





Improving health and learning through better water, sanitation and hygiene in schools











Abstract

Access to safe and reliable water, sanitation and hygiene (WASH) is a critical precondition for providing a safe school environment that supports equal opportunities for high-quality education and healthy development of children. To create WASH-friendly and health-promoting schools, common problems beyond the provision of proper WASH infrastructure – such as toilets and taps – need to be addressed. Operation and maintenance, education and persisting taboos, such as talking about toilet use and menstrual hygiene matters, need to be tackled. This information package offers practical support for school staff on how to address common WASH problems and deliver improvements at the school level, alongside pupils and the entire school community. It will help schools strengthen health education and implement whole-school policies that promote the health, well-being and dignity of pupils and school staff, making every school a health-promoting school.

Keywords CHILD HEALTH EUROPE HYGIENE SANITATION SCHOOL TEACHERS SCHOOLS WATER SUPPLY

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AN INFORMATION PACKAGE FOR SCHOOL STAFF







for every child



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Water, sanitation and hygiene (WASH) are fundamental child and human rights. Good and reliable WASH is a critical precondition for providing a safe school environment that supports equal opportunities for high-quality education and the healthy development of children.

In many schools in the pan-European region, basic WASH provisions are not met. This affects children's learning and well-being, and poses a risk to their health and the health of school staff, as well as of the surrounding community. A WASH-friendly school, however, needs to look beyond the provision of proper WASH infrastructure such as toilets and taps. It also needs to address persisting taboos, such as talking about toilet use and menstrual hygiene matters. To trigger positive and sustainable change, all WASH issues faced by pupils need to be fully acknowledged by school staff and responsible authorities.

The Sustainable Development Goals – in particular Goal 4 on quality education and Goal 6 on clean water and sanitation – call upon countries to ensure universal access to safe and equitable WASH services and a safe and inclusive environment in schools. In the pan-European region, the 2017 Ostrava Declaration on environment and health prioritizes "universal, equitable and sustainable access to safe drinking-water, sanitation and hygiene for all and in all settings". Under the Paris Declaration on partnerships for the health and well-being of our young and future generations, European countries committed to make every school a health-promoting school that provides adequate WASH services.

The Protocol on Water and Health establishes a framework for key WASH policies in the pan-European region. It aims to ensure access to drinking-water and sanitation for everyone – including children in schools. Together, the United Nations Economic Commission for Europe and the WHO Regional Office for Europe use it to foster the development of progressive and integrated WASH policies.

WASH in schools has been a key priority of the work under the Protocol since 2014, bringing together health and education sectors, youth organizations and international partners. We believe that creating and maintaining WASH-friendly schools requires the active engagement and leadership of all stakeholders.

This information package offers practical support for school staff on how they, in concert with pupils, can address common WASH problems and deliver improvements at the school level. It will help schools strengthen health education and implement whole-school policies that promote health, well-being and dignity of the pupils and school staff, making every school a health-promoting school.

To achieve improved WASH in schools, it is also crucial that authorities act at different levels, addressing gaps in governance, surveillance and implementation. National and local authorities can also use this information package to develop their own tools and trigger improvements in WASH in schools within their area of responsibility. A complementary publication, Surveillance of water, sanitation and hygiene in schools: a practical tool, has been developed to advise health and education authorities on strengthening surveillance of WASH services in schools to assess compliance with health-related standards and pupils' needs.

The practical measures presented here can contribute to achieving our joint commitment to make every school a health-promoting school. Together, we must strive for schools that, through improved and maintained WASH services, safeguard children's health, well-being and dignity, allowing future generations to reach their full potential.

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Introduction



This information package focuses on a basic provision for a healthy learning environment: safe and adequate water, sanitation and hygiene (WASH). If children are concerned about the drinking-water available at school or smelly/dirty toilets, they may avoid them, with important consequences for their health and well-being (1).

Children's success at school is greatly affected by the school environment, which is fundamental to ensuring high-quality education and to promoting children's cognitive performance and life skills, including health and health literacy (2, 3). As a headteacher or school manager¹, you have a vital role to play in improving and sustaining WASH in your school. Your involvement in bringing together and engaging teachers and other staff, schoolchildren, parents and local authorities is crucial (4).

This information package provides summary information about the precious benefits of high-quality WASH conditions and how you can deliver improvements to these in your school, together with your team and the pupils. You will find guidance and support to address common problems, along with practical solutions and tips.

The publication focuses on the most important aspects of WASH in schools. It will equip you to assess these, identify gaps and priorities, and come up with a school-specific WASH improvement plan and a health-promoting school policy. You can read it from cover to cover like a book or pick one specific aspect of interest to read in a short break. The practical tools will help you put improvement plans into action and create a favourable WASH environment in your school.

To help you navigate the various aspects of WASH, this information package consists of 15 short factsheets with similar structures, clustered under main chapter headings. They include **1** an opening question to introduce and help you relate to the topic; **2** a list of members of the school community who could play an important role in improving or maintaining the status of the WASH aspect discussed; and **3** details of the major benefits of taking improvement action. They also provide **3** a rationale, summarizing common challenges and the importance of overcoming them.

The main body of each factsheet is dedicated to suggested improvement actions, including **9** a list of practical steps and examples that can be used b y every school to ensure adequate WASH for pupils and staff.



Finally, they list **③** resources and further reading that can be accessed online for more inspiration; **④** related practical templates found inside this publication; and **③** links to other closely related factsheets. The last two factsheets, which cover crosscutting approaches and methods to address aspects and activities discussed in the earlier factsheets and chapters, omit some of these structural elements. The list of useful resources is not meant to be comprehensive. Those suggested in the factsheets were selected from the materials available in English and Russian and retrieveable online. Readers are encouraged to search for further resources that may be available in the local language, possibly made available by education or health authorities.

Some factsheets also provide boxes and tables with more insight into a specific aspect or case studies outlining positive projects implemented by individual schools in the pan-European region. These offer



concrete and inspiring examples, outlining what is achievable with WASH, to generate ideas about actions to take in your school.

At the end of each main chapter, you will find questions for conducting a WASH self-assessment in your school. More information on how to use these is provided in Factsheet 14 on using the WASH checklists.

Practical templates can be found in the annexes at the end of the publication, including printable tables and charts to support your improvements and planning in Annex 1, as well as practical tips for children to be used in the development of educational materials to be hanged or discussed in class in Annex 2.

If you work for a national or local authority rather than in a school, you can use this information package as guidance to develop local tools and trigger improvements to WASH in the schools in your area of responsibility. You can also refer to the previous publications on WASH in schools addressed to authorities by the WHO European Centre for Environment and Health. Health authorities and health care staff working in schools may also consider using this publication for reference when advocating engagement from the school management.

The school environment encompasses various aspects, including air quality and safe infrastructure and equipment (5). WASH can be a convenient starting-point for schools that aim to promote health. Once you have started to improve WASH, you can build on the impetus to make your school a health-promoting school, adding other relevant environmental or non-environmental aspects such as healthy nutrition and physical activity (6). Improving WASH can soon become a successful project (a quick win) and is an effective intervention to promote health (7, 8, 9).

This information package is intended help you to find practical actions to drive change in your school and promote the development and maintenance of a healthy environment. This will improve the health, well-being, dignity and cognitive performance of children and benefit the entire school community.

Quiz: are you ready to become a WASH champion?



If you answered B to most questions....

You are ready to become a WASH champion! You probably know why school managers and staff are so important in improving WASH. This publication should give you answers to any questions you may have and help you feel motivated to take action and improve the WASH status in your school, to benefit your and your students' health.

If you answered mostly A or C...

You will be surprised how relevant WASH is in your life and work. You can still become a WASH champion: find out why and how in this publication. You can do so much to drive change for WASH accessibility and acceptability in your school and make a huge difference to the health and well-being of pupils and staff. Try it out! You will not be disappointed by the results.

Chapter 1. All you need to know about WASH in schools

This chapter will guide you through the different WASH dimensions in schools, covering commonly observed challenges, the importance of taking action and what can be done at the school level. Explore the following chapters for more details on tools and procedures to support improving and maintaining WASH in schools.

Factsheet 1. Drinking-water

Do you think pupils drink enough water at school?

Pupils are often found to be dehydrated due to low fluid intake before and during the school day (10, 11). This has consequences for their attention and performance in class (12, 13).

Key members of the school community

School managers, teachers, janitors and school health staff

Major benefits of taking action

- Hydration positively influences cognitive ability and mood, especially among schoolchildren (10).
- Access to drinking-water in school and in the classroom, in particular – increases children's water consumption (10, 14).
- An adequate intake of safe drinkingwater and appropriate health education reduces health risks among children and adolescents (15).



Background

Children and school staff need safe drinking-water at all times. The water supply is often the responsibility of the district or municipal authorities, or other water service providers, but their responsibility may not extend to the water supply *inside* the school buildings *(16)*. You can help to ensure continuous and safe water in a number of ways: get in contact with the responsible bodies to find out more about water quality, supervise the functionality of the premises plumbing system or take action to improve drinking-water safety. You also have a key role in ensuring pupils' access to water and promoting adequate water intake.

Why it matters

Children and adolescents are often observed to drink too little water at school (14, 17). Water is an essential provision to ensure quality of education and healthy development (Fig. 1) (18). Promoting regular water intake will positively affect pupils' health and well-being, without directly increasing their need to use the toilets (19). At the same time, use of unsafe water can severely affect health and the physical and cognitive development of children, as well as having detrimental effects on adults (20).



Fig. 1. Benefits of accessible and safe drinking-water at school

Source: Popkin et al. (15); van Maanen et al. (18); Lotan et al. (21); Armstrong (22); Prasetyo et al. (23)

How to encourage children to drink enough water

Actively **promote** free access to drinking-water in school and establish a dedicated **school policy**. Encourage pupils to drink water in class and during breaks, especially when they are thirsty or feel tired. Inform teachers, parents and pupils of the importance of adequate water intake and a healthy diet. You could do this during meetings between school staff and parents, a dedicated teachers' workshop or biology lessons, or by organizing a special day. A healthy school policy promotes regular hydration and toilet visits, while restricting sugar-sweetened beverages (*24*).

Ensure an appropriate number of **clean and comfortable facilities** that provide safe drinking-water. Drinking-water facilities located outside toilet areas are more pleasant and convenient for pupils and encourage hydration (10, 25). Facilities can be taps, water fountains, water dispensers with tap or even water bottles available in corridors, schoolyards and/or the canteen. Where possible, packaged water in plastic containers should be avoided due to its environmental footprint. Consult with the authorities to understand the safest option for your school.

Ensure **clean and functional toilets**. Children may limit their water intake to avoid using inadequate toilets *(19)*. Set a cleaning routine and regular checks, address issues promptly and seek support of the authorities and/or the community in the case of complex problems.

How to prevent or address problems

Establish a **plan** and **monitor** the regular performance of operation and maintenance procedures to prevent issues arising. The plan should include a list of maintenance activities, noting how frequently they should be undertaken, and the staff responsible, who should record what activities and checks have been conducted and when. If the school already has a hygiene or maintenance plan in place, make sure that water system is clearly reflected in it.

Seek the help of the health authority and, if necessary, the water supplier to develop or review it. See possible improvement measures in the **\U00e9WASH** problem-solving chart and the **\u00e9** operation and maintenance planning chart (Templates A and B) provided in the practical templates in Annex 1. The following activities belong to maintenance inside the school.

- Drinking-water fountains and taps should be cleaned regularly. This will help to keep the drinking-water points hygienic and hinder unpleasant factors such as smell or dirt, which may deter pupils from using them.
- Water taps and coolers should be flushed regularly after periods of low/no use, such as weekends and school holidays, to remove stagnant water from the system (16).
- The water treatment technology should be maintained regularly. This is important for schools that need a treatment system, such as those with individual water supplies (for example, a school well), and for centralized supplies where the safety of the water is uncertain, and/or when tests show microbiological or chemical contamination of the water at the school. Cost-efficient treatments include boiling, filtration and chlorination (20). Consult the health authority before making treatment choices and follow the instructions of the device's manufacturer.

Establish a **backup water system** or **safe storage**. This is important if the school experiences an irregular or intermittent supply, to ensure continuous access to safe drinking-water. Water storage is safe when covered and protected from outside contamination, regularly cleaned and maintained, handled in a hygienic manner and regularly checked for water quality (20). If piped water is not available in the school building but water is collected from outside, buckets or other means of storage can be used to keep collected water at school. These need to be cleaned regularly, covered and provided with a tap for easy access while preventing contamination (4, 26).

Monitor the routine checks of drinking-water quality by the responsible authority. Liaise closely with the authority to ensure that tests are done and results communicated to you. Possible issues may be presence of bacteria such as *Escherichia coli* or of chemicals such as lead, nitrates, fluoride and arsenic, among others (20). You can also encourage pupils and staff to report changes in appearance, taste, odour and temperature (such as hot water in the cold system). Assign a dedicated person to receive observation reports, including a communication channel (for example, an email address or a box in the corridor).

Watch out for **lead pipes**. If lead is present in the school plumbing system, further measures should be considered until replacement becomes feasible. These should be discussed with the relevant authorities.

Establish long-term **cooperation** with the authorities and the water provider. Issues with the water system and risks may arise even when maintenance is in place. You can turn to the local authorities if you have any concerns about the quality of the water supply or questions about water testing, treatment or system maintenance. It is important to collaborate in the case of complex issues such as poor design and/or insulation of the water supply system or unsafe plumbing materials, which are outside the school administration's responsibility.

Useful resources

- A toolkit for school staff who are interested in increasing access to drinking-water at school: Centers for Disease Control and Prevention. Increasing access to drinking water in schools. Atlanta, GA: US Department of Health and Human Services; 2014 (https://www.cdc.gov/ healthyschools/npao/pdf/water_access_in_schools_508.pdf).
- Guidance on sugary drinks in schools: Be smart drink water: a guide for school principals in restricting the sale and marketing of sugary drinks in and around schools. Manila: WHO Regional Office for the Western Pacific; 2016 (https://apps.who.int/iris/handle/10665/208340).

Practical templates and tips

See the collection of printable practical templates in Annex 1, including:

- A. WASH problem-solving chart
- B. Operation and maintenance planning chart
- I. Improvement plan

See also the collection of practical tips for pupils in Annex 2.

Explore other factsheets related to this topic:



Factsheet 6. School-based maintenance



Factsheet 9. WASH topics neglected in health education

Factsheet 11. Engaging schoolchildren



Factshet 13. Health-promoting and child-friendly school policies and rules

Factsheet 2. Sanitation

Should toilet visits be topics in the school?

It is not uncommon for children to be affected by bladder or bowel problems (27, 28, 29) and to need the support and understanding of teachers and classmates.



Key members of the school community

School managers, teachers, janitors, school health staff and cleaning staff

Major benefits of taking action

- Pupils attending schools that are in good condition, including adequate school sanitation facilities, have higher academic success rates (1, 2, 30).
- Adequate toilet facilities contribute to the reduction of infectious diseases and thereby increase school attendance (2).
- Children and adolescents who feel comfortable using the toilets at school have lower health risks and are less distressed in cases of incontinence or menstruation (2, 10).

Background

Many pupils do not use the toilets at school regularly (18). Pupils do not feel comfortable in the toilets for various reasons, including lack of privacy; poor cleanliness; smell; and lack of toilet paper, soap and/or towels for drying hands (10, 19). Pupils also neglect their physical needs when they are not allowed to go to the toilet during lessons or because they feel uncomfortable asking for permission in front of the class (10, 19). Sanitation in schools means clean, private and functioning toilet facilities or latrines, with provision for menstrual hygiene management, proper illumination to prevent harassment and accidents and adequate ventilation (natural and/or artificial) to prevent smells and hinder proliferation of moulds (4).

Why it matters

Toilet avoidance may result in dehydration (because pupils do not drink), compromised bladder and bowel function or urinary tract infections (2). Along with the physical outcomes, such medical conditions can also have social, psychological and educational consequences that need prolonged support (31). At the same time, pupils who use inadequate toilets in schools are more likely to contract infectious and parasitic diseases (1, 2). Pleasant sanitation facilities improve the school's image and may be appreciated by future students and parents when choosing a school. Start with one feasible improvement step in the short/medium term and success will drive you further!

How to support pupils to overcome challenges faced in toilet facilities

Share knowledge with colleagues about healthy elimination patterns (voiding 3–7 times a day (32)) and common bladder and bowel issues resulting from toilet restrictions (such as constipation, incontinence and urinary tract infections). Awareness among school staff can avoid unhealthy restrictions on children's access to water and sanitation facilities (10, 33). Provide information related to WASH from both the health and education perspectives. Engage school health staff or ask medical doctors for help.

Promote **transparent communication** with pupils and parents. Pupils' families may not recognize the relevance of certain health conditions related to the urinary system, such as day wetting. They may also feel inhibited and may not communicate the existence of such issues to school staff (27). Teachers can facilitate and promote communication, listening to pupils and their parents on WASH-related aspects and health conditions, and beyond. This may help teachers' work in class and support the promotion of healthy behaviours (34). A psychologist or a health expert may offer further support.

Assign a **contact person** to whom pupils can report issues about the toilets and/or who can offer help in the case of health issues, including menstruation pain. This could be a teacher or a member of the health or pedagogic/pastoral support staff. Children have noted that "it is good to have a school nurse or someone at school who knows about it and who you can talk to about it" (29). Girls may prefer a female point of contact.

Address **overcrowding** of toilet facilities, which affects cleanliness of WASH facilities and may lead to toilet avoidance (2). If this is an issue in your school, discuss infrastructural solutions with the authorities or, as a temporary solution, establish different multiple short breaks and/or different time schedules for classes.

Teach children **healthy habits** when they use the toilet. These can take time and attention to develop, especially in a shared setting such as a school (*14, 19*). Teachers can remind children to use the toilet and teach them about WASH and elimination patterns. If the curriculum seems to lack capacity for a dedicated lesson, use half an hour for a practical activity linked with a curricular topic. Urinary and bowel health fit into the biology curriculum. Toilet use is linked to social education and respect (*35*), which also contribute to the reduction of bullying episodes, often reported by children with physical dysfunctions (*29*).

Establish a health-promoting and child-friendly **policy**. Set rules and goals for an environment fostering healthy behaviours, including adequate and timely bladder emptying.

Engage the whole school community. Promote consistent teaching and effective behaviour change by arranging meetings with teachers and parents (or representatives) and distributing informative materials (*34*). You could contact the local authorities to see whether they can provide you with information material.

Verify and improve **privacy** in the school toilets. This helps to hinder inappropriate behaviours and increase comfort (4, 10). Ensure sufficiently high partitions (including for urinals), doors with locks, separate toilets for teachers and pupils and sex-separated toilets for girls and boys. Establish regular checks to verify the structural integrity and the functionality of door locks. Also, include topics such as privacy and respect for others in the education programme for pupils from an early age (36).

Prevent **antisocial behaviour** through supervision and easy access to facilities. Toilets should be supervised during breaks (19, 37). A different space can be allocated for students to hang out and express their creativity at breaktime to reduce antisocial behaviours in the toilets (19). Toilets located close to classrooms and recreational areas, and sufficiently illuminated, contribute to reducing the risk of accidents and inappropriate behaviours.

How to help pupils love their school toilets

Establish an **operation and maintenance routine**, including regular checks, preventive maintenance and cleaning. Frequent cleaning – especially after periods of high use – and regular inspection of the toilets will enable staff to refill hygiene consumables (soap, toilet paper and so on) and detect early any problems (such as non-functioning infrastructure, smells, poor ventilation and insufficient consumables). This will ensure proper hygienic conditions and contribute to preventing toilet avoidance and higher costs in the long run (10, 38). See the \bullet operation and maintenance planning chart, the \bullet routine functionality check and the \bullet routine consumables refill (Templates B, D and E) provided in the practical templates in Annex 1. If checks reveal frequent issues or defects, discuss long-term solutions at the managerial level and with the relevant authorities. Also see possible improvement measures in the \bullet WASH problem-solving chart (Template A in Annex 1). Appealing toilets also contribute to reducing vandalism (25, 39, 40).

Let children **participate** in the improvements. Collect their views through a box for suggestions or a survey and engage them in supporting activities; for example, by checking toilets after breaks, providing ideas for improvements or helping with decoration of toilets. This will provide insight into the accessibility of toilets, foster ownership and help with maintenance (25, 26). See whether there are any competitions related to WASH or toilets in your country and pursue the opportunity to receive recognition for efforts made, as well as support for further improvements.

Useful resources

- Guidelines addressing common challenges and including strategies for effective operation and maintenance: Toilets in schools guidelines. Nottingham: Department for Education and Skills; 2007 (https://webarchive.nationalarchives.gov.uk/tna/+/teachernet.gov.uk/_doc/11363/3595_ SSLD_toilets_AW.pdf).
- Guidance for schools and useful tools for inspection: School toilets: good practice guidance for schools in Wales. Cardiff: Welsh Government; 2012 (https://dera.ioe.ac.uk/13643/7/120124sc hooltoiletsen_Redacted.pdf).
- Informative and training materials for parents, school staff and children, including videos and educational games, guides and booklets: ERIC the Children's Bowel and Bladder Charity [website]. Bristol: ERIC; 2018 (videos and educational games: https://www.eric.org.uk/Pages/Category/kids; guides and booklets: https://www.eric.org.uk/guides-to-childrens-bowel-and-bladder-problems).
- An educational leaflet for adolescents on WASH, covering aspects related to toilets use in English and Russian: Hygiene MUCH. European Environment and Health Youth Coalition; 2015 (English: http://www.eehyc.org/wp-content/uploads/2016/09/hygiene_en_eehyc.pdf; Russian: http://www.eehyc.org/wp-content/uploads/2016/09/hygiene_ru_eehyc.pdf).
- Materials to display or work with on the topic of sanitation and hygiene: My school loo. Berlin: German Toilet Organization; 2018 (https://www.germantoilet.org/en/schools/my-school-loomaterial).
- A guide to sanitation technology and maintenance in English and Russian: Guide for the school managers: options for the improvement of sanitation in rural schools in Moldova Chisinau: Ministry of Education, Culture and Research and Ministry of Health, Labour and Social Protection; 2018 (English: http://apasan.skat.ch/wp-content/uploads/2018/11/GuideOptionsfortheimprovementofsanitation.pdf; Russian: http://apasan.skat.ch/wp-content/uploads/2018/11/Guide.for-the-school-managers-ru.pdf).



