

Background and introduction

On 11 – 13 December 2023, WHO/Europe hosted the third subregional workshop on water, sanitation, and hygiene (WASH) in schools. The event took place in Astana, Kazakhstan, bringing together representatives of health and educational authorities from Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan, as well as UNICEF country offices from Central Asia, the Schools for Health in Europe (SHE) Network, and experts from Croatia, Lithuania, and Serbia.

The workshop was organized and funded under the auspices of the Protocol on Water and Health, a multilateral legal instrument jointly supported by the United Nations Economic Commission for Europe and WHO/Europe.

The Protocol on Water and Health

The Protocol on Water and Health is a multilateral legal instrument which supports advancing the WASH agenda in the WHO European Region, including meeting the commitments of the 2030 Agenda for Sustainable Development, and the Declaration of the Seventh Ministerial Conference on Environment and Health.

An ambitious programme of work for 2023-2025 under the Protocol aims to address key regional challenges and priorities in the WASH domain, including advancing WASH in schools.

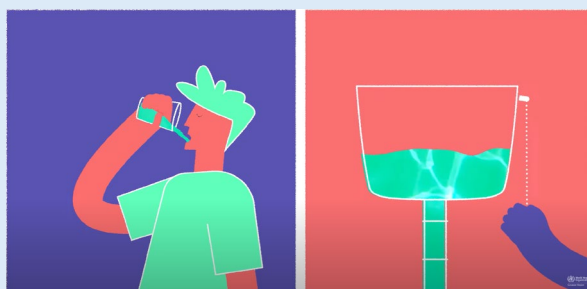
Learn more about the Protocol on Water and Health:

Video:

<https://www.youtube.com/watch?v=zwujVTJHELw>

Brochure:

https://unece.org/sites/default/files/2022-01/ProtocolBrochure_EECE_MP.WH_21_WEB.pdf



The purpose of the workshop was to offer an up-to-date overview of health and education considerations for ensuring adequate WASH in schools. It served as a platform for discussing and exchanging on regional priorities for action and strategizing the effective implementation of improvements at both national and local levels, including consideration of WASH aspects related to preparedness and response to health emergencies based on the lessons learned from the COVID-19 pandemic.

Recognizing the interdisciplinary nature of WASH interventions, the workshop aimed to promote leadership and cooperation between the education and health sectors, and encourage collaborative actions towards advancing WASH in schools.

Thanks to the enthusiastic participation of pupils during the workshop opening, participants gained valuable insights into first-hand experiences and challenges associated with using WASH facilities in schools. They also had the opportunity to learn about pupils' perspectives and ideas on how WASH conditions in schools could be improved to meet their needs. A representative from a media outlet, a website focused on education and upbringing in Kazakhstan, showcased a successful case study (see Textbox 1) where the media supported government agencies in understanding the magnitude of the issue, demonstrating how awareness-raising campaigns can help enhance the user-

friendliness, comfort, and cleanliness of school toilets.

Through interactive sessions and group work, participants shared country-specific examples of initiatives and efforts aimed at ensuring provisions for adequate WASH in schools, including for menstrual hygiene management (MHM), an emerging priority in the Central Asian region. They also provided updates and valuable insights into the status of national policies and standards for WASH in schools, and discussed country practices for effective surveillance of WASH conditions and pupils'

WASH related behaviours such as use of toilets, handwashing with soap, regular hydration etc . Global indicators and tools for monitoring and reporting on national progress towards achieving Sustainable Development Goals (SDG) targets on WASH in schools were presented, along with successful approaches to conducting pupils' perception surveys and engaging pupils in monitoring and evaluation of WASH conditions. Participants also exchanged views about success factors and barriers to regular operation and maintenance, and sustainable financing. They identified common challenges across countries, such as difficulties in justifying investment in WASH in schools, and the need to establish norms for calculating the required WASH expenditure per student.

The workshop outlined a set of concrete steps to be taken towards strengthening national target setting and progressive action planning to achieve universal access to WASH in schools, including by using the mechanisms offered by the Protocol on Water and Health. Due to the high vulnerability of the Central Asian region to climate change, the need to prioritize inclusive, climate-resilient, and environmentally sustainable WASH infrastructure in schools was emphasized as crucial for adaptation and achieving advanced levels of service provision (Textbox 6).

