number ID or location, for example)	Room users [c] (M = for boys only F = for girls only U = for unisex)	Total number of toilet cubicles/ latrines	Number of available toilet cubicles/ latrines [d]	Number of functional toilet cubicles/ latrines [e]	Number of private toilet cubicles/ latrines [f]	Number of usable toilet cubicles/ latrines: available, functional and private [g]	Number of toilet cubicles/ latrines with means for anal cleansing	Status of cleanliness in toilet facilities [h] (C = clean SC = somewhat clean NC = not clean)	Status of lighting in toilet facilities (A = adequate)	Status of ventilation in toilet facilities (A = adequate)	Availability of waste bins in toilet facilities (A = available)
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
Totals			M:	M:	M:	M:	M:		C:			
			F:	F:	F:	F:	F:		SC:			
			U:	U:	U:	U:	U:		NC:			
			Total:	Total:	Total:	Total:	Total:					

[c] Gender-neutral toilets could be also considered if relevant (see note to question CS2).

[d] Available means that the door to the toilet facility or the toilet cubicle is unlocked, or a key is available at all times.

[e] Functional means that the toilet is not broken, the toilet hole is not blocked, and water is available for flush/pour-flush toilets at the time of inspection.

[f] Private means that there are (partitioning) walls, a closable door that locks from the inside and no large gaps in the cubicle structure. In the case of urinals, private means with integral partitioning walls. Lockable toilet doors may not be applicable in preschools.

[g] A usable toilet is available, functional and private at the same time.

[h] "Clean" means all toilets do not have a strong smell or significant numbers of flies or mosquitos, and there are no visible faeces, urine spots or litter on the floor, walls, seat (or pan) or around the facility. "Somewhat clean" means that there is some smell and/or some sign of faecal matter in some of the toilets. "Not clean" means that there is a strong smell and/or presence of faecal matter in most toilets.

Hygiene

	Facility/area identification (adapted to the local context, using room number ID or location, for example)	Total number of handwashing facilities	Number of handwashing facilities with running water	Number of handwashing facilities with running water and soap	Number of sinks with disposable towel	Status of cleanliness of handwashing facilities [j] (C = clean)	Number of handwashing facilities with hot water
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
Total							

[j] "Clean" means that handwashing facilities are free from dirt, with no spots of litter/waste at the time of inspection.

Adequate access to water, hygiene and sanitation (WASH) is every child's right, as recognized in the 2030 Agenda for Sustainable Development, which calls for improved WASH in schools via Sustainable Development Goals on good health and well-being, high-quality education and clean water and sanitation. Ensuring WASH accessibility in schools is also a priority in the pan-European region, as expressed in the Protocol on Water and Health and the Ostrava Declaration on Environment and Health.

This publication provides evidence-based and ready-to-use surveillance instruments to support education and public health authorities in assessing and monitoring WASH conditions in schools, thereby advancing the agenda to achieve universal access. Routine WASH surveillance has been shown to support school improvements and policy-making to safeguard children's health, well-being, dignity and cognitive performance.

Strengthening routine WASH surveillance in schools will help with informed target-setting and the development of efficient and focused improvement strategies. The findings will also be useful for other stakeholders committed to improving WASH in schools as a fundamental objective to protect children's health and ensure basic human rights.

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