Practical templates and tips

See the collection of printable practical templates in Annex 1, including:

- B. Operation and maintenance planning chart
- D. Routine functionality check
- E. Routine consumables refill

See also the collection of practical tips for pupils in Annex 2.

Explore other factsheets related to this topic:



Menstrual hygiene

management

Factsheet 6. School-based maintenance



Factsheet 9. WASH topics neglected in health education



Factsheet 11. Engaging schoolchildren



Factsheet 13. Health-promoting and child-friendly school policies and rules

Factsheet 3. Hygiene and the clean environment

Is the school setting a negligible source of infections?

It is not. Children are more likely to acquire diarrhoeal infections or helminth infections at school than at home (1).

Monday 10

Key members of the school community

School managers, teachers, janitors, cleaning staff and school health staff

Major benefits of taking action

- Adequate facilities for personal hygiene contribute to a reduction of infectious diseases and significantly increase school attendance (1).
- Pupils attending schools that are in good condition, including adequate facilities for personal hygiene have higher academic success rates (1).
- The school is a place where children spend much of their time. Providing them with hygiene knowledge and good practice behaviours will help them create healthy habits, not only at school but also in their future everyday life.

Background

Hygiene in school is about infrastructure, operation and maintenance, and education. Accessible handwashing facilities with water and soap, means for hand drying, a clean environment and sufficient means for waste disposal, together with education on good hygiene practices, are all important factors to ensure hygienic conditions at school.

Many pupils do not wash their hands with water and soap every time they go to the toilet or before meals (10). Comprehensive and age-appropriate hygiene education is often not included in school curricula, or not consistently implemented. Good hygiene practices cannot be promoted in schools that lack accessible and safe facilities, washing areas and waste disposal facilities, or when pupils have no time for hand hygiene (14, 41).

By changing this, pupils will gain an important opportunity to learn and strengthen their knowledge about hygiene and healthy behaviours. With simple routines for operation and maintenance, including cleaning at critical times and investing in hygiene education, you can greatly improve hygiene in your school. If your school is not responsible for all aspects of facilities cleaning, you can work with authorities or the provider to ensure proper practices.

Why it matters

Up to 75% of cases of absenteeism from school are related to illness (1). Good hygienic conditions at school and proper hygiene behaviours – consistently promoted by hygiene education and practical training – reduce the incidence of diseases among pupils. Thus, provision of means for adequate hygiene is a way to reduce absenteeism and can lead to better pupil performance.

Proper handwashing with soap is the most effective measure against the spread of germs that cause respiratory illnesses, like colds, as well as diarrhoeal diseases: regular handwashing with soap can reduce the number of diarrhoeal incidents alone by around 30% (7). Hygiene interventions targeting handwashing have proved to be efficient. Schools can be hotspots for the spread of infectious diseases, and good hygiene practices are especially critical during outbreaks such as waves of influenza. But you don't need to wait until the epidemic arrives: by improving hygiene, your school can break the chain of transmission and prevent diseases.

Good hygiene practices reduce the incidence of diseases such as pneumonia, dental caries, scabies, skin and eye infections, urinal tract infections and diarrhoeal diseases (1). Hygiene is also especially important for girls during their period, helping them conduct proper menstrual hygiene regularly, thereby avoiding infections and discomfort (42).

How to promote hygiene practices among children

Incorporate **hygiene education** into the school curriculum. School is one of the most important places where children learn about hygiene – an opportunity they may not enjoy at home. Hygiene education and health behaviours fit well in existing curricula; for example, in subjects covering biology or healthy lifestyles. They can also be introduced into planned lessons on oral hygiene and/ or nutrition and healthy diets.

Provide **advice and training** to staff by engaging experts from the health authorities or school health staff, if possible. Hygiene education should be a core part of teacher training and refreshed regularly to sustain knowledge and awareness (4). All teachers should be acquainted with the important messages related to WASH and skills-based education. This teaching method entails a strong focus on practice, making use of a variety of participatory and other learning methods (43).

Be a **role model**. Children can learn by the example set by school staff, especially their teachers. Thus, school staff should act as role models and consistently demonstrate appropriate hygiene behaviours, as well as reminding children to do so (4, 43).

Promote hygiene systematically. Teachers and school health staff can explicitly remind children to wash their hands at critical times (such as after using the toilet or after playing). Remind them before going for break and afterwards, and before lunch. Stickers and posters or other forms of nudges can be another efficient way to facilitate proper hygiene behaviours (14).

Aspects to consider for the curriculum

Handwashing with soap

We should wash our hands with water and soap for about 20 seconds before eating, after visiting the toilet, after playing or petting an animal and before preparing food. Learning to practice correct handwashing takes time and attention. Teachers' support is necessary to help younger children and monitor older ones to ensure that handwashing takes place correctly and consistently. This should include explaining the appropriate handwashing technique and critical times to perform it, as well as reminding pupils to practise it.

Aspects to consider for the curriculum contd

Personal hygiene

Key hygiene behaviours for children include handwashing, wearing shoes or slippers, cutting nails, brushing teeth with a fluoride-containing toothpaste, combing hair, regularly washing the whole body and hair with water and soap, and keeping clothes clean and washed.

Daily genital hygiene is important for health in general and the health of the reproductive system in particular. For girls, it is important to manage their period hygienically and wipe their genitals from front to back after defecation. During menstruation, girls should use sterile sanitary pads, tampons or cups, or well washed reusable sanitary towels.

Food hygiene

Besides drinking plenty of water it is essential for children to eat healthy food, not only at home but also during the day at school. Food contaminated with dirt and germs is a significant source of diarrhoeal diseases. Food must, therefore, be stored and treated appropriately and washed thoroughly with clean drinking-water before eating.

Waste management

Reducing, reusing and recycling waste properly will teach children about environmental protection and how this will benefit their health and the health of the community. Children should learn how to manage infectious waste properly – like used menstrual products or hand and facial tissues – and to keep away from chemical hazardous waste, such as mercury, batteries, cleaning agents and so on.

Sources: WHO (3); Mooijman (44).

How to improve facilities to facilitate hygiene practices

Establish a routine for **operation and maintenance**. This is especially important after high-traffic times during the school day, such as breaks (10, 19). The routine should ensure the cleanliness of the facilities and the provision of consumables, and should verify the functionality of the WASH services. If soap is available and toilets are functional and clean, teachers' messages can be conveyed more credibly and promote the proper use of toilets and the practice of handwashing successfully (14). An effective hygiene routine will not only make the toilet safer but will also make it more pleasant and appealing, reducing avoidance and possibly contributing to stopping vandalism (19, 40).

Ensure **cleaning** with the appropriate procedures and products. This can help make improvement of WASH in schools successful (10). Making use of water, detergent and disinfectant with the proper dilution and establishing a hygienic cleaning routine, starting from the door and ending at the toilet, using different cloths for basins and toilets, will maintain good hygienic conditions and contribute to the reduction of diseases. All fixtures and fittings, washbasins and toilet equipment – including cubicle seats – should be thoroughly cleaned at the end of the day and well maintained during the school day (4). It is important that frequent hand contact sites, such as toilet flush handles, taps, doorknobs and waste bins are disinfected regularly (37). If the cleaning personnel make use of reusable cloths, they must be decontaminated after each use (4). This can be done by hot machine-washing at least 60 °C. Cloths, mops and similar used to clean the toilet area or infectious substances such as vomit or faeces should be cleaned separately with disinfectant – never in a washbasin used for food or handwashing.

Factsheet 3. Hygiene and the clean environment f leaky plumbing and watch for 45). Condensation and moisture ring adequate air circulation by Prevent formation and spread of **mould**. Ensure timely repairs of leaky plumbing and watch for condensation and wet spots, especially inside the toilet facilities (45). Condensation and moisture can be prevented by heating and/or reducing humidity by ensuring adequate air circulation by means of natural or artificial ventilation or a dehumidifer (if outdoor air is warm and humid).

Allow children sufficient time to visit the toilet. Overcrowded toilets or very short breaks may hinder toilet visits or adequate handwashing practice (10, 19). School policies should be adapted to allow pupils time to use the toilets, clean the toilet after they have used it, clean themselves if needed and wash their hands. Children may fear staying too long in the toilets in case of bullying (19). You can help them by teaching tolerance and respect and establishing a passive surveillance system (19, 35).

Allow girls to manage menstrual hygiene properly. Facilities should include means for changing menstrual products and to wash in private, in line with the type of sanitary products used and the prevailing cultural practices (4, 42). You may consider providing a private place to wash and dry clothes, sanitary bins to throw away used sanitary pads safely, and water inside toilet cubicles for personal cleaning. Separate toilets for boys and girls and lockable doors should ensure sufficient privacy.

Establish a school policy for hygienic and efficient management of waste. It is useful to set procedures for the separation and collection of waste. Collaborate with teachers and cleaning staff to ensure efficient implementation by all actors. Collecting waste quickly and properly will improve the environment and reduce the risk of diseases or contact with hazardous substances. Identify hazardous waste in your school and inspect obsolete equipment for hazardous components prior to disposal. Check for batteries, lamp ballasts, mercury switches, computer components, lamps and lightbulbs. This waste should be collected separately and stored in a safe area not accessible to students (4). The waste policy should include methods for recycling and reduction of waste to help to keep waste management under control and teach pupils about environmental protection. You do not have to do everything on your own: environmental hygiene is a matter of teamwork.

Engage the whole school community. To address specific gaps in children's knowledge and practice sustainably, you could arrange joint meetings with teachers and parents, or their representatives, or send out formal communications. Contact between school and home will create a link between education at school and at home (34). Consistent teaching will lead to effective behaviour change.

Collect children's and parents' views and engage them in extracurricular activities to help to monitor and improve the facilities in schools. Community and user perceptions can provide more insight into on the accessibility of toilets and contribute to making maintenance efficient and sustainable over time (26, 34, 44).

Useful resources

- Materials to display or work with on the topic of sanitation and hygiene: My school loo. Berlin: German Toilet Organization; 2018 (https://www.germantoilet.org/en/schools/my-school-loomaterial).
- An educational leaflet for adolescents on WASH, covering aspects related to toilet use in English and Russian: Hygiene MUCH. European Environment and Health Youth Coalition; 2015 (English: http://www.eehyc.org/wp-content/uploads/2016/09/hygiene_en_eehyc.pdf; Russian: http:// www.eehyc.org/wp-content/uploads/2016/09/hygiene_ru_eehyc.pdf).
- A health education resource available in 22 languages with lessons and useful materials for different age groups, focusing on oral hygiene, hand hygiene and other topics related to infection prevention. E-bug [website]. London: Public Health England; 2019 (www.e-bug.eu).

Practical templates and tips

See the collection of printable practical templates in Annex 1, including:

- B. Operation and maintenance planning chart
- E. Routine consumables refill
- F. Routine cleaning record sheet

See also the collection of practical tips for pupils in Annex 2.

Explore other factsheets related to this topic:



Factsheet 4. Menstrual hygiene management



Factsheet 6. School-based maintenance



Factsheet 8. Hand hygiene education



Factsheet 9. WASH topics neglected in health education



Facysheet 10. Skills-based education and nudging



Factsheet 4. Menstrual hygiene management

Are girls satisfied with the WASH conditions for menstrual hygiene management (MHM) at your school?

> Major shortcomings have been reported in many schools following assessment of provisions for MHM.



Key members of the school community

School managers and teachers

Major benefits of taking action

- Adequate education on menstrual hygiene and functional, clean and well equipped WASH facilities can lower the absenteeism of girls during their period (46, 47).
- Timely education about puberty and MHM for both boys and girls is likely to lower negative feelings associated with menstruation and reduce teasing of menstruating girls (42, 48).
- Adequate provisions for MHM are crucial to foster the equal rights of girls and are a clear statement by schools of nondiscrimination and recognition of gender-specific needs.

Background

Throughout the pan-European region, provisions for MHM frequently fail to reflect girls' and women's needs (10). In particular, they are often limited in primary schools; this is an issue for the many girls who start menstruating before entering secondary school. In many countries, girls face challenges due to a lack of privacy, inadequate toilet doors or cubicles and shared toilets. An emerging issue is also lack of access to and affordability of menstrual hygiene products (49), with consequences for school attendance (50, 51). In the United Kingdom, for instance, one in seven girls surveyed had experienced difficulty with affording menstrual hygiene products and one in five had changed to a less suitable product because of the cost (52, 53).

Adequate and safe provisions for MHM ensure dignity, well-being and equity for girls at your school (46). WASH in schools requires MHM to be embedded in education, MHM-supportive WASH facilities and availability of menstrual hygiene products. Hygiene education, even where included in national education policies, is often not integrated into the school curriculum. Sexspecific aspects like MHM are included even less often (10). If your country has no national programme for menstrual hygiene and puberty education, you can still include it in your school's curriculum and in extracurricular activities to support the well-being of female pupils.

Why it matters

Menstruation is a natural process, but hygienic management is required to prevent health problems. Poor menstrual hygiene can lead to urinary or reproductive tract infections, as well as affecting the well-being of pupils (47, 54). Education and provisions for adequate MHM at school can help to prevent possible adverse health consequences, including psychosomatic effects such as pain, stress and embarrassment (47).

Girls may avoid attending school during their period owing to fear of bullying and inadequate toilet facilities; in the case of menstrual pain, they may feel less able to concentrate (47, 55). Allowing girls to manage their period hygienically through provision of adequate menstrual hygiene facilities, including freely available menstrual hygiene products, is a key aspect of ensuring equity in school participation and equal learning opportunities. The good news is that measures to ensure a basic level of MHM for girls are easy to achieve.

Tools to ensure a supportive environment for girls and women at school

- Accurate and timely education about healthy and dignified MHM and puberty for both boys and girls should be provided, including in primary schools. MHM knowledge needs to be addressed before it is experienced to ensure learners are prepared.
- Teachers and health staff should be informed, available and comfortable talking about menstruation.
- Running and clean water should be available in private spaces or toilet cabins for menstrual hygiene practices.
- General hygiene consumables, such as toilet paper and soap, should be topped up regularly throughout the school day, especially after breaks and in the afternoon.
- Menstrual hygiene products, such as sanitary towels, rags, pads, tampons and disposal bags should be always available at school and accessible to girls at any time.
- Toilet facilities should be checked and cleaned at least twice a day to ensure availability of consumables and cleanliness after times of peak use during breaks and later in the day.
- Sanitary bags or dedicated bins with a lid inside cubicles allow safe disposal of used menstrual hygiene products in privacy. Avoiding used products being mixed in general trash bins ensures protection from infections that might be transmitted by blood.
- Lockable, functioning and clean cubicles with full-height partitioning walls and doors without any holes ensure privacy and dignity and may facilitate menstrual hygiene practice.
- Private toilets, separate from boys' toilet areas, help to ensure privacy and comfort during menstrual hygiene practices.
- Checks to ensure that everything is clean, in place and functioning help to keep the environment supportive for MHM.
- Procedures should be in place for referral to health service providers, child protection services and community support groups in the case of health problems, such as hormonal imbalances or dysmenorrhoea, that cannot be resolved at school.
- If architectural or financial constraints exist, make small adjustments as they can make a big difference. For example, if separate toilet areas are not available for boys and girls, reserve at least one toilet cubicle for girls. A small improvement can significantly increase feelings of safety and the overall experience of visiting the toilets.

How to address the sensitive topic of menstrual hygiene

Factsheet 4. Menstrual hygiene management PNE r experiences, problems and Ask girls about their **perceptions** of the situation at school – their experiences, problems and ideas; for example, through a dedicated meeting with student representatives or an anonymous survey. Summarize the results in key bullet points and include these in the agenda for a meeting with school staff and/or parents. Include girls' ideas when planning improvements and try to implement easy actions, at minimum, quickly to make them feel heard. Ensure a friendly and open atmosphere, and value the girls' sharing of experiences and opinions.

Include MHM education in your school curriculum. Seek the help of health officers or school health staff to inform and train teachers about the consequences of inappropriate MHM for girls' health and learning opportunities, and about the need to break the taboo around the topic. WASH and MHM education can be linked with sexual and reproductive health or family education, or be an entry point to introduce these topics, since all are related to the concepts of health and respectful cooperation. Cultural and societal taboos about menstruation are not an argument against menstrual hygiene education but make it even more necessary.

Educate boys and girls together and make menstruation something normal and fun with engaging activities. MHM is not just about the biological aspects of the menstrual period but also about the need to address the surrounding societal beliefs and taboos. Talking about menstruation with confidence, and providing guidance and support for girls in preparation for and during menstruation, form an integral part of WASH in schools programming. For example, let children discuss in groups what they know, ask them to brainstorm what they would associate menstruation with, organize a thematic drawing class or set up roleplays or other small-group work. Engaging with boys about menstruation allows them to understand an essential part of womanhood that should not be concealed or be a reason to tease classmates.

Establish school rules that allow girls to have access to menstrual hygiene products and access to toilets when needed. Write a policy with teachers, health staff and pupils to promote health in the school and do not forget to include MHM. Rules should make sure that girls have access to hygiene products and that they know how to access these and ensure that school schedules and class rules facilitate visiting toilets without discomfort.

Nominate a **contact person** that pupils can turn to. Assign a focal point from female staff members or an older girl pupil in your school, whose advice girls can ask on menstrual issues or issues with facilities, and whom they know they can trust.

Consider MHM in primary schools, too. Learning intimacy from primary school age is important so that pupils can learn about their own bodies and respect those of others (36). Girls can start menstruating before secondary school and it is thus necessary to provide timely menstrual hygiene education, before they experience it, as well as basic provisions for consumables, menstrual hygiene products and adequate facilities at primary school.

Try not to skip any of the key provisions for MHM to empower girls in your school. Appropriate WASH facilities, MHM education and engagement of girls in activities and dialogue are all necessary aspects to empower girls to make their way to a self-determined future. It is better to start with one step at a time, and to continue to build on improvements as resources are made available, than to rush to do everything with too few resources (10, 56).

Case study 1. Improving provisions for MHM with the help of pupils in Scotland

Stirling High School, Scotland (United Kingdom), decided to pilot a roll-out of free menstrual hygiene product provision as part of a Scotland-wide initiative. A key teacher championed the project and helped to promote it. The school engaged with pupils to determine the best method to distribute the products and made the initiative the subject of assemblies for female pupils. Views were then obtained through questionnaires for staff, pupils and parents and two focus groups.

The two groups engaged themselves further, calling themselves the "Period posse", and later adopted Pedro the Panda as their mascot, becoming the "Panda posse". Students wore panda badges, and for key events donned a mascot costume. Menstrual hygiene products were made available with other hygiene products in storage units in the toilets of changing rooms for physical education, in pupil support offices and in a named classrooms on each corridor. Stalls were held during lunch breaks in the run-up to the summer break reminding pupils to collect supplies for the "holiday period", and travel packs were provided for school trips. In addition to pads and tampons, discreet paper bags and other items such as hair ties, cotton wool pads and tissues were provided, along with information booklets on periods.

After implementation of the initiative, pupils reported feeling more comfortable talking about periods and felt that they had grown in confidence. Male students also got involved and became more aware of periods. The Panda posse has grown, involving more students and providing strong leadership opportunities for pupils. Finally, the Scottish Government committed to make sanitary products available free of charge in schools and succeeded in this aim.

Source: Dr Elaine Moir, Scottish Government, personal communication, 2018.

Useful resources

- A toolkit for teachers, school health and nutrition coordinators, and other school personnel: Menstrual hygiene management toolkit. Washington DC: United States Agency for International Development and Zambia Ministry of Education; 2015 (http://washplus.org/sites/default/files/ mhm_toolkit2015.pdf).
- Guidelines for the development of educational programmes for MHM, including tips on the topics to address and methods to assess girls' practices in a respectful way with practical tools: Menstrual hygiene management: operational guidelines. London: Save the Children; 2018 (https://www.savethechildren.org/content/dam/global/reports/health-and-nutrition/mens-hyg-mgmt-guide.pdf).
- A teachers' handbook on menstrual hygiene for adolescent girls in Russian: Гигиена девочек подростков [Adolescent girls' hygiene]. New York: United Nations Children's Fund; 2017 (http:// www.wins4girls.org/resources/2017%20Kyrgyzstan%20MHM%20BP%20Teachers%20 guideline%20Russian.pdf).

A basic package of education materials on MHM for different age groups in Russian:

 a story book on puberty for 8–10-year-old girls: Markvarm O. Акылай Взрослеет Рассказ [Akylai grows: a story]. New York: United Nations Children's Fund; 2017 (http://www. wins4girls.org/resources/2017%20Kyrgyzstan%20MHM%20BP%20PB2%20Akylai%20 vzrosleet%20%20russian.pdf);



- a guidebook on puberty for 11–18-year-old girls: Savochkina VV, Usupova ZHE. Растем и взрослеем [Growing up and getting older]. New York: United Nations Children's Fund; 2017 (http://www.wins4girls.org/resources/2017%20Kyrgyzstan%20MHM%20BP%20 PB1%20Rastem%20i%20vzrosleem%20russian.pdf).
- Comprehensive guidance with examples of good practice, information for colleagues and pupils in class and tips on how to break the taboo: 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/sites/g/files/jkxoof256/files/Menstrual%20hygiene%20 matters%20low%20resolution.pdf).