Step-wise improvements and working progressively towards compliance with the national WASH standards (Textbox 3), engaging multiple stakeholders and strengthening access to WASH using systems approach (Textbox 2), ensuring access to adequate WASH services in schools as a fundamental pillar in promoting healthy nutrition and eating habits (Textbox 4), and sustaining momentum on hand hygiene (Textbox 5), are some of the priorities for action identified during the workshop. These topics are further elaborated as a part of this report.

The workshop received positive feedback from participants, who found it to be highly useful and insightful. The exchange of experiences among countries was particularly valued, as it provided a unique opportunity for mutual learning and collaboration. Continued knowledge-sharing and capacity strengthening will be instrumental in further advancing WASH in schools and fostering healthier learning environments for children in the region.

Textbox 1: From awareness raising to national standards for WASH in schools: a case study from Kazakhstan

Awareness-raising initiatives and campaigns are driving forces to improve WASH in schools by fostering behavioural change, promoting good hygiene practices, and highlighting the importance of adequate WASH infrastructure, while also calling for necessary improvements.

TOILE is an informational and awareness-raising campaign about the quality of school toilets that was implemented between June and December 2022 by *Peremena.media*, a website about education and upbringing in Kazakhstan. The campaign was designed to motivate pupils and school communities across Kazakhstan to talk openly about toilets in their schools, whether they liked them and what kind of problems they had been facing in accessing school toilets when needed. Pupils were also encouraged to take photos of toilets and anonymously share them on a social media platform, while at the same being offered an opportunity to vote for the worst toilet.

“We want toilets in Kazakhstani schools to be accessible, comfortable, safe and meet all sanitary and hygienic standards.” - one of the messages of the TOILE awareness-raising campaign.

Evidence generated through the campaign and continued advocacy had gained significant popularity, drawing public attention to the issues related to WASH in schools. As a result of this bottom-up awareness-raising and demand stimulated by the social media campaign, several follow-up actions have been taken by the government in response. For instance, a technical group on WASH in schools was established by partnership with the WHO office in Kazakhstan, the Government, and the Parliament, including the representatives of the social media campaign and other important stakeholders.

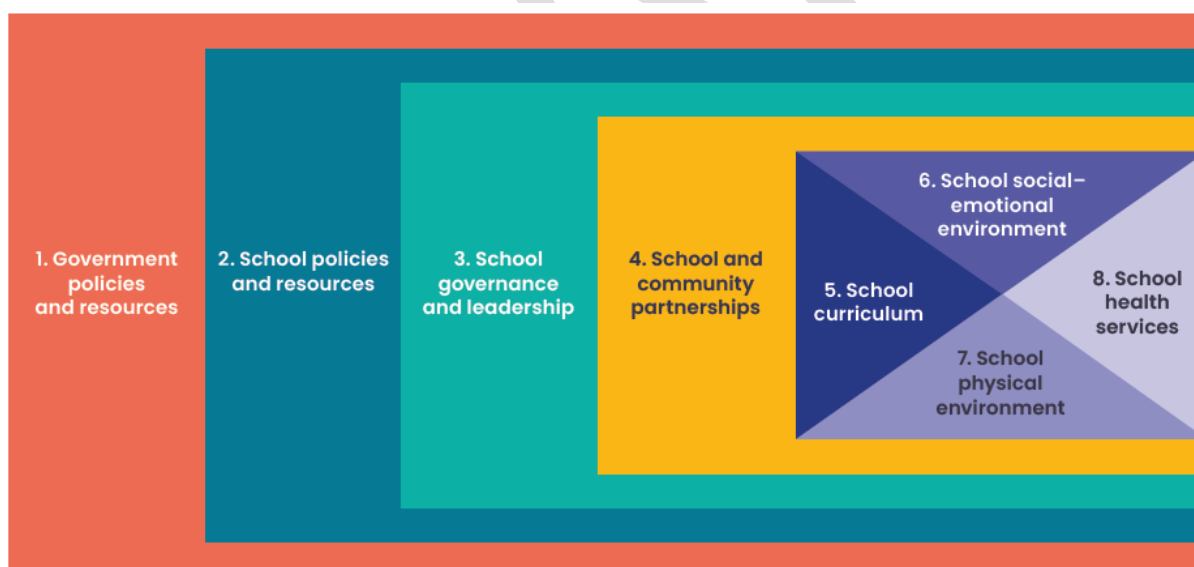
The technical group worked to develop national standards on WASH in schools that were officially adopted in 2023, aligning Kazakhstan with international standards on the matter as of 1 January 2024. Implementing national standards for WASH in schools will lead to forthcoming reforms in school construction and maintenance, with a specific focus on gender equality and water management.