Practical templates and tips

See the collection of printable practical templates in Annex 1, including:

• E. Routine consumables refill

See also the collection of practical tips for pupils in Annex 2.

Explore other factsheets related to this topic:



Factsheet 2. Sanitation



Factsheet 6. School-based maintenance



Factsheet 9. WASH topics neglected in health education



Factsheet 11. Engaging schoolchildren



Factsheet 5. Special considerations to ensure access for all

Does every pupil have sufficient access to WASH in your school?

Pupils may face a variety of challenges when accessing toilets or handwashing facilities depending on their sex, gender or sexual orientation, or because of specific needs due to disabilities or particular health conditions.



Key members of the school community

School managers and janitors

Major benefits of taking action

- Improving universal access to WASH in school makes each individual feel valued, reducing possible disparities.
- Ensuring equal access to WASH fosters the school's educational success by providing equal health promotion and learning opportunities (18).
- Giving due attention to everyone's needs by ensuring access to WASH goes beyond the toilets in your school: it provides a lesson for children on equality and improves acceptance of differences (57).

Background

Inadequate WASH facilities and insufficient education may affect pupils in different ways depending on gender, age or physical state. Smaller children, girls, children with specific health conditions (such as bladder problems) and children with physical disabilities have particular needs; these need to be considered if you want all pupils to find it easy to access WASH in your school and to gain the same health benefits, contributing to equal learning opportunities.

Why it matters

In many schools, greater challenges are faced by some pupils because of a lack of access to WASH facilities suitable for pupils with a disability or a lack of privacy and provisions for menstrual hygiene management (MHM) (10). Pupils with non-binary gender identity or transgender pupils may face further challenges when accessing WASH facilities because of teasing and discrimination. Improving the accessibility of facilities is often linked with infrastructural interventions, which are not necessarily within the capacity of the school. Nevertheless, many challenges can be solved with quick wins: small changes that improve access significantly.

How to check the accessibility of WASH in your school

Establish a discussion group or meeting to explore specific **sex- and gender-based needs**. You might engage female staff or create a small discussion group with female students led by a female teacher or nurse to discuss how the school environment and WASH services are supportive of menstruating girls and women. You could also engage lesbian, gay, bisexual, transgender, queer or intersex (LGBTQI) organizations or representatives to identify measures to ensure dignity and access for transgender young people.

Encourage **honest dialogue** between teachers, parents and pupils. Disabilities can be very different. They can be of a physical, sensory (vision or hearing), intellectual (learning and understanding) or mental nature (58). Parents and children can provide useful information to identify the different disabilities present in the children attending the school and gain a clear understanding of their specific needs (34). Talk about this in meetings with teachers and organize a meeting to raise awareness among parents. Teachers, with the help of the school health staff if possible, should be encouraged to reach out to parents if needed and to refer to health services in the case of health problems – such as urinary incontinence – that cannot be resolved at school.

Walk through the school facilities and **engage students**. Explore the accessibility of WASH provisions by asking yourself and the students questions about what might be missing or what might present a barrier (for example, the height of facilities or the distance). Some examples are provided in the checklist at the end of this chapter.

Let pupils map the WASH facilities or even the general school building to look for **access barriers and solutions** for people with visual impairments and wheelchair users. Engaging children will help them learn about the difficulties other schoolmates may face. This could also teach them about equality beyond toilet access (57). Eventually, it may help to reduce the higher burden of bullying faced by vulnerable pupils.

How to take action

Establish a **bladder-friendly school policy**, which allows pupils to go to the toilets. Up to 9% of children may face challenges with daytime wetting *(59)*. They need adequate attention and free access to the toilets at any time. Such a policy could also benefit healthy pupils, as retaining urine is unhealthy and can have consequences for health and learning performance.

Establish **open dialogue on equality**, including it in curricular and extracurricular activities. Your school plays an important role in enabling pupils to talk about specific needs associated with sex or gender differences, impairments or health conditions. Focusing only on the limitations of impairment has a negative effect on how an individual with a disability is viewed. Pupils should feel comfortable to ask to visit the toilet and to take the time they need in the toilets and washrooms, without fear of punishment. Further considerations may be required in the case of transgender pupils to ensure their safety and dignity. They may face challenges when visiting sex-separated toilets because of the fear of being teased, and may thus avoid drinking or visiting the toilet. Other pupils may also have misconceptions and feel uncomfortable using the toilets at the same time as transgender pupils. Solutions, such as a gender-neutral toilet, could be discussed jointly with pupils (60).

Minimize the risk of unsupervised **antisocial behaviour and bullying**. Implement measures to allow supervision of the facilities and assign staff to supervise during breaks *(19, 37)*. The toilets should be not too far from classrooms or recreational areas and their access routes should be sufficiently illuminated. Ensure privacy inside the cubicles with high partitioning walls and functional locks on the inside of toilet cubicles.

Take action with **easy practical changes** to increase access for all pupils. A school with WASH facilities that are not adjusted to be suitable for children with disabilities, or that does not provide means for menstrual hygiene management, is a school that does not provide equal access for all children. This could lead to the practice of unhealthy behaviours, with consequences for wellbeing and learning – it could even lead to pupils dropping out of school. Barriers for pupils with disabilities may include steps, distance, handles or taps that are too high or too low, among others (58). Younger children may also require facilities with different dimensions. Small adjustments, such as removal of a step or installation of a seat with handles or a portable toilet, can be practical temporary solutions. Creating a tactile map of the WASH facilities or painting the area around the sanitary fixtures a contrasting colour is an inexpensive way to improve access for children with visual impairments (58). Barriers for children with health conditions may include restrictive school rules and policies, which can be adapted with limited resources (10). Barriers for girls, transgender or non-binary pupils may include signage on toilet rooms; by replacing it, gender-neutral and female-only spaces can be created to increase privacy and safety.

Useful resources

- Educational materials for pupils with bladder or bowel problems: ERIC's guide to children's bowel problems (https://www.eric.org.uk/Handlers/Download.ashx?IDMF=d34eca57-7f98-48ec-a538-0ea08abe8c4c); and ERIC's guide to children's daytime bladder problems (https://www.eric.org.uk/Handlers/Download.ashx?IDMF=a728ba45-2374-4c28-b563-1c516b5a2df4). In: ERIC the Children's Bowel and Bladder Charity [website]. Bristol: ERIC; 2018.
- Supporting transgender young people: guidance for schools in Scotland. Edinburgh: LGBT Youth Scotland; 2017 (https://www.lgbtyouth.org.uk/media/1344/supporting-transgender-young-people.pdf).

Explore other factsheets related to this topic:



Factsheet 4. Menstrual hygiene management



Factsheet 9. WASH topics neglected in health education



Factsheet 11. Engaging schoolchildren


Chapter 1 checklist

This section provides you with questions to check the status of WASH services and examine whether your school needs to take action to improve their provision and/or accessibility. Questions are not meant to provide a comprehensive assessment but facilitate a critical analysis by school staff to identify improvements that can be undertaken by the school itself or for which the help of the authorities needs to be sought. If improvement needs are discovered during the check, you might want to consider these in the development of an improvement plan. For planning, go back to the relevant factsheet (indicated by the checklist question headings) to find tips and possible activities. More suggestions about how to conduct the checks are described in Factsheet 14.

How is adequate access to WASH ensured in your school?	This is in place	We need to improve this
Factsheet 1. Drinking-water		
Is drinking-water always available at the school?		
 If piped drinking-water is not available or not always available from the main source at your school, do you have a backup system (e.g. a storage container, packaged water, water tank, well)? 	٦	
 If drinking-water is not available or not always available from the main source at your school, are the responsible authorities kept informed? 	٦	٦
Do you have routines in place to ensure the quality of water and functionality of the plumbing system inside the school building?		
Are checks conducted to ensure that drinking-water points are functional and clean?		
 If there is a piped water supply at the school, do you flush the system after long breaks in use? 		
If water is treated at the point of entry or the point of use (e.g. at a water fountain) in the school, is the drinking-water treatment technology monitored regularly and maintained by the school or the authorities?		
 If the school is provided with a backup water system, is it maintained regularly to ensure functionality and cleanliness? 	٦	
If you have routine procedures in place for the water supply, are these written in an operation and maintenance plan of the school?	٦	
Is the school drinking-water safe to drink?		
Has the drinking-water been tested?		
 Did you obtain information about the water quality via the authorities or the body conducting the drinking-water tests? 		
 If the water is not safe to drink, do pupils and teachers know this (e.g. are there signs at the drinking-water points)? 		
Do you have a system for pupils and teachers to report issues with water availability or quality (e.g. changes in appearance, taste and odour)?		

How is adequate access to WASH ensured in your school?	This is in place	We need to improve this
Factsheet 1. Drinking-water contd		
Do you have enough drinking-water points (e.g. taps) at the school?		
 Is the number of drinking-water points compliant with national requirements? Record the number of drinking-water points in total: []; record the ratio with the number of students: []/[] 	٦	
 Are these all functional? Insert number of functional over total []/[] (functional: basin/fountain basin not broken, no holes, proper drainage, no blockage, water available) 	٦	
 Are these all clean? Insert number of clean over total [_]/[_] 		
 Are these easily accessible from the classrooms (within two minutes' walk)? (Note: to ensure accessibility, there should be one drinking-water point on each floor and one may also be needed close to the recreational area.) 	٦	٦
 Is there at least one drinking-water point (e.g. tap or fountain) outside the toilet facilities at your school? Record number of points outside over total [_]/[_] 		
Is access to the drinking-water facilities kept in good condition?		
 Are there regular procedures for cleaning and maintenance of the drinking-water fountains, taps or dispensers? 		
Are pupils encouraged to drink water whenever they are thirsty?		
Is there a school policy in place to promote water consumption?		
Is the policy for promoting drinking-water at school clearly communicated to all pupils and staff?	٦	
Are pupils encouraged to drink water?	٦	٦
Are there measures in place to favour water consumption over less healthy beverages?		
Have you asked pupils whether they feel free to drink whenever thirsty?		
Factsheet 2. Sanitation		
Do you have enough toilets/latrines at the school?		
 Is the number of toilets/latrines compliant with national requirements? Record the number of toilets/latrines in total: []; record the ratio with the number of students: []/[] 		



		Chapter
How is adequate access to WASH ensured in your school?	This is in place	We need to improve this
Factsheet 2. Sanitation contd		
Are the toilets at your school usable?		
 Are all toilets undamaged? Insert number of broken toilets over total []/[] 		
 Are all toilets unblocked/unclogged? Insert number of blocked toilets over total []/[] 		
 If there are flush/pour-flush toilets in the school, is water available in all toilets? Insert number of toilets lacking water over total []/[] 		
Do the toilet cubicles/latrines provide privacy? (e.g. are there closable doors that lock from the inside, partition walls of adequate height and no large gaps in the structure)?		
• Are there functional locks on the inside of the toilet cubicles?		
Are there partitioning walls and doors of adequate height and no large holes or damage?	٦	
Are there partitioning walls and intact doors, with no holes or damage?		
 Have you asked pupils whether they find the toilet cubicles sufficiently private? 		
Are toilets safe to use?		
• Are the facilities not too far from the classroom?		
 Is there sufficient light in the toilet facilities and on the way to the facilities, including during the afternoon? 		
 Is there an absence of damage that could pose a risk to pupils (e.g. broken ceramic ware, uncovered electric cable)? 		
Is there supervision during times of high use?		
Are consumables always at hand in the toilet facilities?		
• Soap?		
Means for drying hands?		
Toilet paper (if applicable)?		
Are toilet facilities visually pleasant?		
Are the toilets free from signs of improper use of consumables or vandalism?		
Do you have a system for pupils and teachers to report issues with school toilet facilities?		
Have you asked pupils whether they feel free to visit the toilets whenever they need to?		
Have you asked pupils what they would like to improve in the school toilet facilities?		

How is adequate access to WASH ensured in your school?	This is in place	We need to improve this
Factsheet 3. Hygiene and the clean environment		
Is soap currently available at the handwashing facilities?		
In all facilities for boys?	٦	
In all facilities for girls?		
In all facilities outside the toilets (e.g. canteen or classroom)?		
Is the area surrounding the handwashing facilities kept in good condition?		
Do you have bins in the school toilets?		
Do you have bags to remove waste from the bins easily?		
Are bins emptied every day?		
Have teachers received training on health and hygiene education?		
Is hygiene addressed in the school curriculum?		
Is it comprehensive of hand hygiene, personal hygiene and MHM, waste reduction and recycling and food hygiene?	٦	
Does it include skills-based education methods?		
Do you link hand hygiene education with WASH-related activities, nutrition and other health topics?		
Factsheet 4. Menstrual hygiene management (MHM)		
Are separate toilets for girls available at the school?		
Are menstrual hygiene products provided in your school?		
Are menstrual hygiene products free of charge?		
Can girls access them easily?		
Are provisions for safe MHM ensured in the school facilities?		
• Are there bins with lid inside the girls' toilet cubicles?		
 Are there sanitary bags for safe disposal of used menstrual products inside the girls' toilet cubicles? 	٦	
Is there a place accessible to girls to wash and get changed in private?		
Is there someone girls can turn to in the case of menstrual issues or questions?		
Has a female member of school staff been nominated as a focal point for girls in need?	٦	
Are female pupils aware of this?		

		Chapter
	This is in	We need to
How is adequate access to WASH ensured in your school?	place	improve this
Factsheet 4. Menstrual hygiene management (MHM) contd		
Do you provide education on menstrual health matters in the school?		
Is it part of the school curriculum?		
Is it aimed at both boys and girls?		
Have you ever asked female pupils what they would like to improve in the school facilities?		
Factsheet 5. Special considerations to ensure access for all		
Does the physical environment allow access for all pupils?		
Is there at least one sanitation facility with:		
• a smaller toilet for shorter pupils?		
• a lower level of handwashing facilities for shorter pupils?		
level or ramped access?		
• a wide door for wheelchair access?		
• sufficient space inside for a wheelchair user or helper to manoeuvre?		
provision of support structures such as a handrail?		
an over-the-toilet seat or a toilet seat with handles?		
• a tactile map for blind pupils?		
Do school policies promote access to the WASH facilities?		
Do children have the opportunity to communicate problems and needs?		
Are you aware of pupils with particular impairments or health conditions at your school?		
• Do parents have the opportunity to communicate children's needs?		
• Can pupils with health issues access WASH services easily?		
• Can menstruating girls access WASH services easily?		
• Are pupils allowed to use the toilet every time they need to?		
• Are pupils allowed to drink water every time they feel the need to?		
• Are pupils aware of the rules for accessing WASH facilities?		
 Do school staff explicitly promote the importance of accessing WASH services? 		
Do you educate children about sex-specific aspects of hygiene?		
Do you educate children about equity and talk about possible special needs of children with disabilities?		



Chapter 2. How to maintain adequate WASH provision for the long term

To maintain WASH services in an adequate state and ensure their use, a school needs school-based maintenance and operation, including cleaning, supported by sufficient resources. This chapter will guide you through the operation and maintenance requirements at school, covering the key components and role definitions, discussing aspects that are not always considered and providing useful tips.

Factsheet 6. School-based maintenance

Do you think that the cleanliness of WASH facilities and the availability of consumables in your school are satisfactory?

This was not the case in any of the European countries where WASH in schools was assessed (10).



Key members of the school community

School managers, teachers, janitors and cleaning staff

- Major benefits of taking action
 - Well maintained, clean and hygienic WASH facilities provide a visible indication that the school values and respects the health, safety and well-being of its pupils, letting children value the facilities and feel safe to use them, and contributing to a reduction in poor behaviour and vandalism (19, 25, 39).
 - Children with access to handwashing materials are three times as likely to wash their hands consistently (14).
 - Efficient operation and maintenance (O&M) of WASH facilities ensure the long-term benefits of infrastructural improvements and may contribute to positive morale-facilitating behaviour change (14, 61, 62).

Background

Arrangements to ensure maintenance of WASH services in schools may be complex; the distribution of responsibilities between schools and various relevant authorities is not always clear. Staff and pupils can, however, contribute greatly to ensuring the provision and supervision of O&M so that users feel safe using WASH facilities at all times.

Why it matters

In schools, unsatisfactory conditions related to maintenance are often reported by school staff and/or pupils because of poor **cleanliness** and bad smells and/or unsatisfactory provision of **consumables**, among others (10). These are reasons pupils may avoid visiting WASH facilities at school, with consequences for their health and school performance (2,10). Poorly maintained facilities may also trigger antisocial behaviours (19, 39).

Regular and diligent O&M is essential to ensure that WASH services remain functional and adequate sustainably over time to ensure healthy practices. O&M consists of work planned and carried out on a routine basis to keep the infrastructure in good condition. It should also entail "soft" or management aspects of WASH: those that go beyond maintainance and rehabilitation

of building infrastructure, such as managing and keeping track of cleanliness, minor repairs and monitoring and provision of consumables.

Ingredients for efficient O&M

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A well thought out and reliable **plan** that specifies roles and tasks, routine schedules and requirements is the first step.

A dedicated **budget is required.** In many countries, funding is provided to schools through a budget that covers, among others, expenses for day-to-day maintenance, cleaning and repairs (63). It may be the responsibility of the school to identify the budget needed to address WASH O&M appropriately and request support from responsible local authorities in cases of further need.

Monitoring of O&M activities is essential, with good record-keeping to allow discussion of recurrent issues and necessary improvements (64).

Personnel should be responsible for O&M and cleaning, including staff from the school management, who can act promptly on issues identified.

See the ♦operation and maintenance planning chart (Template B) provided in the practical templates in Annex 1.

How to squeeze O&M into the busy school schedule

Include the topic of WASH facilities and their management in relevant **school meetings** and make use of other opportunities to **communicate** with stakeholders and interested people inside and outside the school – for example, school staff, school council, students, community groups/users, parent-teacher associations, cleaning and maintenance contractors and even local authorities. In this way, you can raise awareness of the topic and get support. Remember the central role of cleaning staff in keeping WASH facilities in a good condition. This should be strongly emphasized among the cleaning staff themselves, as well as among teachers and pupils.

Define **clear responsibilities** and distribute them to the staff with the appropriate skills. This is key to ensuring efficient and successful O&M of WASH in schools (64). Depending on the regulatory setup in your country, different people may share WASH-related responsibilities in schools. See possible roles for the different groups most commonly observed in schools in the *boperation* and maintenance roles map (Template C) provided in the practical templates in Annex 1. If school staff are engaged in O&M, make sure that they have the necessary skills to look after WASH-related matters.

Establish a **monitoring system** with a limited set of objectives that can be measured easily, conduct frequent checks and avoid leaving issues pending. This will facilitate identification of problems and their correction in a timely way. Keeping O&M activities monitored will help to save time and costs (38). For example, water shortages can be monitored by teachers or children according to an organized schedule, so that action can be taken immediately if a problem occurs. Recording sheets may be available from authorities, or you can develop your own. See the collection of printable practical templates in Annex 1, including:

- D. Routine functionality check
- E. Routine consumables refill
- F. Routine cleaning record sheet

How to ensure that the O&M procedures in place are sufficient

Sometimes school facilities do not meet pupils' needs, often owing to issues with the current O&M procedures (10). You might want to check whether the O&M plan in your school includes all key aspects to ensure the best state and cleanliness possible.

- All consumables (see Table 1) should be topped up regularly throughout the school day, especially after breaks and in the afternoon (10, 37).
- Cleanliness, including how full the bins are, should be checked regularly during the day and checks may be recorded (10, 37).
- Drinking-water taps should be thoroughly flushed through after periods of low use. (16)
- A deep clean of toilet blocks may be planned during school holidays. (65).
- WASH facilities should be cleaned twice a day (and whenever dirty) to ensure availability of consumables and cleanliness, especially after times of peak use during breaks and later in the day (10, 19).
- Checks of WASH facilities should be conducted regularly to ensure that everything is in place and functioning (37, 64). A small improvement can increase the safety and experience of visiting the toilets significantly.
- Planned maintenance should happen outside school hours (25.)

Action	Consumables and related items (Different or additional consumables may be needed according to local practices and preferences)
Purchase and replace sanitation consumables regularly	Toilet paperToilet brushLightbulbs for illumination
Purchase and replace hygiene consumables regularly	 Soap for handwashing Single-use hand towels (paper or other type) Menstrual hygiene products (sanitary pads, tampons) Sanitary bags or wrapping material for safe disposal of used menstrual products Bags for waste bins Cleaning detergent Cleaning products (rags may need to be replaced when worn out) Laundry detergent
Ensure functionality of devices	Availability and functionality of soap dispensers, dispensers of hand-drying paper or automated hand-drying devices, bins and toilet paper holders should be ensured.
Ensure other essential supplies	Electricity (to ensure hot water supply and illumination) and drinking-water are not always available as planned and free of charge. You may need to make sure that contingency supplies/measures are included in the O&M plan and the school WASH budget.

Table 1. Consumables your school needs to ensure adequate WASH services

Sources: Adams et al. (4); van Maanen et al. (18); Welsh Government (37).

Choose the best consumable options for your school. Different formats for the choice and provision of hygiene consumables are available. For example, soap can be provided in the form of a bar or as liquid soap/soap foam from a dispenser at the sink. Means for hand drying may include (single-use) paper towels, a hand towel roll dispenser or hand dryers. Toilet paper may be provided hanging on a simple holder free on one side, secured with string, locked in a dispenser or even kept in classrooms. In the last case, consider that pupils may feel uncomfortable asking for the amount of toilet paper they may need; this may lead them to avoid asking and going to the toilet. Decide what the best options are for your school, based on the cultural practices and preferences of the pupils. This is especially important in the case of the choice of menstrual products made available at school. For example, some girls may prefer nonintrusive options such as pads. In some cases, product choices may be based on criteria such as avoiding misuse of consumables or antisocial behaviours (for example, this may be a factor in the choice of foam rather than liquid soap). It is therefore important to consult first with staff and pupils to find the best solution and avoid spending effort on interventions that will not be accepted by users and will not last. Another criterion for consideration is the financial resources available to ensure O&M of the provision and devices of choice.

An enemy to O&M: how to fight vandalism

Engage children in exploring improvement needs. Often pupils have a better overview of what is missing in the WASH facilities they use and when shortages occur. Before improving maintenance, you may want to engage pupils in assessing the status of the facilities and identifying possible solutions.

Build pupil ownership and create responsibilities. Pupils can play an active role in the decoration as well as the maintenance of facilities (4, 25). At the same time, you can engage pupils in the supervision of the toilet blocks after times of peak use (through school health clubs or rotating classrooms). This will make pupils feel responsible and encourage them to keep the toilets clean. Children may also contribute to and get involved in cleaning and maintaining parts of the WASH facilities or other common areas. This decision requires a number of careful considerations in advance, however, along with measures to ensure clear communication with and support by parents. Roles should not be distributed unfairly between different groups of children and it is important that the task is not used as a punishment (4). Great care should be taken to avoid exposing children to disease risk. For this reason, children may be engaged in maintenance of the common areas or the handwashing facilities, rather than the toilet cubicles.

Provide **alternative indoor social areas** inside the school. Antisocial behaviours may occur when pupils socialize and hang around in the WASH facilities. The provision of alternative areas could discourage this practice (19). Small modifications that allow supervision could make pupils feel safe when using the toilets – for example, installing a small window at an adult's eye level on the main facility door or creating an open unisex handwashing facility outside of the toilet cubicle area (25).

Ensure a high standard of quality and aesthetics in the facilities: this alone could encourage pupils to respect and have pride in the toilets and discourage vandalism.

Case study 2. Pupil participation in supervision of toilet facilities in Germany

The toilets in St. Peter School in Neuss, North Rhine-Westphalia, Germany, look attractive as they are very colourful, but another scheme was also implemented to keep the toilets as clean as possible. The "Saubären" (a pun on the German words "clean bears") are rotating teams of two children who "guard" washrooms during breaks. This idea was suggested by the school manager. If the children notice that something is broken or unpleasant, they make a note, lock the door and inform the caretaker.

Source: Spiegel online (66).

Useful resources

- A general overview of O&M programmes for WASH, including actors, participation and funding: Construction and maintenance of school facilities. In: A manual on school sanitation and hygiene: Water, Environment and Sanitation Technical Guidelines Series No. 5. New York: United Nations Children's Fund; 1998: 51–4 (https://www.unicef.org/wash/files/Sch_e.pdf).
- A comprehensive list of more technical information on O&M: Sustainable sanitation and water management toolbox – operation and maintenance. Bern: Seecon; 2018 (https://www.sswm. info/planning-and-programming/ensuring-sustainability/ensure-sustainability/operation-andmaintenance).
- An O&M manual for schools and communities, considering the active participation of school staff and pupils: WASH in schools operation and maintenance manual (www.fitforschool.international/ wp-content/ezdocs/WASH_in_Schools_Operation_and_Maintenance_Manual_2017.pdf); and a specific manual for sanitation maintenance: Toilet repair manual (www.fitforschool. international/wp-content/ezdocs/gizffs_Toilet_Repair_Manual_English_20170522.pdf), Bonn: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ); 2017.
- A guide to effective and cost-efficient procedures for maintenance, including of WASH: Planning guide for maintaining school facilities. Washington DC: National Forum on Education Statistics (NCES); 2003 (https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2003347).

Practical templates

See the collection of printable practical templates in Annex 1, including:

- A. WASH problem-solving chart
- B. Operation and maintenance planning chart
- C. Operation and maintenance roles map
- D. Routine functionality check
- E. Routine consumables refill

Explore other factsheets related to this topic:



Factsheet 9. WASH topics neglected in health education



Factsheet 11. Engaging schoolchildren



Factsheet 14. Using the WASH checklists



Factsheet 15. Keeping it right with an improvement plan

Factsheet 7. Costing and budgeting for WASH

Is toilet paper always the last item on the school's shopping list?

Adequate budgeting is indispensable for maintaining good WASH services in the school.



Key members of the school community

School managers, janitors and administration staff

Major benefits of taking action

- A dedicated budget line for WASH under general maintenance can help the school plan and prioritize WASH (61).
- Investing in WASH operation and maintenance (O&M) is cost-efficient, reducing the frequency of equipment replacement, decreasing the number of major repairs needed and reducing overhead costs (such as utility bills) because of increased system efficiency (38).
- Ensuring adequate WASH facilities in schools may discourage antisocial behaviours and vandalism (19, 39).

Background

Good management of the WASH services at school requires sufficient financial support to cover the recurring costs of O&M. In many countries, WASH is mainly financed by the government, but the funds allocated often do not match actual needs (2, 10, 67). Sometimes teachers volunteer, at personal expense, to compensate for a lack of materials at school (68, 69). To ensure adequate WASH services, schools need to establish a budget and manage costing on a regular basis, comprehensively reflecting recurrent costs (see Table 2) and costs for human resources. To increase funding, it is important to improve management of the available resources, communicate the school's needs to the authorities and engage the community and parents (26).

Why it matters

A WASH budget is an important step in improving transparency and planning (70). Continuous funding, facilitated by appropriate planning, is essential to ensure well-managed WASH facilities in schools (61). Schools working on their WASH budget are more likely to achieve their goals and might be able to gain additional funding, by showcasing good financial management and successful implementation.



WASH service	Costing items to ensure adequate WASH services
Water supply	 Water bill and energy bill to prepare hot water
	• O&M of water supply infrastructure, such as replacement and/or repairs of hardware (e.g. taps, sinks)
	 O&M and supplies for running any disinfection and/or filtration devices
	Cleaning of water storage tanks
	Water quality testing
Sanitation	 O&M of latrines or toilets, including pit emptying and pit latrine additives (where applicable), repair and spare parts of door grips and door locks of toilet cubicles
	 Replacement of toilet brushes and lighting bulbs for illumination of WASH facilities and/or the way to facilities (e.g. if they are outside the school building)
	Supplies of toilet paper
Hygiene	 O&M of handwashing infrastructure, including repairs of soap dispensers and hand- drying devices
	 Supplies of consumables, such as soap, menstrual products, hygiene bags for safe disposal of menstrual products, hand-drying paper (or laundry for cotton towels) and bags for waste bins
	 Supplies for cleaning WASH facilities, such as toilets, sinks, taps and water fountains, including purchase and replacement of brooms, mops, cloths and
	detergents
Other WASH-	Educational materials
related aspects	 Other maintenance and decoration materials, such as paint
	 In some settings, out-of-pocket payments of cleaning/maintenance staff by the school

Table 2. Possible recurring costs for WASH in schools

Source: adapted from McGinnis et al. (63).

How to start building a WASH budget

Create an **overview of expenditure** on WASH in the school and assess the budgetary needs. Consider the costs for ensuring adequate maintenance, cleaning and consumable supplies of WASH services in one year. Ask staff, who may know of gaps they have been supplying and conduct a rapid assessment of the WASH situation in your school. This also helps to detect issues previously overlooked or that need support from the authorities. See the \diamond costing matrix (Template G) provided in the practical templates in Annex 1.

Establish a plan to improve the budget for keeping WASH facilities in good order, reflecting needs and priorities. Many initiatives can be funded from available budgets and integrated into ongoing staff responsibilities. Others require additional resources. A plan allows you to keep track of availability and management of resources and ensures WASH improvements in the long term. It can also help when requesting additional support from the authorities. Review plans periodically.

Develop a schedule for WASH O&M, with clear roles. This is key to ensuring sustainable services: it will help to create a clear overview of cost lines and ensure cost-effective use of available resources in the long run (38). A schedule should include procedures for prompt detection (checks) and resolution of issues (corrective actions). If neglected, small issues worsen and may impair accessibility of WASH facilities, eventually leading to higher costs for improvement.

How to ensure sufficient funding in the long term

Consider WASH costs under a **separate budget line** in the school budget. This will allow you to monitor expenditure, identify needs and ensure sustainable planning and financing for WASH services and their O&M. A clear WASH budget could also make authorities aware of the relevance and importance of WASH maintenance in the school and eventually improve school financing.

Engage pupils and parents in planning and supporting WASH O&M. This also helps to raise awareness and create ownership. If needed, they can help with decoration, preparing posters, conducting checks of the facilities and even providing support for small repairs and cleaning (26). Remember always to ensure their safety and a fair and equal distribution of work.

Raise funding and technical support from outside the school, in the case of insufficient resources for an important improvement action. Multiple resources can be considered, such as state or municipal funding and technical support, foundations or public grants, partnerships with parent–teacher associations and nongovernmental agencies or charities, among others. The community could help through cost sharing, donations and technical assistance. Consider also fundraising projects/days, income-generating activities in the school and engaging volunteers to donate time and skills.

Make an **improvement plan** that reflect needs and priorities, defining what needs to be done and how to do it. Many challenges require financial support at the same time. Discuss improvements and financial plans with various staff members to ensure that critical actions are prioritized and resources managed at their best. See the \bullet prioritization chart and \bullet improvement plan (Templates H and I) provided in the practical templates in Annex 1.

Include quick wins in your improvement plan: smaller, quickly achievable actions. For example, hanging hand-drawn educational posters or purchasing a soap bar if the soap dispensers are broken are cost-efficient temporary solutions to ensure basic WASH services in the school while waiting for more resources to become available.

Encourage the school management and staff to engage in **activities to improve WASH**. Financial resources are not sufficient on their own. Important contributing factors are an active school management team engaged in WASH, responsible staff members held accountable for school maintenance and a clear maintenance plan *(61)*.

Case study 3. Low-cost setting does not prevent a school administration building suitable toilets for all pupils in the Republic of Moldova

The school in Nimoreni, Ialoveni, Republic of Moldova, has two buildings separated by a road and one toilet facility with no connection to the sewage system. Pupils in one of the buildings had no access to toilet facilities. The school decided to build a new facility with Eco-san toilets (allowing location inside the building without sewerage). Within five years, the budget needed was reached through savings at the school level and with the help of a local public authority, complemented by technical assistance from an external agency (the Swiss Water and Sanitation Project in Moldova (ApaSan)).



Practical templates

See the collection of printable practical templates in Annex 1, including:

- B. Operation and maintenance planning chart
- G. Costing matrix
- H. Prioritization chart

Explore other factsheets related to this topic:



Factsheet 6.

School-based

maintenance



Factsheet 11. Engaging schoolchildren



Factsheet 12. School and community Using the WASH working together



Factsheet 14. checklists



Factsheet 15. Keeping it right with an improvement plan



Chapter 2 checklist

This section provides you with questions to check the status of WASH services and examine whether your school needs to take action to improve their provision and/or accessibility. Questions are not meant to provide a comprehensive assessment but facilitate a critical analysis by school staff to identify improvements that can be undertaken by the school itself or for which the help of the authorities needs to be sought. If improvement needs are discovered during the check, you might want to consider these in the development of an improvement plan. For planning, go back to the relevant factsheet (indicated by the checklist question headings) to find tips and possible activities. More suggestions about how to conduct the checks are described in Factsheet 14.

How is adequate access to WASH ensured in your school?	This is in place	We need to improve this
Factsheet 6. School-based maintenance		
Is there an established procedure for routine O&M?		
Does the plan include WASH?		٦
 Does the plan include a clear distribution of roles and responsibilities for WASH-related O&M, supervision and cleaning taks? 	٦	
Is implementation of the plan monitored?		
 Does the plan include regular checks of the cleanliness of WASH facilities during the day? 		
 Does the plan include regular checks of the availability of WASH consumables during the day? 		
• Does the plan include regular functionality checks?		
Did you check accessibility of safe drinking-water at the school? (Questions in Chapter 1)		
Did you check accessibility of toilets at the school? (Questions in Chapter 1)		
Did you check provisions for menstrual hygiene management at the school? (Questions in Chapter 1)		
Factsheet 7. Costing and budgeting for WASH		
Do you have an overview of annual expenditure on recurrent WASH costs at the school?		
Do you have an overview of current budgetary needs to improve WASH at the school?		
Is there a specific budget line for WASH O&M, cleaning and provision of consumables?		

How is adequate access to WASH ensured in your school?	This is in place	We need to improve this
Factsheet 7. Costing and budgeting for WASH contd		
Does the WASH budget line include all important aspects?		
O&M of water supply		
 Water treatment and storage (if applicable to the setting) 		
Water bill (if applicable)		
O&M of sanitation facilities		
 Cleaning and provision of consumables to ensure hygienic conditions of WASH facilities (including waste management) 	٦	٦
Cleaning and provision of consumables for handwashing facilities		
Cleaning and provisions of consumables for girls' menstrual hygiene		
Electricity bill (if applicable)		
 Illumination supplies (e.g. lightbulbs) 		
Other costs that may need to be considered:		
Are pupils and parents involved in O&M of the school facilities?		
 Do pupils actively contribute to maintaining and promoting maintenance of the WASH facilities? 		
• Do you have a plan or measures to engage parents and pupils?		



Chapter 3. Including WASH in the school curriculum

This chapter will guide you through some topics of health education related to WASH that should complement noneducational WASH improvements. It provides tips on how to integrate these into curricular and extracurricular activities in your school, and on successful approaches to drive positive change in health behaviours.

Factsheet 8. Hand hygiene education

Will pupils ever learn to wash their hands?

Hand hygiene interventions can increase handwashing practice by up to 50%. Better results are obtained when you address more than one aspect at a time: awareness, reminders and facilitation with sufficient provisions (71).



Key members of the school community

Teachers, pupils and school health staff

Major benefits of taking action

- Education about hand hygiene is an essential step to improve understanding and commitment to increase hygiene practice (71).
- Handwashing education is effective in improving hand hygiene practices, and results are better when knowledge is translated into practice through training at school (10, 14).

Background

Learning to practise handwashing takes time and attention. Support from teachers and school health staff is necessary to help younger children and monitor older ones to allow them to practise handwashing correctly and consistently. Practical education, direct and indirect reminders and being a positive role model all contribute to create lasting handwashing habits (4, 14, 71).

Why it matters

Proper handwashing with soap is the most effective measure against the spread of germs that cause respiratory illnesses, like colds, as well as diarrhoeal diseases: regular handwashing with soap can reduce the number of diarrhoeal incidents alone by around 30% (72). Hygiene interventions targeting handwashing have proved to be efficient.

Schools can be hotspots for the spread of infectious diseases, and good hygiene practices are especially critical during outbreaks. But you don't need to wait until the epidemic arrives: by improving hygiene, your school can break the chain of transmission and prevent diseases.



How to support children learning about hand hygiene

Incorporate **hygiene education** into the school curriculum. School is one of the most important places in which children learn about hygiene –an opportunity that may not be possible in their homes. Hygiene, health and their connection to nutrition fit well in existing curricula within science or social subjects covering biology and/or healthy lifestyles. Hygiene can be introduced into planned lessons on oral hygiene and/or nutrition and healthy diets.

Provide **advice and training to staff**, in collaboration with school health staff and experts from health authorities if possible. Hygiene education should be a core part of teacher training and refreshed regularly to sustain knowledge and awareness. Teachers should be knowledgeable about important messages related to WASH and skills-based education. This teaching method entails a strong focus on practice, making use of a variety of participatory and other learning methods. See the **\equiv child-friendly** teaching plan (Template J) provided in the practical templates in Annex 1 to facilitate discussion with staff and identify practised or new skills-based activities.

Be a **role model.** Children can learn by the example set by school staff, especially their teachers. Thus, school staff should act as role models and consistently demonstrate appropriate hygiene behaviours, as well as reminding children to do so.

Set school rules to **promote hygiene** systematically. Teachers can explicitly remind children to wash their hands at critical times (such as after using the toilet or after playing). Remind them before going for break and afterwards, and before lunch. A fixed schedule and group handwashing activities could also help to create the habit. Stickers and posters (Fig. 2) or other forms of reminders such as nudges can be very useful in an indirect and efficient way to facilitate proper hygiene behaviours (14).

Make improvements an **occasion for learning**. Organize, for example, handwashing contests or drawing contests on the theme of hand hygiene. The outcomes can be used to initiate skills-based

Fig. 2. Example of poster for promoting hand hygiene



education or produce educational materials to hang in classrooms and toilets. You can also engage the community to raise funding or donations to print more posters or buy better soap dispensers or a soap that smells good.

Make sure that the school allows children to **wash their hands**. Establish school rules and a schedule that allow children sufficient time to visit the toilets and establish a routine for operation and maintenance. If soap is available and toilets are functional and clean, teachers' messages can be conveyed more credibly and can promote the proper practice of handwashing successfully.

What pupils should learn

Pupils need to understand:

- when to wash their hands and why: the critical times to wash hands and germ transmission;
- how to wash their hands and why: rinsing and washing, how to rub between hands and fingers, the importance of soap;
- the importance of handwashing.

Teachers in a health-promoting school should impart skill-based handwashing behaviour (73):

- knowledge that handwashing with soap leads to a drastic reduction of germs on hands that may lead to diarrhoeal and respiratory diseases, and so by proper handwashing with soap, pupils protect themselves, their friends and families;
- an appropriate attitude to understand the importance of handwashing with soap and when to do it;
- practising how to wash hands properly with soap every time before eating and preparing food, and after using the toilet, playing outside or petting animals.

The lesson should encourage development of the attitude by making children understand by themselves and develop practical skills by practising handwashing at school.

Useful resources

- Useful materials for hand hygiene education to teach when and how, as well as why, developed by the United States Centers for Disease Control and Prevention (CDC):
 - When and how to wash your hands (https://www.cdc.gov/handwashing/when-how-handwashing.html);
 - Show me the science why wash your hands? (https://www.cdc.gov/handwashing/why-handwashing.html);
 - Show me the science how to wash your hands (https://www.cdc.gov/handwashing/ show-me-the-science-handwashing.html);
 - Handwashing general posters (https://www.cdc.gov/handwashing/posters.html) all available via: Centers for Disease Control and Prevention [website]. Atlanta, GA: Centers for Disease Control and Prevention; 2019.
 - Online educational modules available via: Global Handwashing Partnership [website]. Washington DC: Global Handwashing Partnership; 2019 (www.globalhandwashing.org).
- A health education resource available in 22 languages with lessons and useful materials for different age groups, focusing on oral hygiene, hand hygiene and other topics related to infection prevention. E-bug [website]. London: Public Health England; 2019 (www.e-bug.eu).

Practical templates and tips

See the collection of printable practical templates in Annex 1, including:

• J. Child-friendly teaching plan

See also the collection of practical tips for pupils in Annex 2.

Explore other factsheets related to this topic:



Factsheet 3. Hygiene and the clean environment



Factsheet 9. WASH topics neglected in health education



Factsheet 10. Skills-based education and nudging

Factsheet 9. WASH topics neglected in health education

Is hygiene a subject in your school?

Hygiene and health education are only partly covered in the school curriculum in many countries, and in some countries are not included at all (10). Available hygiene education programmes often neglect important topics.



Key members of the school community

School managers, teachers, janitors, cleaning staff and school health staff

Major benefits of taking action

- Educating children about the importance of hygiene, hydration, regular voiding and menstrual hygiene management (MHM) has a positive impact on their health and well-being (18).
- Providing pupils with knowledge about and practical skills for good hygiene behaviour and healthy practice increases their self-esteem, self-confidence and coping capacity (19, 39).
- Good hygiene behaviours and healthy practices enhance pupils' mental capacity and school performance (2).

Background

Proper WASH conditions in schools and WASH education are fundamental to ensuring healthy practices, such as healthy bladder emptying, sufficient hydration and handwashing. They are consequently important to ensure equitable access to high-quality education. Hygiene education at school often neglects aspects related to the importance of WASH for positive health and learning outcomes of children (10). Beside hand and personal hygiene behaviours, important topics include hydration, regular and proper use of toilets and MHM.

Alongside provision of well equipped and maintained WASH facilities, it is important to ensure that children know how to use them. Moreover, children should be taught about the negative health consequences of improper behaviour related to WASH. Raising awareness about these topics among school staff and pupils is crucial to empowering children to acquire long-lasting knowledge and skills, enabling them to take responsibility for hygiene and healthy behaviours at school and at home.

Why it matters

Children spend a major proportion of the day at school. Schools that do not pay due attention to children's health and hygiene education are likely to see negative consequences for pupils' health and school performance. Health education that includes WASH topics contributes to improving health, well-being and quality of life, as well as strengthening pupils' civic and social engagement (74).

Acquiring knowledge and developing positive attitudes and skills for proper hygiene behaviour may also contribute to decreasing possible negative feelings associated with toilets or menstruation, for example, and to reducing episodes of bullying *(19, 36)*.

How to teach children to drink water and use toilets regularly

Hydration is key to allowing children to maintain attention in class, fostering positive mood and school performance (10). Hydration and voiding skills are both important to sustain a healthy bowel and bladder (15, 21). Education on these topics, along with hygiene, can prevent children developing health problems, which may include constipation and/or bladder problems leading to incontinence (daytime or bedwetting), as well as recurrent urinary tract infections. All these issues can affect children's well-being and their experience at school significantly, lowering self-confidence or self-esteem and affecting cognitive performance, especially short-term memory (2). Sufficient water consumption also lowers the risk of obesity and dental caries, as children are less prone to consuming sugar-sweetened beverages.

Ensure an appropriate number and appropriate conditions of **drinking-water points** at school to meet children's needs. Taps in the toilet areas, which are sometimes the only source of water at school, may not be considered a drinking-water source by pupils because of their negative perception of toilets. This may therefore negatively affect pupils' fluid intake at school, especially considering the common avoidance of toilets.

Include **hydration and voiding matters** in the curriculum, choosing age-appropriate topics and teaching methods. Learning about the physical and functional aspects of the bladder may help promote bladder health (75). It is likely that a larger number of younger pupils will have acute wetting problems and may be less able to take responsibility for their own toilet routines than older children, although this does not mean that older children do not face these problems. In turn, it is of greater importance in higher grades to talk about sex-specific aspects, such as MHM. This will strengthen awareness among teachers and children.