Textbox 2: Strengthening access to WASH using a Health Promoting Schools and systems approach

The Health Promoting Schools (HPS) framework is a holistic approach to promoting health, well-being and educational attainment in schools. It reflects a whole-school approach, comprising healthy school policies, curricula, physical and psychosocial environments, communities, and health services. The many barriers to appropriate WASH in schools require action in several systems and sectors, including infrastructure, environment, health, and education. Bringing these systems together is the essence of the HPS. A multisystem approach ensures that policies, mechanisms and resources for health and well-being are sustainably promoted in all aspects of school life.

HPS designed a set of global standards to be used by various stakeholders involved in identifying, planning, funding, implementing, monitoring and evaluating any whole-school approach (even if the term HPS is not used) at local, subnational, national and global levels, primary and secondary schooling and public and private educational institutions (Fig. 1). The HPS enables improvements based on the strengthening of human capacities, ensuring that schools with inadequate infrastructure and material conditions are not overlooked and left behind, preventing the exacerbation of disparities between educational institutions.

Fig. 1. The eight global standards for health-promoting schools and systems.



Source: WHO (2023). *How school systems can improve health and well-being. Topic brief: water, sanitation and hygiene (WASH)*. Available at: <https://www.who.int/publications/i/item/9789240064799>.

Numerous actions, activities, or initiatives, informed by these global standards for HPS, can be conducted to strengthen the access to and use of WASH facilities. Examples include:

- Developing national policies for HPS and WASH, ensuring alignment between the ministry of education and other relevant sectors.
- Developing national WASH guidelines that set minimum standards for WASH in schools.

- Developing school policies on personal hygiene, food preparation, menstrual hygiene management, infection prevention and control, and environmental hygiene.
- Recognizing and promoting WASH as integral to health and education.
- Ensuring that WASH and menstrual hygiene are integrated into national school health literacy framework and educational materials for pupils.
- Creating WASH awards for WASH-friendly schools and community groups.
- Ensuring that teachers are comfortable and confident in delivering educational messages from the comprehensive national health and nutrition curriculum, including messaging on personal hygiene and menstrual health.
- Committing to “zero tolerance” of bullying and discrimination and emphasizing dignity and safety of school toilets.

For further information, please visit: <https://www.who.int/publications/i/item/9789240064799>

Textbox 3: Practical approaches and initiatives to foster school-level action and improvements: the Three Star Approach and experience from Tajikistan

The Three Star Approach (TSA) for WASH in schools has been developed to improve the effectiveness of hygiene behaviour change programmes for children. The TSA promotes a system of cost-effective hygiene measures in schools to which additional services can be added over time. The approach recommends starting with simple and affordable hygiene practices (1 star) and implementing subsequent improvements in a stepwise fashion, working progressively towards compliance with the national WASH standards (3 stars). The guiding principle for interventions at all stages is “*keep it simple, scalable and sustainable*”, enabling the approach to be expanded sustainably countrywide at low cost.

UNICEF Tajikistan in partnership with the Ministry of Education and Science of the Republic of Tajikistan introduced the WASH in schools TSA programme in July 2021 to promote safe learning environments. The programme focused on 45 schools across Tajikistan where WASH infrastructure has been rehabilitated with the support from the UNICEF Global WASH Thematic Fund. The TSA programme included behaviour change activities in schools to raise awareness about good hygiene practices (Fig. 2), improving awareness of the importance of maintaining WASH infrastructure timely and regularly, and identifying and managing finances to keep it functional. Emphasis was placed on ensuring inclusive and equitable access to WASH in schools, with particular attention given to the participation and empowerment of children and youth, alongside sensitization efforts targeting the school administration and parents. Recognition and reward mechanisms were utilized to incentivize and acknowledge contributions of schools towards achieving programme objectives.

Schools were categorized as follows:

- One star: pupils perform daily group handwashing and daily group cleaning of classrooms and the school compound.
- Two stars: pupils wash their hands with soap after going to the toilet, and the school supported menstrual hygiene management, improved the toilets and wastewater treatment.
- Three stars: the school upgraded facilities and systems in line with national standards on WASH in schools.