Ensure a **friendly school environment** where children feel safe. Your school may need to improve rules to allow sufficient fluid intake and toilet visits for children according to need. It is important to understand needs without discriminating against vulnerable pupils. Promoting acceptance and appreciation of others and avoiding taboos or judgments are important when teaching about these topics.

You can teach how to use the toilet and promote its use. Age-appropriate education can help to ensure that children know how to keep themselves clean and leave the toilets in a hygienic state. Younger children may especially need to be taught this topic during class and to have a chance to practise (14). Fig. 3 and Case study 4 show examples of educational measures for schools in France. The first provides advice for prevention of bowel and bladder problems, because "Peeing can be learned too", while the latter suggests how to integrate sanitation into the curriculum and link it with social education.



Fig. 3. Door hanger for toilet cubicles

Case study 4. Example from France of educational activity focusing on sanitation at school

The French Ministry of Education set out a suggested activity for grade 4–8 classes: a sensitization compaign about the relationship to otherness and sanitation. The main topics of focus were demonstrating respect for others and explaining the connection between commitment and accountability: individual and collective responsibilities.

The activity was to be taught by teachers of history/geography and moral and civic education, and teachers of art and language could be involved in creating the posters. Pedagogic support staff, if present, could also participate.

The pupils would be asked to consider a hypotetical situation concerning a school exchange between children from different countries, whose cultures do not use toilets in the same way, which can create discontent among host families. This would raise awareness of different cultural practices and allow the students to discuss possible differences and consider solutions for overcoming conflict while respecting each other.

Students would be reminded that certain behaviours are not acceptable when they undermine people's dignity. They would be divided into groups to discuss and make a list of unacceptable behaviours for school toilets.

Next, pupils would be given large pieces of white paper and markers or other colouring materials to create posters for an awareness campaign. They would be encouraged to work on interrogative rather than imperative formulations, asking questions to make the reader think.

This last phase could be integrated into a joint action across the school, bringing together the management team, health and social staff parents. The project could also aim, for example, to make students "ambassadors" for the following years.

This activity could also be used to discuss different perceptions between boys and girls. The resulting posters could be presented during an exhibition, in the school hall or the parents' area. The work could be used to support lessons in class or initiate dialogue on the topic.

Source: Ministère de l'Éducation nationale et de la Jeunesse (35).

Give **practical tips**. As well as knowledge about the adverse consequences of dehydration and irregular voiding, children should be taught how to prevent them. See the *b*practical tips for pupils related to using the toilet in Annex 2 to allow children to stay healthy, respecting school hours.

How to address menstrual hygiene at school

Puberty, menstruation and MHM should be taught in classes for **both boys and girls**. MHM is important for every single girl's health and well-being and has an impact on their participation at school (46). It is therefore critical for their future lives and for overall gender equality in your school and community. Children should learn about menstruation before they experience it and learn that it is a natural process of the body (48).

Give **practical messages** about how to stay healthy, such as those suggested in the practical tips for pupils related to MHM in Annex 2. Consult with health services or health staff in your school. A number of MHM-related topics should be included in education, covering the following topics (48):

- what menstruation and premenstrual syndrome are;
- whether menstruation hurts and how to manage both menstruation and pain;

- menstrual hygiene products, hygiene around menstruation and how to dispose of menstrual materials;
- a menstrual calendar to track monthly menstrual flow and identification of signs that a girl is going to have her period (such as breast sensitivity or changes in vaginal discharge);
- cultural and religious beliefs, social norms and myths surrounding menstruation and puberty (location-specific);
- privacy and bodily integrity.

Incorporate neglected topics concerning hygiene education and WASH in general into your curriculum. WASH aspects can be integrated in the curriculum in various subjects, such as biology and social science. Skills-based education can be used to ensure consistent learning of healthy practices in the long term (*43*). Learning about key hygiene behaviours can be grouped into three basic WASH themes, including generally neglected topics: personal and food hygiene (including MHM); health benefits and risks related to poor WASH conditions and practices (including hydration and MHM); and proper use of WASH facilities and keeping them in good order. WASH education can also be linked with sexual and reproductive health or family education, or be an entry point to introduce the topic, since all are related to teaching about health and respect.

Case study 5. Age-appropriate educational materials available for school curricula in Hungary

The National Institute of Pharmacy and Nutrition, with the support of WHO, developed colourful and informative posters to be hung in schools for the Hungarian Aqua Promoting Programme in the Young (HAPPY) campaign (launched in 2010). The posters address different school audiences: pre-schoolers, young schoolchildren, adolescents and parents (Fig. 4). They promote healthy hydration and reducing consumption of soft drinks among schoolchildren and are available in Hungarian on the Institute's website.

Fig. 4. Age-appropriate educational materials on hydration and nutrition used in Hungarian schools (left for smaller children, right for adolescents)



Source: National Institute of Pharmacy and Nutrition (76).

Useful resources

- Charts to print and hang in school WASH facilities to help pupils monitor their hydration status through the colour of their urine – if the colour is too dark, they should drink one or two more glasses of water:
 - Simplified chart: How is your wee? Lismore: Northern NSW Local Health District; 2017 (https://nnswlhd.health.nsw.gov.au/health-promotion/files/2017/09/wee.jpg);
 - Complete chart: Healthy pee and colour chart. Glasgow: Health Protection Scotland; 2018 (https://hpspubsrepo.blob.core.windows.net/hps-website/nss/2391/documents/6_ Healthy%20Pee%20&%20Colour%20Chart.pdf).
- Information for children and adolescents on how to cope with periods, developed by young people: Periods [website]. Edinburgh: Young Scot; 2019 (https://young.scot/campaigns/ national/periods).
- Comprehensive guidance on sexuality education, including examples of learning objectives by age group on aspects such as tolerance, inclusion and respect, health skills and puberty: International technical guidance on sexuality education: an evidence-informed approach. Paris: United Nations Educational, Scientific and Cultural Organization; 2018 (https://unesdoc.unesco. org/ark:/48223/pf0000260770).
- Tools and materials to deliver education on MHM for girls and boys: Resources. In: Be amazing! Menstrual hygiene management [website]. New York: United Nations Children's Fund; 2017 (http://www.menstrualhygienegh.org/resources.php).
- An educational booklet for girls: Growing healthy: things that girls need to know. New York: United Nations Children's Fund; 2015 (https:\resourcecentre.savethechildren.net\node\13164\ pdf\4.mhm_booklet_ectec_aug_2015.pdf).
- An informative and fun booklet for children on sanitation: Poo and wee. Bristol: ERIC; 2016 (https://www.eric.org.uk/Handlers/Download.ashx?IDMF=b7e6059b-db44-47ae-9c15b7c7df1c88a4).

Practical tips

See the collection of practical tips for pupils in Annex 2.

Explore other factsheets related to this topic:



Factsheet 4. Menstrual hygiene management



Factsheet 10. Skills-based education and nudging



Factsheet 10. Skills-based education and nudging

Can improving toilet aesthetics make a difference to children's behaviour?

Nudging in the form of graffiti and wall paintings in school toilets can make between five and seven out of ten children change their behaviour and start washing their hands (77).



Key members of the school community

School managers, teachers and school health staff

Major benefits of taking action

- Skills-based hygiene education is more fun for the children, eventually leading to better learning outcomes in terms of long-lasting good hygiene practice (73).
- Nudges indirectly and unconsciously lead children towards better hygienic behaviour and are more effective than direct instruction or enforcement (78).
- Deciding to use nudges can be an occasion to raise pupil participation, engaging them in the development.

Background

Good hygiene behaviours are essential for children's well-being and learning outcomes. Nevertheless, key hygiene practices like handwashing and toilet use are not always properly executed by children owing to lack of knowledge, skills or awareness (14).

Schools play a key role in hygiene education. Many children learn some of their most important hygiene skills at school and may be introduced to hygiene practices that may not be promoted at home. Teachers can teach children about WASH through health education as well as by acting as role models for schoolchildren (4). For this purpose, methods can be used that have proven to lead to the most enduring learning outcome and successfully drive change towards healthy behaviours and lifestyle.

Why it matters

Improvement of WASH facilities in schools alone may not lead to improvement if critical hygiene behaviours are not changed accordingly (10). It needs to be done hand in hand with the introduction of educational measures to initiate and strengthen healthy behaviours.

Teaching facts about bad hygiene practices and risks to health is not enough for effective hygiene education: it is important to develop skills and to focus on changing children's hygiene behaviour (44).

Skills-based education (Fig. 5) and nudging are effective to pursue this objective (44, 77). Both approaches aim to facilitate proper hygiene behaviour for WASH in schools; they are thus complementary.

Fig. 5. Skills-based education method



Source: adapted from: IRC (79); Postma et al. (43).

Translating teaching into practice

Skills-based health education is meant to create or maintain healthy behaviours (73). It makes use of a variety of learning experiences, with an emphasis on participatory methods (43), covering:

- knowledge and understanding of practical and theoretical information on WASH;
- attitudes, opinions and preferences influencing actions to unhygienic situations;
- practical skills to carry out specific healthy behaviours.

Nudging is not a teaching technique, but it supports uptake of certain practices as it consists of use of simple cues ("nudges") within the environment that influence people's behaviour towards a desired outcome (77). Nudges influence us to perform a behaviour in a certain way without making a conscious decision (80). Note: nudging is not about forbidding or imposing any behavioural options.

How to apply skills-based education and nudging successfully

Organize ad hoc **training and meetings** for school staff. School staff members are largely responsible for promoting healthy behaviours at school and encouraging children's participation in maintaining a healthy school environment. All teachers should thus be aware of the importance of and best practices for WASH, and should be role models for schoolchildren. School staff from a wide range of subject areas should be involved in order to reinforce learning. See the *•*child-friendly teaching plan (Template J) provided in the practical templates in Annex 1 to facilitate discussion with staff and identify practised or new skills-based activities.

Integrate skills-based health education in the **school curriculum**. Adapt the curricular activities already in place, set a new core subject within the broader curriculum or combine health and social issues within a core subject such as science. If formal curriculum time is overburdened, you can make use of nonformal or extracurricular programmes.

Select a few key WASH behaviours at a time, based on the most urgent issues and the priorities at your school (for example, regular water intake, handwashing with soap or proper waste disposal). Then choose the skills-based education strategies and nudges accordingly. Teaching and learning methods for hygiene behaviour are most successful when focusing on a limited number of behaviours with the biggest overall health impact.

Examples of nudges to use at your school

- Colourfully painted footsteps on the floor that lead the children from the toilet to the handwashing facilities
- Stickers or signs attracting attention and showing the proper use of soap and water for handwashing at eye level in the handwashing facilities (Fig. 6)
- Mirrors by the handwashing facilities, which Fig. 6. Example of signs to promote hand attract and are preferred by children
- Signs with **positive messages** to remind children about keeping the environment clean
- Stickers or signs expressing disgust at actions or results that can clearly be assigned to improper hygiene behaviour
- Highlighting of important WASH facilities with bright colours to draw children's attention to a drinking-water dispenser, drinking-water fountain or soap dispenser

hygiene



Joyful graffiti and colours to decorate the toilet facility walls to improve children's perceptions and reduce avoidance

Sources: Neal et al. (14); Global Handwashing Partnership (77).

Tips on using nudges in the right way to ensure the desired outcome

- Nudges should be noticeable and stand out to the user. Make sure they are placed in visible areas and have bright colours.
- Nudges should be inclusive. They should be visible and easy to reach and interact with for all possible users. Consider vulnerable groups at your school, too. If, for example, a mirror or stickers are used as a nudge, make sure that they are placed inside the field of vision of children in wheelchairs or small children.
- Nudges should be simple, presenting the behaviour to be nudged and triggered in a clearly understandable way, and leading to the desired action. This is especially important, since the nudges should evoke the desired behaviour unconsciously.
- Nudges should be relevant and refer to existing and functioning infrastructure. If you want to nudge the handwashing behaviour of children, it is necessary to provide functional handwashing facilities.
- Nudges can be inexpensive. For example, you do not have to spend money on printing stickers. Instead, you could have a drawing session with the children, for example. This will support pupils' ownership of the nudges and is therefore even more likely to increase compliance with the desired behaviour.

Useful resources

- Information, tips and factsheets on nudges: FAQ: using nudges to encourage handwashing with soap. Washington DC: Global Handwashing Partnership; 2017 (https://globalhandwashing.org/ resources/faq-using-nudges-to-encourage-handwashing-with-soap/).
- Educational materials for schools with tips and practical examples for integrating skills-based education into lessons:
 - Postma L, Getkate R, van Wijk C. Life skills-based hygiene education in school sanitation: a guidance document on concepts, development and experiences with life skills-based lygiene education in school sanitation and and hygiene education programmes. Delft: IRC International Water and Sanitation Centre; 2004 (https://www.ircwash.org/sites/default/ files/Postma-2004-Lifeskills.pdf);
 - The joy of learning: participatory lesson plans on hygiene, sanitation, water, health and the environment. Delft: IRC International Water and Sanitation Centre; 2005 (https://www. ircwash.org/sites/default/files/Khanal-2005-Joy.pdf).
- A health education resource available in 22 languages with lessons and useful materials for different age groups, focusing on oral hygiene, hand hygiene and other topics related to infection prevention. E-bug [website]. London: Public Health England; 2019 (www.e-bug.eu).

Practical templates and tips

See the collection of printable practical templates in Annex 1, including:

J. Child-friendly teaching plan

See also the collection of practical tips for pupils in Annex 2.

Explore other factsheets related to this topic:



Factsheet 6. School-based maintenance



Factsheet 9. WASH topics neglected in health education



Factsheet 12. School and community working together



Chapter 3 checklist

This section provides you with questions to check the status of WASH services and examine whether your school needs to take action to improve their provision and/or accessibility. Questions are not meant to provide a comprehensive assessment but facilitate a critical analysis by school staff to identify improvements that can be undertaken by the school itself or for which the help of the authorities needs to be sought. If improvement needs are discovered during the check, you might want to consider these in the development of an improvement plan. For planning, go back to the relevant factsheet (indicated by the checklist question headings) to find tips and possible activities. More suggestions about how to conduct the checks are described in Factsheet 14.

How is adequate access to WASH ensured in your school?	This is in place	We need to improve this
Factsheet 8. Hand hygiene education		
Is hygiene education part of the school curriculum?		
Have the teachers involved received refresher training on hygiene or health education within the last 2–3 years?		
Is there a policy to ensure systematic promotion of hand hygiene?		
If the school has a health-promoting policy, is hand hygiene considered in it?		
Are teachers asked to set positive examples and remind pupils about hand hygiene practices?		
Are fixed appointments or group handwashing activities organized for pupils to create the habit of handwashing at critical times?		
Is skills-based education used to teach correct hand hygiene practices?		
Have you asked pupils whether schools rules and schedules allow them to practise proper hand hygiene at critical times?		
Factsheet 9. WASH topics neglected in hygiene education		
Is WASH or health education part of the school curriculum?		
Do you cover all important topics within hygiene education at your school?		
Importance of hydration		
Importance of regular voiding		
Proper toilet use		
Menstrual hygiene management		
Are the content and teaching methods for hygiene education at your school age-appropriate?		
Have you asked pupils whether they know when, why and how we should wash our hands?		

How is adequate access to WASH ensured in your school?	This is in place	We need to improve this
Factsheet 10. Skills-based education and nudging		
Do teachers make use of group work and playful activities to strengthen teaching about WASH-related topics?		
Do you use child-friendly teaching methods adjusted to the ages of different groups of children?		
Do children have time to practise what they learn in class about healthy WASH behaviours?		
Do the school rules support healthy practices and lifestyle?		
Are the following educational aspects supported by school policies and rules?		
Regular drinking-water intake		
 Hand hygiene at critical times 		
 Regular use of the toilets for urination and defecation 		
Other:		
Does your school use any nudges that guide children to healthy behaviour decisions?		
Do you have stickers or signs giving hints or showing the proper use of soap and water for handwashing at eye level in the toilet facilities?		
Do you have joyful graffiti and colours to decorate the toilet facility walls to improve children's perceptions and reduce avoidance?		
Are important WASH facilities (e.g. a drinking-water fountain or soap dispenser) at your school highlighted with bright colours to catch children's attention?		


Chapter 4. Enlisting others to help

While a WASH champion is important to initiate and motivate improvements in schools, you should not forget that the whole community can support you. This chapter will guide you through the importance of engaging pupils, parents and the entire community, giving tips on how to ensure consistent education and get support to improve and sustain good WASH conditions at your school.

Factsheet 11. Engaging schoolchildren

Do you think pupils like their toilets?

In many countries, a significant number of pupils avoid using the toilets during the school day (18).



Key members of the school community

School managers, teachers, pupils and school health staff.

Major benefits of taking action

- Pupils become aware of the importance of WASH and practise healthy habits (14, 81).
- Pupils learn about their role in contributing to clean and accessible WASH in schools.
- Pupils gain a sense of ownership of the school toilets and reduce vandalism (14, 40, 82).

Background

Involving pupils in assessing and improving WASH in schools can help with detecting hidden issues, which might not be acknowledged by school staff, and finding solutions. The perceptions of pupils can differ substantially from that of teachers and school managers (10, 83). In schools where toilets may be considered adequate, pupils may in fact be unhappy because of bad smells, poor cleanliness and/or lack of privacy (10). You can improve pupils' perceptions and use of WASH facilities by engaging them in improvements and establishing communication between teachers and students of any grade on the topic of WASH (40, 82).

Why it matters

Pupils may hold their need to go to the toilet for up to eight hours, or even longer, because they do not want to visit the toilets at school. This affects their concentration in class and their health, sometimes leading to discomfort and even pain because of postponing. Avoidance may have even greater consequences if it reduces pupils' water intake or hinders handwashing practice. Some pupils may avoid toilets also because others use the facilities as a place of transgression, where bullying and vandalism are observed (14, 19, 40). Engaging pupils in improving their school toilets, and learning about the importance of privacy and respect as well as WASH, can help to improve the situation(14, 40, 82). Finally, pupils can contribute to improving WASH and engage their parents for the benefit of the school and the wider community (26).

How to engage pupils

Promote **skills-based hygiene and healthy practices**. Include WASH topics and activities in the school curriculum. Activity-based and joyful group work, songs and games are examples of efficient participatory learning methods.

Organize activities **outside the classroom**. Create a WASH day, a WASH event after school or a WASH contest over a period of time. Engage teachers, school nurses and health workers in organizing it. You can promote the school's accomplishments and provide information about current practices at school. Pupils can have a role not only as audience but also as speakers and organizers. They could have the chance to demonstrate practices they have learned, for example, through games and performances. You can profit from international awareness days such as World Health Day (7 April), Global Handwashing Day (15 October), World Toilet Day (19 November) and Menstrual Hygiene Day (28 May).

Promote **transparent and honest communication** with pupils and parents. Problems with WASH accessibility and certain health conditions related to the voiding system or menstruation may not be communicated easily. Communicate clearly and discuss rules for visiting the WASH facilities, establishing communication on WASH-related aspects and health conditions, and beyond *(33)*. This will help teachers' work and supports the promotion of healthy behaviours. Build and maintain trust through communication and by addressing pupils' requests in a timely manner.

How pupils can help

They can contribute to **operation and maintenance**. Pupils, as main users, need to feel ownership and keep their facilities clean. You can also engage pupils in small tasks through school health/ WASH clubs or rotating duties by classroom (*26*). They could supervise the toilets during or after peak periods and report back on issues. Children could be involved in replacing consumables or cleaning small areas, but they should not be exposed to disease risk. These tasks may be more appropriate for older children and adolescents and should not be unfairly distributed between different groups. They should also and not be used as punishment. Communication with and support by parents should be also ensured.

Improve the **design** and make posters. Pupils can be involved in the design of the toilet facilities by choosing colours and finishes (wherever possible) or simply helping with decoration of cubicles and creation of educational posters with artwork. See the practical tips for pupils (Annex 2) to find example messages to include in the posters and educational materials.

Rate the status of the WASH facilities and find solutions. You might discover a new perspective and you will empower children. Pupils will feel heard, while learning about WASH, and you will keep track of the school situation. Use of existing groups and delegations of students promotes their engagement in the improvement projects. Use the occasion to ask girls about their perceptions to improve the school's menstrual hygiene management provision. You can also engage pupils to map the WASH facilities, looking for access barriers and solution for pupils with disabilities. In the longer term, make a box to collect issues and suggestions.

Case study 6. Improving cleanliness and student ownership of school toilets in Germany

Elisabeth-Seibert-Gesamtschule in Bonn. Germany, organized a roundtable discussion with the school management, students and parent representatives to discuss problems of vandalism in the school toilets. The discussion resulted in the launch of a competition led by students for students, called "Make our toilets great again", to collect suggestions for improving the school toilets. After winning the support of the municipal authority's department of culture, a cultural state programme (Kultur und Schule) and the parent-teacher association, a project was initiated - in collaboration with an architect to realize the winning designs in the school toilets (Fig. 7).

Fig. 7. Pupils implementing the new design of the toilets in the Elisabeth-Seibert-Gesamtschule



Source: Schmelzeisen (84).