By 2022, the programme achieved significant success. Only five schools remained at “one star” compared to 28 schools before the intervention; 37 schools developed as “two stars” schools, compared to 17 before, while three schools managed to update WASH facilities to meet national

standards and thus became “three stars” schools. In addition, an increase in pupils’ education and awareness about menstrual health and puberty was observed, as well as an effective and low-cost transfer of skills among schools participating in the programme as a result of school-to-school exchanges.

Some of the challenges included a lack of capacity of school staff to engage children in the hygiene agenda to support habit formation and development, limited financial resources to support a safe learning environment, access to and functionality of WASH facilities, and a lack of reliable data and information on WASH in schools.

Ministry of Education and Science’s role in overseeing the implementation and ensuring the continuation and scale-up of TSA was instrumental. Next steps include upscaling of WASH behaviour change communication plans in schools as part of the efforts to implement the TSA across Tajikistan.

Fig. 2. Examples of hygiene communications materials developed under the programme.



Source: Ministry of Education and Science of the Republic of Tajikistan, UNICEF Tajikistan, Good Neighbours Tajikistan (2021)

Textbox 4: Safe drinking-water as the best alternative to sugar-sweetened beverages: testing materials for a communication campaign in school settings

Sugar-sweetened beverages (SSBs) consumption in children is one of the most common unhealthy nutrition habits worldwide which has been association with increased risk of overweight gain and obesity, and the risk of dental caries and other noncommunicable diseases (NCDs).¹ According to the WHO European Childhood Obesity Surveillance Initiative (COSI 2018-2020), 29% of children aged 7-9 years are with overweight or obesity. Also, around 20% of children consume SSBs on more than three days a week, which can compromise their health and well-being.²

The use of communication messages is a common approach to improve health. However, there is limited evidence about which messages are likely to be effective and acceptable, including to caregivers

¹ Guideline: sugars intake for adults and children. Geneva: WHO; 2015 (<https://www.who.int/publications/i/item/9789241549028>).

² WHO European Childhood Obesity Surveillance Initiative (COSI): Report on the fifth round of data collection, 2018–2020. Copenhagen: WHO Regional Office for Europe; 2022 (<https://iris.who.int/handle/10665/363950>).

to reduce SSB consumption among their children. To support the development of an effective communication campaign tailored to the Central Asian context, targeting primary caregivers, a research project was initiated in Kyrgyzstan and Tajikistan to test communication messages to reduce the consumption of SSBs among school-aged children (7 – 11 years old). The project aims to answer the two main questions:

- Do messages increase caregivers' intention to reduce their children's consumption of SSBs?
- Which version of the messages is the most appropriate in terms of clarity, acceptability, usefulness, while avoiding unintended reactions?

A set of messages were developed based on an evidence review of communication-based interventions to reduce children's SSB consumption. Each message included an introductory text about negative effects to health due to SSBs consumption and offered safe drinking-water as the best alternative. Focus group discussions with caregivers in Kyrgyzstan and Tajikistan were held to tailor and adapt the messages to different cultural contexts, including natural additions to safe drinking water (e.g. herbs, fruits) to make water more attractive to children. Finally, three most promising messages were chosen, and a randomized controlled trial was conducted to evaluate the messages enrolling a minimum of 1,000 primary caregivers per country recruited through schools. Analysed results will be available in 2024 and are intended for use in targeted activities.

Overall, schools are environments where children spend a significant portion of their time and can play an important role in enabling health behaviours, specifically healthy eating habits, along with effectively addressing the issue of SSBs consumption. At the same time, access to adequate WASH services, specifically to safe drinking-water, in schools is a fundamental pillar in promoting healthy eating habits and health behaviours, serving as a critical mechanism for preventing NCDs. For example, the provision of appropriate drinking-water infrastructure, such as water fountains in school canteens, alongside promoting regular hydration, facilitates the adoption of healthy behaviours, such as opting for water over SSBs.