Useful resources

- A resource to help raise awareness and engage pupils and the whole school community, including tools and activities: Toilet tactics kit: healthy bladder and bowel habits in schools [website]. Surrey Hills: Continence Foundation of Australia; 2019 (https://www.continence.org. au/pages/healthy-bladder-and-bowel-habits-in-schools.html).
- A manual for teachers to help pupils assess WASH in schools: Module 3. In: WASH in schools monitoring package. New York: United Nations Children's Fund; 2011 (http://www.unicef.org/wash/schools/files/wash_in_schools_monitoringpackage_.pdf).
- Tips for activities to teach and engage pupils: Basic guide for school directors, teachers, students, parents and administrators: WASH-friendly schools. Washington DC: United States Agency for International Development; 2010 (https://www.ircwash.org/sites/default/files/USAIDHIP-2010-Basic.pdf).
- Colourful guidance materials for students and teachers to engage in activities and initiatives to promote WASH in the school and among the community: Abel M, Deverell A. Arts for advocacy. Melbourne: Live & Learn Environmental Education; 2017. Includes:
 - a student guide (https://livelearn.org/assets/media/docs/resources/Arts_for_Advocacy_ StudentGuide.pdf);
 - and a teacher guide (https://livelearn.org/assets/media/docs/resources/Arts_for_ Advocacy_TeacherGuide.pdf).

Practical tips

See the collection of practical tips for pupils in Annex 2.

Explore other factsheets related to this topic:



Factsheet 2. Sanitation



Factsheet 10. Skills-based education and nudging



Factsheet 13. Health-promoting and child-friendly school policies and rules

Factsheet 12. School and community working together

Can WASH in schools affect people beyond the school users?

It has been shown that schools that reach out to family members and the community not only improve pupils' and teachers' health and well-being but promote a healthier lifestyle for everyone.



Key members of the school community

School managers, teachers, school health staff, parents and community members

Major benefits of taking action

- Parents' engagement helps to ensure consistent learning and support positive behaviour change among pupils (81).
- It can lead to improved communication between teachers and parents.
- The school community can support sustaining adequate WASH services in schools (61) and may contribute money, labour or materials for operation and maintenance, if needed (26).

Background

Schools do not operate as separate entities: education takes place not only in schools but even more within families, communities and society. It is achieved most efficiently and effectively when parents, schools and the community collaborate (*34, 36*).

A school building often also serves the community as a meeting space and for sports activities. If school resources are insufficient to improve the WASH situation for all users, the whole community could become engaged.

Why it matters

Parents, as part of the school community, are important for successful implementation of WASH as they may provide support in planning hardware improvements and in education by helping to reinforce and sustain behaviour changes (81, 85). Mobilizing parents can improve accountability, behaviour change and a positive reputation for the school in the community (85). Parents act as a mean of communication between pupils and school staff. Pupils communicate what they have learned at school, and this also fosters behaviour change at home (81).

How to engage communities in WASH promotion

Inform parents about WASH-related healthy practices and school policies. You can organize a meeting with the parent-teacher association or invite parents' representatives. This can be led by the school health staff or organized with the help of the local authorities. Informing parents about hygiene and healthy practices is useful to ensure long-term and efficient uptake of education interventions done at school and behaviour change. Inform parents about the new school policy and rules related to WASH, and ask them to help with implementation.

Invite parents and volunteers to **share expertise and time**. Community members representing specific professions in the WASH sector (such as water providers, cleaning staff, staff working on water safety or public health officers) can be invited to the school to talk to students about their work and its importance for a healthy life. Other volunteers could support with small repairs and construction or provision of consumables. They could also help by supporting fund mobilization or volunteering in shifts to contribute physical work or supervision, or even by advocating for increased WASH resources from local officials (26).

Organize events for the **entire school community**. Create a WASH day, a WASH event after school or a WASH contest over a period of time. Engage teachers, school nurses and health workers in organizing it. You can promote the school's accomplishments and provide information about current practices and policies at school, as well as raising funds. You can profit from international awareness days such as World Health Day (7 April), Global Handwashing Day (15 October), World Toilet Day (19 November) and Menstrual Hygiene Day (28 May).

Promote **transparent and honest communication** with pupils and parents. Parents can facilitate communication and link teaching at school to the home. Adressing WASH in parent–teacher meetings is a good way to start. Parents may know more about problems with WASH accessibility and certain health conditions related to the voiding system or menstruation that may not be communicated easily by children. Establishing communication on WASH-related aspects and health conditions, and beyond, may help teachers' work and support the promotion of healthy behaviours. Invite parents' representatives to assessments of WASH conditions in school. They could volunteer to take up duties and help you get started.

Seek help with **fund mobilization and income-generating activities** for the school. Parents can advocate locally for improvements or engage in them actively (26). For example, income from sales of snacks or treats could be used for WASH improvements. Soap-making could be promoted at school for income generation and for use in school WASH programmes. Locally sourced ingredients can be used to make soap.

Support the establishment of a **parents' WASH committee.** Community support determines how long improvements last (61, 62). Schools with parent–teacher associations or parent councils can create a WASH committee to help organize support (26). Invite the committee to contribute to internal school meetings and planning, an annual check of WASH conditions, management of activities and fund mobilization.

Useful resources

- Strategies for engaging parents in school health: Parent engagement: strategies for involving parents in school health. Atlanta, GA: Centers for Disease Control and Prevention; 2012 (https://www.cdc.gov/healthyyouth/protective/pdf/parent_engagement_strategies.pdf).
- A resource to help raise awareness and engage pupils and the whole school community, including tools and activities: Toilet tactics kit: healthy bladder and bowel habits in schools [website]. Surrey Hills: Continence Foundation of Australia; 2019 (https://www.continence.org. au/pages/healthy-bladder-and-bowel-habits-in-schools.html).
- More ideas for pupil and parent participation:
 - Basic guide for school directors, teachers, students, parents and administrators: WASHfriendly schools. Washington DC: United States Agency for International Development; 2010 (https://www.ircwash.org/sites/default/files/USAIDHIP-2010-Basic.pdf);
 - Training guide for parents, teachers and student leaders: WASH-friendly schools: Washington DC: United States Agency for International Development; 2010 (https://www.ircwash.org/sites/default/files/USAIDHIP-2010-Training.pdf).

Explore other factsheets related to this topic:



Factsheet 6. School-based maintenance

Factsheet 7. Costing and budgeting for WASH



Factsheet 11. Engaging schoolchildren



Chapter 4 checklist

This section provides you with questions to check the status of WASH services and examine whether your school needs to take action to improve their provision and/or accessibility. Questions are not meant to provide a comprehensive assessment but facilitate a critical analysis by school staff to identify improvements that can be undertaken by the school itself or for which the help of the authorities needs to be sought. If improvement needs are discovered during the check, you might want to consider these in the development of an improvement plan. For planning, go back to the relevant factsheet (indicated by the checklist question headings) to find tips and possible activities. More suggestions about how to conduct the checks are described in Factsheet 14.

How is adequate access to WASH ensured in your school?	This is in place	We need to improve this
Factsheet 11. Engaging schoolchildren		
Are pupils engaged in WASH-related activities?		
Do pupils have a role in the promotion of WASH or operation and maintenance?		
Are roles assigned equally?		
Do you avoid using WASH tasks for punishments?		
Do you have a student health/WASH club?		
Have you asked pupils whether they know who they can turn to if they have a problem with WASH facilities or their body?		
Factsheet 12. School and community working together		
Do you inform parents about WASH policies or rules and practices at school?		
Are parents involved in children's health education?		
Do parents have a role in maintaining and promoting WASH in your school?		
Do parents have the opportunity to talk to teachers and school staff about WASH?		
Do you have a parent-teacher association?		
• Does it include a WASH/health or environment committee?		



Chapter 5. What to do now

It is time to take action. This chapter explains how to do this and guides you through assessment of where your school stands and development of school rules/ policies and an improvement plan. The final factsheet addresses how the information in each factsheet can be used to support your activities to improve WASH accessibility and practices in your school and promote health.

Factsheet 13. Health-promoting and child-friendly school policies and rules

What is the purpose of writing a WASH-supportive school policy?

This ensures the success of the improvement efforts – meeting pupil and staff needs and ensuring long-lasting benefits from the improvements to deliver health and education opportunities for all.

Key members of the school community All.

Major benefits of taking action

- A WASH-supporting school policy demonstrates commitment to equity, nondiscrimination, gender issues and human rights (36, 37).
- Formalized WASH-supporting rules contribute to positive behaviour change for example, with hydration practices – and improve pupils' perceptions of the school (82, 86).
- A health-promoting school policy can integrate diverse topics besides WASH, including but not limited to nutrition and physical activity, for example, to tackle and reduce the risk of childhood obesity.

Background

A health-promoting policy for the school – a document setting goals and procedures to guide present and future decisions – that reflects pupils' needs is important to facilitate and strengthen the benefits of good WASH services. Pupils who are dehydrated and avoid toilets face challenges with trying to keep focused and excel in class (2, 10). This can be aggravated when rules used in class prioritize order, restricting access to drinking-water and toilets, or when rules are not clearly communicated to the children who need to interpret them (33).

Why it matters

Schoolchildren should normally drink sufficient water (1–2 litres per day) and visit the toilet regularly (four to seven times per day) (87). It is important to allow children to visit the WASH facilities to ensure healthy voiding and other healthy practices, especially when the school day is 6–8 hours long. Sufficient time to visit the toilets allows children to take their time to urinate or defecate without stressing their organs and to wash their hands properly, and allows girls to manage their period hygienically. Children who show proper hydration practices have better results in tests, concentrate in class and are not observed directly increasing their visits to the toilets (10, 12, 19).

Specific health conditions or diet may increase the need to visit the toilet. These include, for example, children – especially at younger ages – with overactive bladders, or those drinking caffeinated, carbonated or sweetened beverages (75, 88). Teachers who are aware of children's needs and allow them to practise healthy behaviours contribute to their health and well-being, helping them avoid discomfort or embarrassment.

How to create a child-friendly WASH policy

Put pen to paper: create a written WASH-supportive school policy. Establish a set of objectives, rules and practices on how to behave and what is accepted or not in the school with regard to WASH accessibility and health promotion (Fig. 8). Writing such a policy can be a useful starting-

point for establishing honest communication around WASH issues in school and initiating improvements (6, 37). Discuss the following question: Why do we need to develop a specific policy on WASH in our school? Try to address different dimensions of WASH, from hand hygiene to hydration, from toilet visits to cleanliness of facilities.

Engage parents, pupils and all staff. Policies are more effective if actively acknowledged and endorsed by parents, teachers, the school management committee and the community (34, 36). All key players - especially pupils should be involved in developing the policy, to make sure that it addresses the needs of all children, including religious and cultural aspects if children at school come from different backgrounds. Also, give pupils a role in implementation. It will help them feel that they are participating and responsible (6). Finally, don't forget non-teaching staff, including maintenance and cleaning staff, who conduct hard work while often out of sight (6). Inviting them to the table will give them recognition and respect.



- Rationale why this policy is being created
- Objectives what we want to achieve [Possible objectives include well-being, equality, participation and accessibility]
- Tasks and activities what we will do
- ✓ Timelines and resources when and how we will do it
- Source: Simovska et al. (6) Welsh Government (37).

Revise the policy. Pupils grow up and cultures evolve. Make sure you address WASH issues in an up-to-date manner, reflecting the needs of new generations or new cultures in the school community. Set a date for the next update from the first version of your policy.

Spread the good news and **make a plan**. Take the occasion of a WASH or a health event to inform parents about the new WASH-supporting policy. Make the document freely available online or hang it on the wall, and distribute it to the entire school community (*34*). Share it with other schools to let them participate or with the education authorities to seek their endorsement and support. Then, move on to further action developing a practical implementation and improvement plan (6).

Child-friendly policy objectives and activities

Possible objectives of a WASH school policy include improving and promoting well-being, equality, dignity, participation and accessibility. To achieve these, the school team will need to identify related acitvities that will be acceptable for pupils and staff and that cultivate their health and education.

Promote accessibility by allowing pupils to **drink water** every time they are thirsty. You may want to discourage the use of soft drinks. At the same time, teachers and pupils should know about the importance of proper hydration. The availability of safe drinking-water at school at all times should greatly facilitate this.

Promote accessibility by letting pupils **visit the toilets** whenever they need to. All teachers at school should follow the same rules and allow children to use the toilet during lessons. If pupils drink soft drinks during break times, they may need to visit the toilet in the hour afterwards. Some pupils feel discomfort using the toilets during breaks when they are crowded; others may feel uncomfortable asking for permission to use the toilets (*19, 33*). Communicate and discuss the rules with pupils. When working with older children and adolescents, you can set a rule where pupils put a piece of paper with their name on your desk to avoid them asking in front of the class and interrupting the lesson and let one leave at a time. With younger children, who might not yet know when it is appropriate to leave the class, other rules may be preferred.

Promote well-being by choosing options that facilitate teaching while **fostering health**. Discuss the matter honestly with teachers and pupils in your school: they may suggest good ways to discourage misuse of an open toilet visit rule and to favour good hygiene practices. For example, healthy pupils can be asked to postpone their toilet visit for five minutes to discourage scheduled appointments at the toilets, or to set a task prior to visiting the toilets such as using a hand sanitizer before and after use of the toilet (89). Pupils with no need will think twice before asking to visit the facilities. It is also important that strategies and rules are clearly comminucated with children (33). Try to be attentive of children's requests and the need to maintain toilet habits consistent with health and well-being, respecting pupils' dignity.

Promote equality by encouraging teachers to recognize issues and **adapt their rules** to pupils with particular needs. Children and teenagers should be enabled to communicate possible issues with menstruation or with bowel and bladder problems to a reference person or the teacher.

Promote well-being and dignity by giving pupils **sufficient time** to use the toilets. Provide regular and frequent breaks (every 45–60 minutes). Check whether toilets are crowded during the breaks: you may need shifts or longer breaks to allow everyone to use the toilet. If a pupil stays longer in the toilets, address this in private to avoid unnecessary discomfort in the case of health conditions. Girls who are menstruating may need more time than usual.

Promote accessibility and well-being by ensuring a schedule for **maintenance and supervision** of WASH facilities. This will ensure hygienic and pleasant toilets, reducing avoidance and antisocial behaviours. Plan the management of supervision and student circulation in line with the daily schedule.

Promote participation by establishing a child-friendly procedure to **engage all** in improving WASH and reporting issues. Make sure that comments and complaints from staff and pupils reach you and that you address them promptly.



Useful resources

- A downloadable template for your school policy for school toilets: Sample school toilet policy. Bristol: ERIC; 2018 (https://www.eric.org.uk/Handlers/Download.ashx?IDMF=cf0cf767-77b8-4d3c-be74-24202728e197).
- A tool for health-promoting schools to support the development of school policies addressing health aspects beyond WASH: Simovska V, Dadaczynski K, Viig N-G, Tjomsland HE, Bowker S, Woynarowska B et al. HEPS tool for schools: a guide for school policy development on healthy eating and physical activity. Woerden: Netherlands Institute for Health Promotion; 2010 (https://www.schoolsforhealth.org/sites/default/files/editor/Teachers%20resources/heps-toolfor-schools-english.pdf).
- A manual for schools to become health-promoting through development of a whole-of-school policy addressing WASH, as well as physical activity and nutrition, in English and 12 other languages: Safarjan E, Buijs G, de Ruiter S. SHE online school manual: 5 steps to a health promoting school. Utrecht: Schools for Health in Europe; 2013 (https://www.schoolsforhealth.org/resources/materials-and-tools/how-be-health-promoting-school).
- A model charter for a health-promoting school enlisting core components of health-promoting school policies: Health promoting schools: a framework for action. Manila: WHO Regional Office for the Western Pacific; 2009 (http://www.wpro.who.int/health_promotion/documents/docs/ HPS_framework_for_action.pdf).

Practical templates

See the collection of printable practical templates in Annex 1, including:

I. Improvement plan

Explore other factsheets related to this topic:



Factsheet 1. Drinking-water



Factsheet 5. Special considerations to ensure access for all



Factsheet 2. Sanitation



Factsheet 15. Keeping it right with an improvement plan



Factsheet 3. Hygiene and the clean environment



Factsheet 4. Menstrual hygiene management



Factsheet 14. Using the WASH checklists

How to start improving WASH in your school

An important step is assessing where you stand currently.

Uses and benefits of using the checklists



- the status of the school's WASH facilities (toilets, handwashing stations, drinking water sources, etc.);
- the level and efficiency of operation and maintenance of the facilities;
- pupils' knowledge about key handwashing practices and whether the level of knowledge is improving;
- pupils' hygiene and sanitation practices;
- the level of accessibility for children with disabilities;
- discrepancies in perception among different users and school staff;
- particular challenges faced by girls or boys.

The results can also be used for many other purposes, such as:

- raising awareness among school staff about issues faced by children;
 - raising awareness among children about WASH and how to make the best use of it;
 - understanding whether education measures are sufficient for children to practise healthy behaviours;
 - deciding what changes and improvements could be made by the school community;
 - initiating a discussion with parents and children on improving WASH in the school together;
- supporting school requests to the authorities seeking support for the improvement of WASH infrastructure;
- tracking the progress and success of improvement plans and identifying unexpected issues.



Assessing WASH accessibility in your school

Walk through the school facilities and then sit down to **answer the checklist questions**. Each chapter of this publication includes a checklist containing questions to help you assess the status of WASH services and whether your school needs to take actions to improve provision and/or accessibility. Questions are not meant to provide a comprehensive assessment but facilitate a critical analysis by school staff to identify improvements that can be undertaken by the school itself or for which the help of the authorities needs to be sought. The checklists will not inform you about some important technical aspects, such as the current quality of the drinking-water in the school. To find out more about such aspects, you may want to consult with the authorites. More comprehensive tools may be available for monitoring of schools from education or health authorities (90).

Explore the relevant chapters. Before answering the questions in the checklists, it will be helpful to read the related factsheet, highlighted in the section titles. You can also conduct checks related to different aspects of WASH at different times.

Identify improvement needs. Checklist questions may be answered with "This is in place" or "We need to improve this".

After you have filled in the checklists, the checked boxes in the right-hand column "We need to improve this" give you a list of suggestions for items that you might include in your improvement plan. For each item, you need to identify actions suited to the resources available and the particularities of your school. Guidance on remedial action can be found in the related factsheets. Practical templates are also provided in Annex 1 to facilitate establishment of an improvement plan and support implementation at the school level. Bear in mind that you cannot solve everything at the same time. Factsheet 15 gives information on how to prioritize and improve the situation in your school one step at a time.

Engage others in the work. You can delegate someone from the school staff or engage a group of children or even a class to assess the WASH facilities. Having questions answered by different members of the school community is useful to gather different perceptions. It is also important to engage people of different genders. Comparing the answers collected from different stakeholders provides a chance to initiate a joint discussion and identify priorities. In particular, engaging pupils could improve communication between pupils and responsible staff and provide a learning opportunity. Pupils' perspectives are a valuable source of information on actual accessibility and acceptability of WASH in schools – an important precondition of ensuring healthy habits.

Useful resources

If you would like to know more about the requirements for WASH in schools you can ask the local education or health authorities for national or subnational regulations. You can also check the WHO/UNICEF water, sanitation and hygiene standards for schools in low-cost settings (4) and see whether ongoing programmes or national tools for this kind of monitoring are available. If you would like to develop a different kind of checklist tailored to your school and/or a specific questionnaire for certain user groups, see the tools listed below.

- A teacher's guide for surveys and assessment, observation checklist and questionnaire: WASH in schools monitoring package. New York: United Nations Children's Fund; 2011 (http://www. unicef.org/wash/schools/files/wash_in_schools_monitoringpackage_.pdf).
- An inspection sheet and a school toilet questionnaire: School toilets: good practice guidance for schools in Wales. Cardiff: Welsh Government; 2012 (https://dera.ioe.ac.uk/13643/7/12012 4schooltoiletsen_Redacted.pdf).

- An inspection sheet for pupils: WASH in schools operation and maintenance manual. Bonn: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ); 2017 (https://programme. worldwaterweek.org/Content/ProposalResources/PDF/2017/pdf-2017-6723-10-04%20 GIZ%20-%20DPP%200&M%20Guide.pdf).
- An evaluation grid for assessing a school's WASH-friendly status; a school report card and other assessment tools: Basic guide for school directors, teachers, students, parents and administrators: WASH-friendly schools. Washington DC: United States Agency for International Development; 2010 (https://www.ircwash.org/sites/default/files/USAIDHIP-2010-Basic.pdf).
- Tools covering health promotion in general, including aspects like physical activity and nutrition, in English and 12 other languages: Safarjan E, Buijs G, de Ruiter S. SHE online school manual: 5 steps to a health promoting school. Utrecht: Schools for Health in Europe; 2013 (https://www.schoolsforhealth.org/resources/materials-and-tools/how-be-health-promoting-school).
- A tool to assess progress towards becoming a health-promoting school: Safarjan E, Buijs G, de Ruiter S. SHE rapid assessment tool: a companion document for the SHE online school manual. Utrecht: Schools for Health in Europe; 2013 (https://www.schoolsforhealth.org/sites/default/files/editor/How%20to%20be%20a%20health%20promoting%20school/english-rapid-assessment-tool.pdf).



Factsheet 15. Keeping it right with an improvement plan

Can an improvement plan have effects beyond the status of WASH facilities?

The process of creating a plan to improve WASH will enable you to start promoting health in your school. It can also strengthen collaborations with partners within and outside the school.



Major benefits of taking action

- An improvement plan will not only help you achieve the required improvementgs but will also help you maintain the good status and accessibility of WASH services in your school.
- Developing an improvement plan can be an occasion for establishing an open dialogue between users and the staff involved in ensuring WASH, and fostering collaboration.
- Collaboration between students and school staff in health-promoting activities fosters commitment to participation and ownership, and facilitates success (86).

What would you like to see improved in one year? In three years? How can you achieve it?

To achieve improvement, you will need to plan what to do and how to do it. Development of a simple WASH improvement plan will help you to find appropriate answers and solutions. You could consider the following steps, in line with the main chapters in this publication (Fig. 9).

All you need to know about WASH in schools	Make sure you know what is needed and what can go wrong with WASH in your school with factsheets 1–5.
How to maintain adequate WASH provision for the long term	Check whether you have everything in place to improve and maintain WASH in the school with factsheets 6–7.
Including WASH in the school curriculum	Verify that health education for attaining life skills is provided in your school, including practical education about WASH, with factsheets 8–10.
Enlisting others to help	Take the right steps to keep pupils and parents informed about the importance of WASH, engaging them in keeping WASH in a good state and practising healthy behaviours with factsheets 11–12.
What to do now	Take action: have a look at the status of WASH in your school and adapt school policies and rules to be WASH-supportive and child-friendly. Develop a plan to improve the accessibility and acceptability of WASH in your school and then become a health-promoting school with factsheets 13–15.
Practical templates	Make concrete plans about what to do, how, when and with whom; take notes; monitor progress; and officialize duties with the collection of ready-to-use templates in Annex 1.

Fig. 9. Planning steps for WASH improvements

How to put your improvement plan together

Create a team to develop ideas and share roles. Establish your WASH concept for the school with teachers and other relevant staff to support the envisaged changes and facilitate ownership and engagement. It is important to distribute clear responsibilities among the staff and officialize these, to make staff accountable for their commitments (64, 91). See the **•**operation and maintenance roles map (Template C) provided in the practical templates in Annex 1 for suggestions on how you can distribute the roles among staff. Remind them of the importance of their involvement for the success of WASH in your school.

Check the facilities first. Do you know what your school needs? Take a break and walk through the school during your workday. This will allow you to see how accessible and friendly WASH appears to you, your staff and your pupils. The checklists at the end of each chapter will provide you with a list of questions on some of the key aspects to look at to ensure access to WASH. Once completed, these should help you identify the aspects you need to address in your school. Without checking first what your needs are, you may risk wasting resources or taking action on minor issues and missing more serious priorities.

Consider the needs of all. Engage all staff (including janitors, school nurses, teachers and administrative staff) as well as users and their families (pupils and parent representatives) reflecting different social and cultural groups (64). Seek support from representatives of girls and women in your school, members or representatives of the LGBTQI community and users with particular needs such as disabilities or medical conditions. This will allow you to create equal opportunities for high-quality education and health. If needed, seek the support of experts from education and health authorities to help you identify the best measures to improve WASH in your school for all.

Make it realistic. Due to limited economical and management means in schools, improvements should be planned in a progressive manner, one step at a time (4, 92). Deadlines are important to implement routine procedures as well as one-off improvements. Plan only what is feasible within the time frame, reflecting the human and financial resources available. See the **•**costing matrix (Template G) provided in the practical templates in Annex 1 to help you identify the financial needs necessary to ensure WASH services. A realistic plan will encourage improved performance and motivate implementers, leading to success. A plan that is too difficult will debilitate and discourage participants; one that is too easy and not meaningful could lead to complacency. See the improvement plan (Template I) provided in the practical templates in Annex 1 to help you with this process.

Prioritize actions. Identify helps and hindrances, and prioritize interventions on the basis of the needs expressed by members of the school community and the available resources. Note that the importance of actions for the health of the school staff and pupils should also play a role: availability of soap and safe drinking-water at all times, for example, has a huge impact on health. See the ♦prioritization chart and ♦improvement plan (Templates H and I) provided in the practical templates in Annex 1 to help you guide and record the outcomes of the discussion.

Verify whether **existing programmes and budgets** can help you with your plan and discuss with responsible staff how WASH can be integrated *(64)*. Avoid duplicating efforts. Talk to the school staff; you may have already extracurricular activities or subjects covering health topics such as physical activity, oral hygiene and nutrition. WASH is not a separate topic: it is an integral part of a healthy lifestyle and contributes to the prevention of noncommunicable diseases such as obesity and mental well-being. Join forces and integrate WASH in an existing plan or ongoing activities.

Feeling overwhelmed? How to find the quick wins

- Challenge yourself to start with a small improvement. If you cannot do more, you have already created change in your school.
- Start with education: for the first step, try to dedicate 15 minutes of your work with a class to a practical lesson about WASH and health as soon as you find the occasion.
- Take time to understand the topic and engage the team.
- Engage your colleagues to share tasks and support each other.

Go beyond WASH: establish a health-promoting school

Address health and well-being simultaneously through the six healthpromotion components to become a health-promoting school and engage with many actors (Fig. 10) (96). This is called the "whole-school approach": each component reinforces the effect of the others and allow you to succeed (97). Learn more about this through the guidance of the School for Health in Europe and Health-promoting school approach (Box 1) or the FRESH approach (Focusing Resources on Effective School Health) (6, 97, 98).



Fig. 10. Components of a health-promoting school and the whole-school approach

Source: adapted from: IRC (79); Postma et al. (43).

Box 1. Health-promoting schools

A health-promoting school is one that "constantly strengthens its capacity as a healthy setting for living, learning and working" (93). This means that the school management actively engages with health and education authorities, as well as the school community – teachers, students, parents and the broader community (including local organizations and community leaders) – in efforts to foster the health and healthy behaviours of the school users with all measures at its disposal (94). The link with WASH is that health promotion is "any activity undertaken to improve and/or protect the health of everyone in the school community" (95). Health promotion in schools includes health education and other efforts to create a healthy environment, including school policies and curricular or extracurricular activities and maintenance of the environment, among others (96).

Keep going. As with WASH, the process to become and remain a health-promoting school is cyclic and should be renewed every school year or every second year. Check the useful materials at the end of this factsheet for more information on the steps of the health-promoting school process and the whole-school approach.

Create a plan for the long term

Be a champion and **lead by example**. You, as a manager or member of school staff should actively support the WASH improvement plan if you want it to last and be successful. You have an important role to ensure changes in working practices, good management of resources and active promotion of a WASH-friendly environment in the school. You can be a leader to drive improvement and ensure implementation. You can be an example for other teachers and pupils, promoting and practising healthy habits, such as drinking sufficient water and washing hands. You can also engage pupils and staff in creating a contest and raising attention about the topic.

Establish an **operation and maintenance (O&M) routine** and periodically check that it is conducted properly. A plan that aims to establish an O&M routine with recurrent deadlines will ensure that improvements and efforts last in the long term. See the \bullet operation and maintenance planning chart (Template B) provided in the practical templates in Annex 1 for suggestions for developing or updating O&M at your school. Monitoring and supervision will ensure the implementation and identification of recurrent issues (64). All you need is a limited set of indicators that can be observed easily by conducting checks regularly and not leaving issues pending. Keeping activities monitored will help to save time and costs. See examples of recording sheets in the \bullet routine functionality check, the \bullet routine consumables refill and the \bullet routine cleaning record sheet (Templates D, E and F) provided in the practical templates in Annex 1.

Integrate WASH in education and the school environment. This is an aspect you should not forget when making the plan. It will not need significant financial resources, but it will require commitment from school staff. See the practical tips for pupils (Annex 2) you may like to consider for inclusion in your teaching, as well as the *•*child-friendly teaching plan (Template J) provided in the practical templates in Annex 1 to facilitate discussion with staff and identify practised or new skills-based activities. Explore WASH-relevant rules and policies in place that could help the plan or may need to be modified.

Engage the community. The community can help you identify problems and discuss the best solutions. Engaging parents, as well as technical experts and leaders, can help you develop your plan at its best, collect additional funding and get support with implementation. This will help you prioritize actions and make your improvements last.

Evaluate your plan. Check the progress of your improvement plan and keep track of the O&M activities to monitor any changes. You can make a second assessment with the checklists at the end of each chapter. Verify the updated state of WASH in your school and see whether any new issues have arisen or whether the remaining issues are similar. Organize recurrent meetings with the relevant staff and user representatives to discuss feasibility and priorities further.

Useful resources

- An action planner with practical lists and templates to get started with working on planning and taking action towards improving health promotion at school, including for WASH, in English and 12 other languages: Safarjan E, Buijs G, de Ruiter S. School action planner: a companion document for the SHE online school manual. Utrecht: Schools for Health in Europe; 2013 (https://www.schoolsforhealth.org/resources/materials-and-tools/how-be-health-promoting-school).
- A collection of tools to make your school a health promoting school: Local action: creating health promoting schools. Geneva: World Health Organization; 2000 (https://apps.who.int/iris/ handle/10665/66576).

- A practical approach to step-by-step improvement, in English and Russian: Field guide: the three star approach for WASH in schools. New York: United Nations Children's Fund; 2013 (English: https://www.unicef.org/wash/schools/files/UNICEF_Field_Guide-3_Star-Guide.pdf; Russian: https://www.unicef.org/kyrgyzstan/media/1636/file/UNICEF_Field_Guide-3_Star-Guide%20[rus].pdf%20.pdf).
- Plans and a checklist: School WASH facilities: operations and maintenance guidelines. Washington DC: United States Agency for International Development; 2015 (http://www. washplus.org/sites/default/files/zambia-om_guidelines.pdf).

Practical templates

All the printable practical templates in Annex 1 and Annex 2 can be used to create and implement the overall WASH improvement plan, as outlined in Fig. 11.



Fig. 11. Steps to make and implement a WASH improvement plan using the templates

Explore other factsheets related to this topic:



Factsheet 6. School-based maintenance



Factsheet 12. School and community working together

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Factsheet 13. Health-promoting and child-friendly school policies and rules



Chapter 5 checklist

This section provides you with questions to check the status of WASH services and examine whether your school needs to take action to improve their provision and/or accessibility. Questions are not meant to provide a comprehensive assessment but facilitate a critical analysis by school staff to identify improvements that can be undertaken by the school itself or for which the help of the authorities needs to be sought. If improvement needs are discovered during the check, you might want to consider these in the development of an improvement plan. For planning, go back to the relevant factsheet (indicated by the checklist question headings) to find tips and possible activities. More suggestions about how to conduct the check are described in Factsheet 14.

How is adequate access to WASH ensured in your school?	This is in place	We need to improve this
Factsheet 13. Health-promoting and child-friendly school policies an	d rules	
Do you have a written school policy for health promotion?		
Does it include WASH aspects?		
Was it developed with pupils and staff?		
Was it developed with parents?		
Do you regularly review it?		
Is everyone in the school community informed about it?		
Is it freely available and visible at school?		
 Does it facilitate access to toilets, menstrual hygiene management, hand hygiene and drinking-water? 		
Factsheet 15. Keeping it right with an improvement plan		
Do you have a group of people who meet regularly to discuss WASH improvements?		
Do you have an efficient WASH-related improvement plan?		
Does the plan address the WASH-related improvement needs in your school?		
Is the plan written and regularly reviewed?		
Did you develop it jointly with all staff and users?		
Does the plan include concrete tasks for improving WASH?		
Does the plan include people responsible for the improvement actions?		
Does the plan include deadlines?		
Does the plan consider financial and other resources available?		
Have you checked how to manage costing and budgeting? (Questions in Chapter 3 checklist)		

Key sources and references



Key sources

The tips and actions outlined in this information package were developed based on the practice and experience of contributors from the WASH and education sectors. The following publications were also used to guide overall development:

- School toilets: good practice guidance for schools in Wales. Cardiff: Welsh Government; 2012 (https://dera.ioe.ac.uk/13643/7/120124schooltoiletsen_Redacted.pdf);
- Puberty education and menstrual hygiene management. Paris: United Nations Educational, Scientific and Cultural Organization; 2014 (Good policy and practice in health education, booklet 9; https://unesdoc.unesco.org/ark:/48223/pf0000226792);
- Local action: creating health promoting schools. Geneva: World Health Organization; 2000 (https://apps.who.int/iris/handle/10665/66576);
- Adams J, Bartram J, Chartier Y, Sims J, editors. 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/);
- 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-andhygiene-in-schools-in-the-pan-european-region-the-2016);
- Mooijman A. Water, Sanitation and Hygiene (WASH) in Schools: a companion to the *Child Friendly Schools Manual*. New York: United Nations Children's Fund; 2012 (https://www.unicef. org/publications/files/CFS_WASH_E_web.pdf).

References²

- 1. Joshi A, Amadi C. Impact of water, sanitation, and hygiene interventions on improving health outcomes among school children. J Environ Public Health. 2013;2013:984626. doi:10.1155/2013/984626.
- 2. Jasper C, Le T, 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. doi:10.3390/ijerph9082772.
- 3. The physical school environment: an essential component of a health-promoting school. Geneva: World Health Organization; 2004 (https://www.who.int/ceh/publications/ cehphysical/en/).
- 4. Adams J, Bartram J, Chartier Y, Sims J, editors. 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/).
- 5. Health promoting schools: a framework for action. Manila: WHO Western and Pacific Region; 2009 (http://www.wpro.who.int/health_promotion/documents/docs/HPS_framework_for_action.pdf).
- Simovska V, Dadaczynski K, Viig N-G, Tjomsland H E, Bowker S, WoynarowskaB et al. HEPS tool for schools: a guide for school policy development on healthy eating and physical activity. Woerden: Netherlands Institute for Health Promotion; 2010 (https://www. schoolsforhealth.org/sites/default/files/editor/Teachers%20resources/heps-tool-for-schoolsenglish.pdf).

² All references were accessed on 7–13 September 2019.

- Darvesh N, Das JK, Vaivada T, Gaffey MF, Rasanathan K, Bhutta ZA et al. Water, sanitation and hygiene interventions for acute childhood diarrhea: a systematic review to provide estimates for the lives saved tool. BMC Public Health. 2017;17(Suppl 4): 76. doi:10.1186/ s12889-017-4746-1.
- 8. Ejemot-Nwadiaro R, Ehiri JE, Arikpo D, Meremikwu MM, Critchley JA. Hand washing promotion for preventing diarrhoea. Cochrane Database Syst Rev. 2015;9: CD004265. doi:10.1002/14651858.CD004265.pub3.
- 9. Karon A, Cronin A, Cronk R, Hendrawan R. Improving water, sanitation, and hygiene in schools in Indonesia: a cross-sectional assessment on sustaining infrastructural and behavioral interventions. Int J Hyg Environ Health. 2017; 220(3):539-50. doi:10.1016/j. ijheh.2017.02.001.
- 10. 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).
- 11. Iglesia I, Guelinckx I, De Miguel-Etayo PM, González-Gil EM, Salas-Salvadó J, Kavouras SA et al. Total fluid intake of children and adolescents: cross-sectional surveys in 13 countries worldwide. Eur J Nutr. 2015;54 Suppl 2:57-67. doi:10.1007/s00394-015-0946-6.
- 12. Adan A. Cognitive performance and dehydration. J Am Coll Nutr. 2012; 31(2):71–8. doi:10.10 80/07315724.2012.10720011.
- 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. doi:10.1017/ S0007114513004455.
- 14. Neal D, Vujcic J, Hernandez O, Wood W. The science of habit: creating disruptive and sticky behavior change in handwashing behavior. Washington DC: United States Agency for International Development/WASHplus; 2015 (https://globalhandwashing.org/wp-content/uploads/2019/03/the-science-of-habit-creating-disruptive-and-sticky-behavior-change-in-handwashing-behavior.pdf).
- 15. Popkin B, D'Anci KE, Rosenberg IH. Water, hydration, and health. Nutr Rev. 2010; 68(8):439– 58. doi:10.1111/j.1753-4887.2010.00304.x.
- 16. Water safety in buildings. Geneva: World Health Organization; 2011 (https://www.who.int/ water_sanitation_health/publications/9789241548106/en/).
- 17. Michels N, Van den Bussche K, Vande Walle J, De Henauw S. Belgian primary school children's hydration status at school and its personal determinants. Eur J Nutr. 2017; 56 (2): 793–805. doi:10.1007/s00394-015-1126-4.
- 18. 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).
- 19. Burton S. Toilets unblocked: a literature review of school toilets. Edinburgh: Scotland's Commissioner for Children and Young People; 2013.
- 20. 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/).
- Lotan Y, Daudon M, Bruyère F, Talaska G, Strippoli G, Johnson RJ, Tack I. Impact of fluid intake in the prevention of urinary system diseases: a brief review. Curr Opin Nephrol Hypertens. 2013; 22(Suppl 1):S1–10. doi:10.1097/MNH.0b013e328360a268.

- 22. Armstrong LE. Challenges of linking chronic dehydration and fluid consumption to health outcomes. Nutr Rev. 2012; 70(Suppl 2):S121–7. doi:10.1111/j.1753-4887.2012.00539.x.
- 23. Prasetyo T, Birowo P, Rasyid N. The influence of increased fluid intake in the prevention of urinary stone formation: a systematic review. Acta Med Indones. 2013;45(4):253–8.
- 24. Healthy nutrition: an essential element of a health-promoting school. Geneva: World Health Organization; 1998 (https://apps.who.int/iris/handle/10665/63907).
- 25. Standard specifications, layouts and dimensions, volume 3: toilets in schools. London: Department for Education and Skills; 2017.
- 26. Basic guide for school directors, teachers, students, parents and administrators: WASHfriendly schools. Washington DC: United States Agency for International Development; 2010 (https://www.ircwash.org/resources/basic-guide-school-directors-teachers-studentsparents-and-administrators-wash%E2%80%90friendly).
- 27. Paediatric continence commissioning guide: a handbook for the commissioning and running of paediatric continence services. London: Paediatric Continence Forum; 2015 (http://www.paediatriccontinenceforum.org/wp-content/uploads/2015/09/Paediatric-Continence-Commissioning-Guide-2014-PCF.pdf).
- 28. Urinary tract infection in children and young people. London: Royal College of Obstetricians and Gynaecologists; 2017 (Quality standard QS36; https://www.nice.org.uk/guidance/qs36).
- 29. Constipation in children and young people: diagnosis and management. London: Royal College of Obstetricians and Gynaecologists; 2017 (Clinical guideline CG99; https://www.nice.org.uk/guidance/cg99).
- 30. Lyons B. Do school facilities really impact a child's education? Scottsdale, AZ: Council of Educational Facility Planners International; 2001.
- 31. Lukacz ES, Sampselle C, Gray M, MacDiarmid S, Rosenberg M, Ellsworth P et al. A healthy bladder: a consensus statement. Int J Clin Pract. 2011;65(10): 1026–36. doi:10.1111/j.1742-1241.2011.02763.x.
- 32. Nevéus T, von Gontard A, Hoebeke P, Hjälmås K, Bauer S, Bower W et al. The standardization of terminology of lower urinary tract function in children and adolescents: report from the Standardisation Committee of the International Children's Continence Society. J Urol. 2006;176(1): 314–24. doi:10.1016/S0022-5347(06)00305-3.
- 33. Lundblad B, Berg M, Hellström A-L. Teacher's attitudes and strategies when schoolchildren need to go to the toilet. J Health Sci. 2016; 4:99–104 doi:10.17265/2328-7136/2016.02.006
- 34. Parent engagement: strategies for involving parents in school health. Atlanta, GA: Centers for Disease Control and Prevention; 2012 (https://www.cdc.gov/healthyyouth/protective/pdf/parent_engagement_strategies.pd).
- 35. Guide d'accompagnement de projets éducatifs relatifs aux sanitaires au collège et au lycée [Accompanying guide to educational projects related to sanitation in secondary schools]. Paris: Ministère de l'Éducation Nationale et de la Jeunesse; 2016 (https://cache.media. eduscol.education.fr/file/parcours_sante/87/3/Guide_sanitaire_EPLE_738873.pdf).
- International technical guidance on sexuality education (revised edition). Paris: United Nations Educational, Scientific and Cultural Organization; 2018 (https://unesdoc.unesco.org/ ark:/48223/pf0000260770).
- 37. School toilets: good practice guidance for schools in Wales. Cardiff: Welsh Government; 2012 (https://dera.ioe.ac.uk/13643/7/120124schooltoiletsen_Redacted.pdf).
- 38. Szuba T, Young R. Planning guide for maintaining school facilities. National Center for Education Statistics; 2003 (https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2003347).

- Jones S, Wilson G. Better loos for schools: inadequate school toilet facilities can create problems for children, including wetting, incontinence and bullying. Community Pract. 2007;80(7).
- 40. Senior E. We love our school toilets: involving primary school students in improving their school toilets. Glob Health Promot. 2014;21(1):23–8. doi:10.1177/1757975913508420.
- 41. Chittleborough CR, Nicholson AL, Basker E, Bell S, Campbell R. Factors influencing hand washing behaviour in primary schools: process evaluation within a randomised controlled trial. Health Educ Res. 2012;27(6):1055–68. doi:10.1093/her/cys061.
- 42. 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. doi:10.1371/journal.pmed.1001962.
- 43. Postma L, Getkate R, van Wijk C. Life skills-based hygiene education in school sanitation: a guidance document on concepts, development and experiences with life skills-based hygiene education in school sanitation and and hygiene education programmes. Delft: IRC International Water and Sanitation Centre; 2004 (Technical Paper Series no. 42; https://www. ircwash.org/sites/default/files/Postma-2004-Lifeskills.pdf).
- 44. Mooijman A. Water, Sanitation and Hygiene (WASH) in Schools: a companion to the *Child Friendly Schools Manual*. New York: United Nations Children's Fund; 2012 (https://www.unicef.org/publications/files/CFS_WASH_E_web.pdf).
- 45. Mold remediation in schools and commercial buildings. Washington DC: United States Environmental Protection Agency; 2001 (https://www.epa.gov/mold/mold-remediation-schools-and-commercial-buildings-guide).
- 46. 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).
- 47. Sumpter C, Torondel B. A systematic review of the health and social effects of menstrual hygiene management. PLoS One. 2013;8(4):e62004. doi:10.1371/journal.pone.0062004.
- 48. Puberty education and menstrual hygiene management. Paris: United Nations Educational, Scientific and Cultural Organization; 2014 (Good policy and practice in health education, booklet 9; https://unesdoc.unesco.org/ark:/48223/pf0000226792).
- 49. Insight: access to sanitary products. Edinburgh: Young Scot; 2018 (https:// youngscot.net/news-database/young-scot-launches-access-to-sanitary-productscampaign?rq=Insight%3A%20access%20to%20Sanitary%20Products%20).
- 50. Estimation for menstrual poverty in Macedonia. Skopje: Journalists for Human Rights; 2018 (https://jhrmk.org/index.php/2019/05/13/protsenka-za-menstrualnata-siromashtija-vo-makedonija/?lang=en).
- 51. 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/uknews-releases/always-mission-endperiodpoverty).
- 52. 1 in 10 girls have been unable to afford sanitary wear, survey finds. In: Plan International [website]. London: Plan International UK; 2017 (https:// plan-uk.org/media-centre/1-in-10-girls-havebeen- unable-to-afford-sanitary-wear-survey-finds).
- 53. Break the barriers: girls' experiences of menstruation in the UK. London: Plan International UK; 2018 (https://plan-uk.org/act-for-girls/girls-rights-in-the-uk/break-the-barriers-our-menstrual-manifesto).
- 54. Campbell OMR, Benova L, Gon G, Afsana K, Cumming O. Getting the basic rights the role of water, sanitation and hygiene in maternal and reproductive health: a conceptual framework. Trop Med Int Health. 2015; 20(3):252–67. doi:10.1111/tmi.12439.