Textbox 5: Promoting and sustaining universal hand hygiene

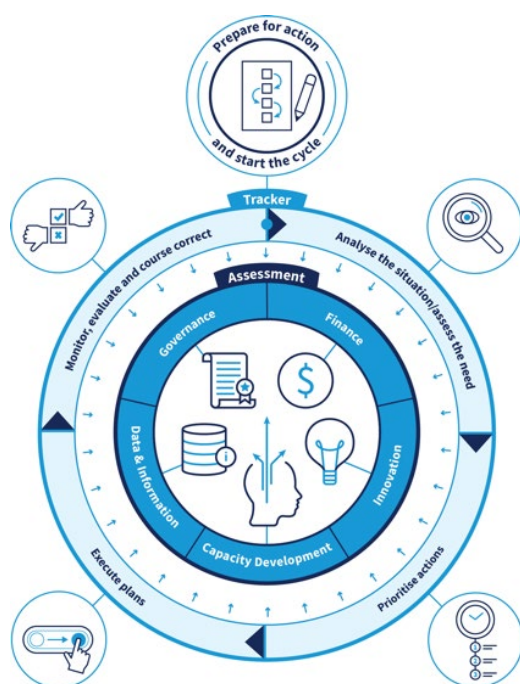
The workshop participants highlighted that during the COVID-19 pandemic, hand hygiene emerged as a critical focus area for preventing and controlling the spread of the disease within school environments. However, there was a shared concern that while hand hygiene received significant attention during the crisis, there is a risk it may be perceived as a temporary measure. It was further emphasized that the promotion of good hand hygiene practices among school children along with adequate investments in ensuring a consistent supply of hygiene consumables like soap in schools may no longer receive the attention and prioritization they deserve. Following the COVID-19 pandemic, funding for hygiene has significantly decreased in almost all countries.

To promote and sustain universal hand hygiene, Tajikistan has developed and adopted the first National Roadmap on Hand Hygiene for All for the Republic of Tajikistan (2023 – 2030), recognising the provision of WASH facilities in schools and other types of educational settings, such as day care centres, universities, colleges as fundamental prerequisite for learning. The National Roadmap outlines a strategic approach to hand hygiene in educational settings. This includes, among others, enhancing the Ministry of Education's leadership role in ensuring hand hygiene for all students, implementing evidence-based behaviour change strategies to promote hand hygiene, integrating hand hygiene into all levels of education curricula to consistently reinforce its importance to children, ensuring accessible and user-friendly handwashing stations, and allocating sufficient resources for the proper functioning and maintenance of hand hygiene facilities. Special emphasis has been given to strengthening monitoring systems to support informed decision-making.

The WHO and UNICEF-led Hand Hygiene for All (HH4A) initiative aims to implement WHO's global recommendations on hand hygiene to prevent and control the COVID-19 pandemic and work to ensure lasting infrastructure and behavior. This initiative calls for countries to lay out comprehensive roadmaps to ensure hand hygiene is a mainstay beyond the pandemic, as part of infection prevention and control (IPC) and WASH efforts. It also proposes a framework for coordination and collaboration among global and regional partners, with the primary aim of supporting and growing country-led efforts and investments.

The Hand Hygiene Acceleration Framework Tool (Fig. 3), developed by WHO, UNICEF and WaterAid as part of the HH4A initiative, supports tracking the process that a government has undergone to develop and implement a plan of action for hand hygiene improvement and assesses the quality of that plan. It helps identify barriers, opportunities and priority actions for accelerating progress towards universal hand hygiene, and drive investment to these.

Fig. 3. The Hand Hygiene Acceleration Framework Tool.



Source: WHO and UNICEF (2022). The Hand Hygiene Acceleration Framework Tool. Available at: [https://www.who.int/publications/m/item/the-hand-hygiene-acceleration-framework-tool-\(hhaft\)](https://www.who.int/publications/m/item/the-hand-hygiene-acceleration-framework-tool-(hhaft))

Textbox 6: Climate-resilient WASH in schools and advanced services

The effects of climate change are making countries across the region more susceptible to extreme weather events, such as droughts, heat waves, heavy rainfall, and floods. Climate change also impacts the provision of adequate WASH in schools. For instance, prolonged periods of drought can lead to water scarcity in schools, disrupting essential hygiene practices such as handwashing and compromising the functionality of sanitation facilities.

In Uzbekistan, the Ministry of Pre-school and School Education, the Ministry of Health, the Scientific-Research Institute of the Ministry of Construction, supported by UNICEF Country Office, have set up a multi-sectoral technical working group for the revision of standards, sanitary norms and procedures for WASH in schools and pre-school facilities, including for construction and rehabilitation of school buildings. Among other key aspects, the revised standards will address climate-resilient and disability-

inclusive WASH infrastructure, and menstrual hygiene and health. To accelerate implementation, the standards will be accompanied with “*Guidelines for WASH in Schools in Uzbekistan*”. To date, improvements to climate-resilient WASH facilities have been facilitated in 25 schools across six districts in the Republic of Karakalpakstan, in areas which are predominantly affected by environmental consequences resulting from the drying up of the Aral Sea. Other initiatives include the use of solar panels, the installation of reverse osmosis systems for purifying underground water, three-step septic tanks for sewage water, and the creation of water reservoirs in schools in areas with limited water supply.

Upon achieving the basic level of service across all WASH domains for all schoolchildren, the focus should transition towards progressive action planning to achieve advanced levels of service provision. This includes promoting quality and enhancing aspects such as usability and user-friendliness of facilities, while also ensuring climate resilience and environmental sustainability. The overarching objective is to maximize the benefits of WASH in schools for pupils.

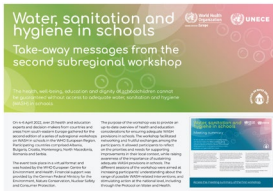
Table 1, created for and discussed during the workshop, offers examples of targets that governments can set to gradually achieve advanced service levels, including considerations related to climate change. Adequate financing of WASH in schools will be essential to guarantee the sustainability of services on a long term.

Table 1. Examples of additional criteria for advanced WASH service provision in schools

Criterion	Water	Sanitation	Hygiene
Quality	Quality of drinking-water supplied meets national standard and/or WHO guidelines for drinking-water quality.	Cleaning and maintenance routine is in operation which ensures that clean, hygienic and usable toilets are available at all times.	Schools provide private places to safely dispose of used menstrual hygiene materials and to wash hands, private parts and clothes. Curriculum for hygiene education includes handwashing practices, menstrual hygiene management, correct use of toilet facilities and regular voiding.
Use of facilities and user friendliness	Schools have a rule on free access to water, allowing children to drink when needed and at their desks.	School rules for toilet visits are adapted to children’s physical and developmental needs. School toilets are equipped with toilet paper inside toilet facilities at all times.	Schools actively teach hand hygiene. Schools establish rules and daily routines for hand hygiene (e.g. prior to school lunch, after use of toilet).
Climate resilience and environmental sustainability	Schools have plans for heat protection and promotion of hydration in case of heat waves.	Schools use technologies with reduced water use for toilets.	Schools implement educational programmes designed to encourage responsible water usage for handwashing, alongside the installation of water reservoirs to ensure the continuity of essential hygiene practices in times of water scarcity.

Useful tools and resources

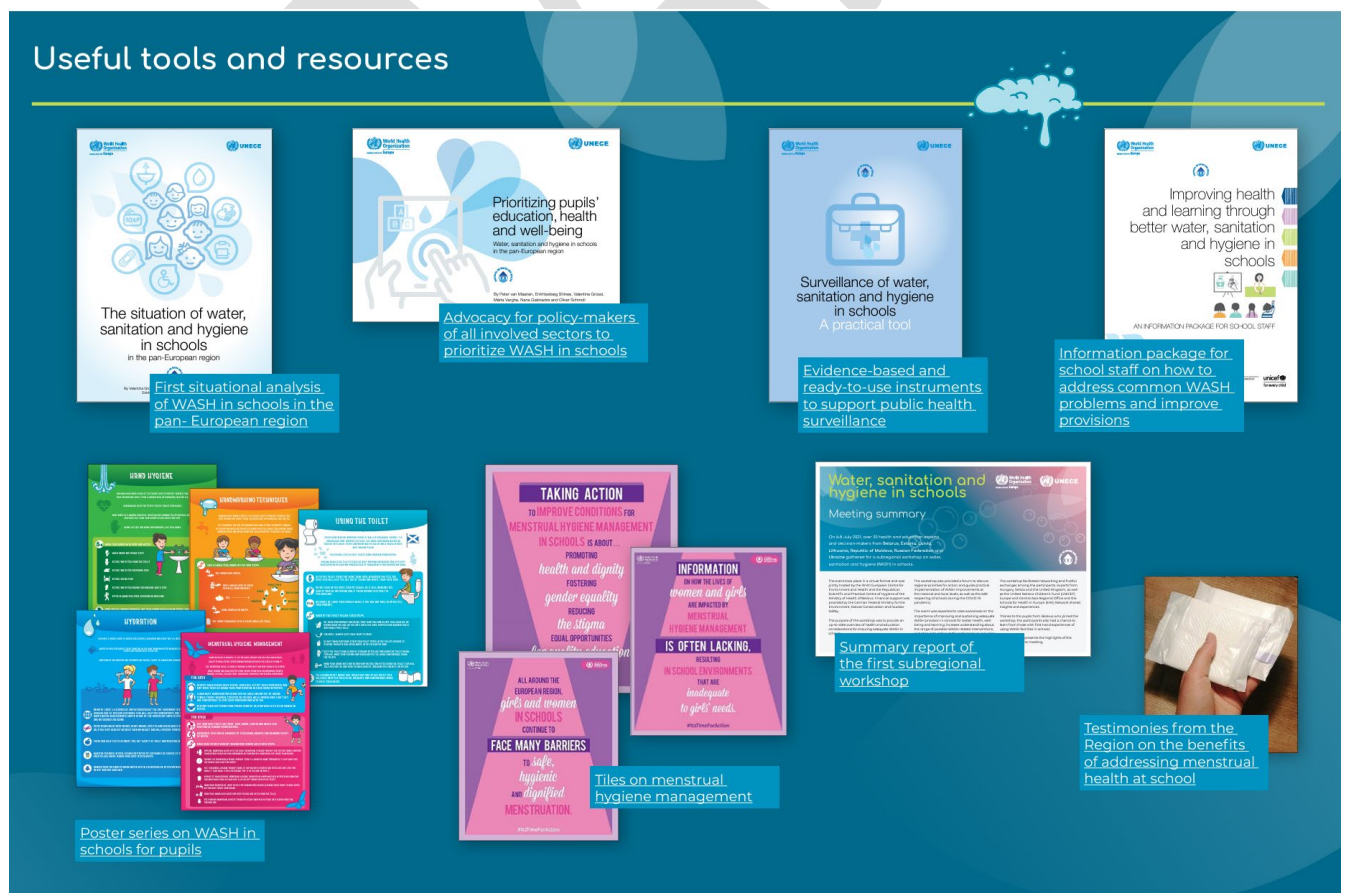
Key take-away messages from the second sub-regional workshop on WASH in schools (<https://www.who.int/europe/publications/m/item/water--sanitation-and-hygiene-in-schools---take-away-messages-from-the-second-subregional-workshop>).



How school systems can improve health and well-being: topic brief: water, sanitation and hygiene (WASH) (<https://www.who.int/publications/i/item/9789240064799>).



Useful tools and resources



- The situation of water, sanitation and hygiene in schools in the pan-European region**
First situational analysis of WASH in schools in the pan-European region
- Prioritizing pupils' education, health and well-being**
Water, sanitation and hygiene in schools in the pan-European region
Advocacy for policy-makers of all involved sectors to prioritize WASH in schools
- Surveillance of water, sanitation and hygiene in schools**
A practical tool
Evidence-based and ready-to-use instruments to support public health surveillance
- Improving health and learning through better water, sanitation and hygiene in schools**
AN INFORMATION PACKAGE FOR SDG-OOL STAFF
Information package for school staff on how to address common WASH problems and improve provisions
- Poster series on WASH in schools for pupils**
Includes posters on: HAND HYGIENE, SANITARY TECHNOLOGIES, USING THE TOILET, INTERACTION, MENSTRUAL HYGIENE KNOWLEDGE.
- Tiles on menstrual hygiene management**
TAKING ACTION TO IMPROVE CONDITIONS FOR MENSTRUAL HYGIENE MANAGEMENT IN SCHOOLS IS ABOUT... PROMOTING health and dignity, FOSTERING gender equality, REDUCING the stigma, EQUAL OPPORTUNITIES.
INFORMATION ON HOW THE LIVES OF women and girls ARE IMPACTED BY MENSTRUAL HYGIENE MANAGEMENT IS OFTEN LACKING, RESULTING IN SCHOOL ENVIRONMENTS THAT ARE inadequate to girls' needs.
ALL AROUND THE EUROPEAN REGION, girls and women IN SCHOOLS CONTINUE TO FACE MANY BARRIERS TO safe, hygienic and dignified MENSTRUATION.
- Summary report of the first sub-regional workshop**
Water, sanitation and hygiene in schools Meeting summary
- Testimonies from the Region on the benefits of addressing menstrual health at school**