- 55. Sahin M, Joshi D, Buit G, González-Botero D. Menstrual hygiene management: education and empowerment for girls? Waterlines. 2015;34(1):51–67. doi:10.3362/1756-3488.2015.006.
- 56. Sahin M. Water, sanitation and hygiene for schoolchildren in emergencies: a guidebook for teachers New York: United Nations Children's Fund; 2011 (resourcecentre.savethechildren. net/node/12303/pdf/282._unicef_wash_in_schools_in_emergencies_guidebook_for_teachers_.pdf).
- 57. McCarthy C, Mitchell F, Rutherford C. Disability equality promoting positive attitudes through the teaching of the national curriculum. London: Children's Society; 2008 (https://www.childrenssociety.org.uk/what-we-do/resources-and-publications/publications-library/disability-equality-promoting-positive-at).
- 58. Jones H, Reed B. Water and sanitation for disabled people and other vulnerable groups: designing services to improve accessibility. Loughborough: WEDC; 2005 (https://www.susana.org/en/knowledge-hub/resources-and-publications/library/details/2218).
- 59. Buckley BS, Sanders CD, Kwong JSW, Kilpatrick KA, Anderson CA. Conservative treatment for functional daytime urinary incontinence in children. Cochrane Database Syst Rev. 2016;2016(9):CD012367. doi:10.1002/14651858.CD012367.
- 60. Supporting transgender young people: guidance for schools in Scotland. Edinburgh: LGBT Youth Scotland; 2017 (https://www.lgbtyouth.org.uk/media/1344/supporting-transgender-young-people.pdf).
- 61. 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. doi:10.1186/1471-2458-14-6.doi:10.1186/1471-2458-14-6.
- 62. Chatterley C, Linden KG, Javernick-Will A. Identifying pathways to continued maintenance of school sanitation in Belize. J Water Sanit Hyg Dev. 2013;3(3):411–22. doi:10.2166/ washdev.2013.128.
- 63. McGinnis SM, McKeon T, Desai R, Ejelonu A, Laskowski S, Murphy HM. A systematic review: costing and financing of water, sanitation, and hygiene (WASH) in schools. Int J Environ Res Public Health. 2017;14(4):pii:E442. doi:10.3390/ijerph14040442.
- 64. Zomerplaag J, Mooijman A. Child-friendly hygiene and sanitation facilities in schools: indispensable to effective hygiene education. Delft: IRC International Water and Sanitation Centre; 2005 (https://www.ircwash.org/resources/child-friendly-hygiene-and-sanitationfacilities-schools-indispensible-effective-hygiene).
- 65. Cleaning guideline for water and sanitation facilities in schools. Baghdad: United Nations Children's Fund; 2011 (http://washinschoolsmapping.com/wengine/wp-content/ uploads/2015/10/iraq-CLEANING-GUIDELINE-FOR-WASH-FACILITIES-IN-SCHOOLS.pdf).
- 66. Sauber und schön: Wer hat die besten Ideen für Schulklos? In: Deutschland: Toiletten an Schulen sind oft dreckig. [Clean and beautiful: who has the best ideas for school loos? In: Germany: toilets at schools are often dirty] [website]. Hamburg: Spiegel Online; 2018 (http://www.spiegel.de/fotostrecke/deutschland-toiletten-an-schulen-sind-oft-dreckigfotostrecke-146630-10.html).
- 67. Venkatesh M, Sara S, Gopal N. Operation and maintenance financing for school WASH facilities in Tajikistan. London: Save the Children; 2015 (https://resourcecentre. savethechildren.net/node/13326/pdf/7-tajikistan-formatted.pdf).
- 68. Himmelrath A. Druckerpatronen, Rotstifte, Klopapier: Was Lehrer aus eigener Tasche bezahlen. [Printer cartridges, red pencils, toilet paper: what teachers pay for out of their pockets] [website]. Hamburg: Spiegel Online; 2018 (http://www.spiegel.de/karriere/schulelehrer-bezahlen-oft-hunderte-euro-im-jahr-fuer-unterrichtsmaterial-a-1208325.html).

- 69. Spiegelman, M. Public school teacher spending on classroom supplies. Washington DC: U.S. Department Of Education; 2018 (https://eric.ed.gov/?id=ED583062).
- Castro V, Msuya N, Makoye C. 2009. Sustainable community management of urban water and sanitation schemes (a training manual). Nairobi: World Bank Water and Sanitation Program – Africa (https://www.wsp.org/sites/wsp.org/files/publications/africa_training_ manual.pdf).
- 71. Huis A, van Achterberg T, de Bruin M, Grol R, Schoonhoven L, Hulscher M. A systematic review of hand hygiene improvement strategies: a behavioural approach. Implement Sci. 2017:92. doi:10.1186/1748-5908-7-92.
- 72. Ejemot RI, Ehiri JE, Meremikwu MM, Critchley JA. Hand washing for preventing diarrhoea. Cochrane Database Syst Rev. 2008;(1):CD004265. doi:10.1002/14651858.CD004265. pub2.
- 73. Skills for health: skills-based health education including life skills an important component of a child-friendly/health-promoting school. Geneva: World Health Organization; 2003. http://www.who.int/iris/handle/10665/42818.
- 74. Improving health and social cohesion through education. Paris: OECD Publishing; 2010 (http://www.oecd.org/education/ceri/improvinghealthandsocialcohesionthrougheducation. htm).
- 75. Burgio KL, Newman DK, Rosenberg MT, Sampselle C. Impact of behaviour and lifestyle on bladder health. Int J Clin Pract. 2013;67(6):495–504. doi:10.1111/ijcp.12143.
- 76. Happy-Hét [Happy week] [website] (in Hungarian). Budapest: National Institute of Pharmacy and Nutrition; 2019 (https://www.ogyei.gov.hu/happy/).
- 77. FAQ: using nudges to encourage handwashing with soap. Washington DC: Global Handwashing Partnership; 2017 (https://globalhandwashing.org/resources/faq-using-nudges-to-encourage-handwashing-with-soap/).
- 78. Trier Damgaard M, Skyt Nielsen H. The use of nudges and other behavioural approaches in education. Brussels: European Commission; 2016. doi:10.2766/696398.
- 79. What is life skills-based hygiene education? [website]. Delft: IRC International Water and Sanitation Centre; 2015 (https://www.washinschools.info/page/177).
- 80. Marteau TM, Ogilvie D, Roland M, Suhrcke M, Kelly MP. Judging nudging: can nudging improve population health? BMJ. 2011;342:d228. doi:10.1136/bmj.d228.
- O'Reilly CE, Freeman MC, Ravani M, Migele J, Mwaki A, Ayalo M et al. The impact of a school-based safe water and hygiene programme on knowledge and practices of students and their parents: Nyanza Province, western Kenya, 2006. Epidemiol Infect. 2008;136(1):80– 91. doi:10.1017/S0950268807008060.
- Michels N, Van den Bussche K, Vande Walle J, De Henauw S. School policy on drinking and toilets: weaknesses and relation with children's hydration status. J Nutr Educ Behav. 2019;51(1):32–40. doi:10.1016/j.jneb.2018.07.001.
- 83. Maxwell LE. A safe and welcoming school: what students, teachers, and parents think. J Archit Plan Res. 2000;17(4):271–82.
- 84. Schmelzeisen A. "Make our toilets great again": Godesberger Gesamtschule will saubere Toiletten. ["Make our toilets great again": Godesberg comprehensive school wants clean toilets]. Bonn: General Anzeiger; 2018 (http://www.general-anzeiger-bonn.de/bonn/bad-godesberg/Godesberger-Gesamtschule-will-saubere-Toiletten-article3984467.html).
- 85. Hung TT, Chiang VC, Dawson A, Lee RL. Understanding of factors that enable health promoters in implementing health-promoting schools: a systematic review and narrative synthesis of qualitative evidence. PLoS One. 2014;9(9):e108284. doi:10.1371/journal. pone.0108284.

- Turunen H, Sormunen M, Jourdan D von Seelen J3, Buijs G. Health promoting schools

 a complex approach and a major means to health improvement. Health Promot Int. 2017;32(2):177–84. doi:10.1093/heapro/dax001.
- 87. Wen J, Wang Q, Zhang X. Normal voiding pattern and bladder dysfunction in infants and children. Life Sci J. 2007;4(4):1–9.
- Wyman JF, Burgio KL, Newman DK. Practical aspects of lifestyle modifications and behavioural interventions in the treatment of overactive bladder and urgency urinary incontinence. Int J Clin Pract. 2009;63(8):1177–91. doi:10.1111/j.1742-1241.2009.02078.x.
- Cox J. Classroom management: dealing with trips to the bathroom. In: TeachHUB [blog]. Frankfort, IL: K-12 Teachers Alliance; 2015 (http://www.teachhub.com/classroommanagement-dealing-trips-bathroom).
- 90. Surveillance of water, sanitation and hygiene in schools: a practical tool. Copenhagen: WHO Regional Office for Europe; 2019 (http://www.euro.who.int/en/publications/abstracts/ surveillance-of-water,-sanitation-and-hygiene-in-schools.-a-practical-tool-2019).
- 91. Water safety plan manual (WSP manual): Step-by-step risk management for drinking-water suppliers. Geneva: World Health Organization; 2009 (https://www.who.int/water_sanitation_health/publications/publication_9789241562638/en/).
- 92. UNICEF, GIZ. Field guide: the three star approach for WASH in schools. New York: United Nations Children's Fund; 2013 (https://www.unicef.org/wash/schools/files/UNICEF_Field_Guide-3_Star-Guide.pdf).
- 93. Promoting health through schools: report of a WHO Expert Committee on Comprehensive School Health Education and Promotion. Geneva: World Health Organization; 1997 (WHO Technical Report Series 870; https://apps.who.int/iris/handle/10665/41987).
- 94. Nutbeam D. Health promotion glossary. Health Promot Int. 1998;13(4): 349–64. doi:10.1093/ heapro/13.4.349.
- 95. St Leger L, Young I, Blanchard C, Perry M. Promoting health in schools: from evidence to action. Edinburgh: NHS Health Scotland; 2009 (http://www.healthscotland.com/ documents/4038.aspx).
- 96. Local action: creating health promoting schools. Geneva: World Health Organization; 2000 (http://www.who.int/iris/handle/10665/66576).
- 97. Safarjan E, Buijs G, de Ruiter S. SHE online school manual: 5 steps to a health promoting school. Utrecht: Schools for Health in Europe; 2013 (https://www.schoolsforhealth.org/ resources/materials-and-tools/how-be-health-promoting-school).
- 98. Access to health and nutrition services. In: Schools and health [website]. London: Partnership for Child Development; 2019 (http://www.schoolsandhealth.org/Pages/ AccesstoHealthandNutritionServices.aspx).

Annex1. Practical templates



In this section, you will find several ready-to-use templates for you to start improving WASH in your schools with the help of teachers, janitors and cleaning staff, as well as with pupils and parents. The tools are meant to support you in implementation of the suggestions provided in the related factsheets. If you haven't yet done so, you might want to read the factsheets first and then put the tips into practice and make use of the tools in this section. In particular, Factsheet 15 clarifies the purpose of each tool in greater detail and ex-plains how these can facilitate your work.

The tables and lists are meant to be suggestions and may not be always 100% applicable in your setting. You can decide to modify them to adapt them to your needs and priorities. For example, you may wish to remove some maintenance items or add others, based on local conditions.

The templates were developed based on the resources used for development of the factsheets or adapted from existing tools. Other useful materials can also be provided by your local or national authorities or retrieved from other agencies and organizations working on WASH in schools. You will find a selection of useful resources listed within the individual factsheets.

The templates in this annex are as follows.

- A. WASH problem-solving chart
- B. Operation and maintenance planning chart
- C. Operation and maintenance roles map
- D. Routine functionality check
- E. Routine consumables refill
- F. Routine cleaning record sheet
- G. Costing matrix
- H. Prioritization chart
- I. Improvement plan
- J. Child-friendly teaching plan



Issue observed	Possible cause	Possible measures to control and/ or solve the issue	Operation and maintenance procedures	Additional useful actions
Change of water appearance, taste and odour	 Low use of drinking- water points Stagnation and low 	 Use active protection of pipes at point of entry (e.g. sacrificial anodes, anticorrosion products). 	 Develop/improve procedures for operating devices at point of entry and point of use. 	 Establish procedures for building users to report any changes observed in water quality.
	 water flows Poor quality or poorly maintained installations Dissolution/corrosion of metals (e.g. from pipework, fittings, drinking-water fountains) 	 Flush taps, drinking-water fountains and pipework after extended school closure times (i.e. long weekends, school holidays, etc.). Install devices at point of use. Request a professional check/ inspection of the plumbing system. 	 Develop/improve procedures for maintaining drinking-water points and devices at point of entry and point of use (consistent with manufacturer's instructions) and for flushing after periods of low or no use. Develop/improve procedures for routine disinfection of drinking-water points. 	 Train operational and maintenance staff on how to keep the plumbing system in good order. Train operational and maintenance staff in the operation of equipment at point of entry and point of use.
Water supply interruptions	 Intermittent centralized supply Low pressure in the building Damaged/worn out ball valve coming from the water source Leaking pipes 	 Establish backup water supply systems to provide supply during interruptions (e.g. carted water or large storages). Ensure that the drinking-water plumbing system is monitored and functioning. Replace damaged equipment and repair leakages. Contact the water service provider to discuss solutions for periods of interruption. 	 Establish/improve procedures for activating backup systems. Establish/improve procedures for resuming the centralized water supply/ usage. Establish/improve procedures for regular inspection of the individual water source at school premises (if applicable) and/or the plumbing system. 	 Inform users about what to do during interruptions. Establish a communication protocol with the water utility company. Train operational and maintenance staff in the use of backup systems.

Template A. WASH problem-solving chart

Issue observed	Possible cause	Possible measures to control and/ or solve the issue	Operation and maintenance procedures	Additional useful actions
Dysfunctional toilet flushing	 Clogged toilet Blocked plumbing Damaged flushing device Septic tank is full 	 Unclog the toilet with a plunger and/ or use dish soap and hot water (not boiling). Ensure the availability of bins to dispose of solid materials that cannot be put in the toilets or trash bin. Repair the plumping/flushing system. Empty the septic tank. 	 Ensure regular inspections of septic tank and the plumbing system. Keep records of inspections and/ or emptying to ensure timely arrangement of emptying. 	 Establish rules to ensure adequate disposal of solid materials in bins. Establish procedures for building users to report any observed issues with the toilets.
Water accumulates on the floor	 Leaking sink drainage Clogged floor drain Leaking pipes 	 Conduct an inspection of the sink drainages and the plumbing system, and repair if necessary. Ensure sufficient and adequate bins to avoid accumulation of litter on the floor or the pipes. Unclog (for example, by means of a wire) or repair the floor drain in a timely manner. 	 Establish/improve procedures for functionality check and maintenance. Establish/improve procedures for routine cleaning. Ensure appropriate waste collection procedures. 	
Low temperature in hot water system	 Dysfunctional heating system or inadequate pipework isolation 	 Check heater thermostat. Maintain hot temperatures above 50 °C in the distribution system or maintain a suitable disinfectant residual. Maintain temperatures above 60 °C in storage systems. 	 Develop/improve procedures for operating hot water systems, including remedial action if temperatures are too low. 	 Establish procedures for building users to report any observed changes in water temperatures.

Template A. WASH problem-solving chart contd
Issue observed	Possible cause	Possible measures to control and/ or solve the issue	Operation and maintenance procedures	Additional useful actions
Bad odours	 Insufficient cleaning frequency 	 Ensure appropriate ventilation of the toilet facilities. 	 Establish/improve procedures for the routine cleaning. 	 Ask users to report any issues with bad odours.
	 Inadequate cleaning routine Insufficient ventilaton Issues with the sanitation system (e.g. ventilation, leakage, 	 Ensure sufficient and adequate cleaning of the toilet facilities (including de-scaling). Organize deep cleaning of the toilet facilities (i.e. steam cleaning and removal of uric scale and lime scale). 	 Ensure an adequate frequency routine cleaning (twice a day). Establish/improve procedures for the routine inspection and maintenance of the sanitation system to detect issues timely. 	 Ensure that cleaning personnel receive appropriate training.
	clogging)	 Ensure proper maintenance of the sanitation plumbing system. 	 Establish/improve procedures for regular ventilation (e.g. a person opening and closing windows, or installing an artificial ventilation system). 	
			 Establish/improve procedures for monitoring the adequacy and functionality of natural or artificial ventilation. 	

Template A. WASH problem-solving chart contd

Template A. W	Template A. WASH problem-solving chart contd	ing chart contd		
Issue observed	Possible cause	Possible measures to control and/ or solve the issue	Operation and maintenance procedures	Additional useful actions
Stained floor and wall tiles	 Insufficient cleaning frequency Inadequate cleaning routine Vandalism by pupils 	 Clean with a steel wool using chlorine diluted in water or bleach. Ensure sufficient and adequate cleaning, in particular after periods of high use. Improve the apprearance of the toilet facilities to encourage pupils to keep them in good order. 	 Establish/improve the procedures for the routine cleaning. Ensure an adequate frequency routine cleaning (twice a day). Establish/improve procedures for regular check of the conditions of the toilet facilities. 	 Ensure that cleaning personnel receives appropriate training. Sentize pupils about the importance of adequate toilets for dignity and health. Engage pupils in improving and maintaining the toilets.
Litter on the floor	 Insufficient cleaning frequency Inadequate bins (mesh bins without bags or too small bins) Vandalism by pupils 	 Ensure sufficient and adequate cleaning, in particular after periods of high use. Improve the apprearance of the toilet facilities to encourage pupils to keep them in good order. Ensure sufficient and adequate bins to avoid accumulation of litter on the floor or the pipes. 	 Establish/improve the procedures for the routine cleaning. Ensure an adequate frequency routine cleaning (twice a day). Ensure appropriate waste collection procedures. 	 Establish procedures for bullding users to report any observed issues with the toilet facilities.
Sources: Water safety in buildings Guidelines for drinking-water qual drinking-water-quality-guidelines- Mold remediation in schools and and-commercial-buildings-guide); Toilet rehabilitation for school com (http://www.fitforschool.internation	Sources: Water safety in buildings. Geneva: World Health Organizatio Guidelines for drinking-water quality, 4th edition, incorporating the 1st drinking-water-quality-guidelines-4-including-1st-addendum/en/); Mold remediation in schools and commercial buildings. Washington D and-commercial-buildings-guide); Toilet rehabilitation for school communities in the autonomous region (http://www.fitforschool.international/wp-content/ezdocs/gizffs_Toilet_	Sources: Water safety in buildings. Geneva: World Health Organization; 2011 (https://www.who.int/water_sanii Guidelines for drinking-water quality, 4th edition, incorporating the 1st addendum. Geneva: World Health Orgar drinking-water-quality-guidelines-4-including-1st-addendum/en/); Mold remediation in schools and commercial buildings. Washington DC: United States Environmental Protectic and-commercial-buildings-guide); Toilet rehabilitation for school communities in the autonomous region of Muslim Mindanao, Philippines. Bonn: I (http://www.fitforschool.international/wp-content/ezdocs/gizffs_Toilet_Repair_Manual_English_20170522.pdf);	Sources: Water safety in buildings. Geneva: World Health Organization; 2011 (https://www.who.int/water_sanitation_health/publications/9789241548106/en/); 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/); Mold remediation in schools and commercial buildings. Washington DC: United States Environmental Protection Agency; 2001 (https://www.epa.gov/mold/mold-remediation-schools- and-commercial-buildings-guide); Toilet rehabilitation for school communities in the autonomous region of Muslim Mindanao, Philippines. Bonn: Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ); 2017 (http://www.fitforschool.international/wp-content/ezdocs/gizffs_Toilet_Repair_Manual_English_20170522.pdf);	11548106/en/); nt/water_sanitation_health/publications/ a.gov/mold/mold-remediation-schools- ionale Zusammenarbeit (GIZ); 2017

Castro V, Msuya N, Makoye C. 2009. Sustainable community management of urban water and sanitation schemes (a training manual). Nairobi: World Bank Water and Sanitation

Program – Africa (https://www.wsp.org/sites/wsp.org/files/publications/africa_training_manual.pdf).

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Template E

WHAT Activity to be carried out to ensure WASH provisions at school	WHEN Frequency of this activity	WHO Responsible person	RESOURCES Financial and technical resources needed (e.g. materials, spare parts, tools and equipment)
 Undertake deep cleaning of all WASH facilities 		Example: External staff	
 Empty septic tanks (where applicable) 			
 Check ventilation system (in case of septic tank) and internal plumbing systems 	Example: every 1–2 vears	Example: Janitor	
 Discuss drinking-water quality monitoring results with competent authority 		Example: School principal	
 Survey children's perceptions of WASH facilities and needed improvements 		Example: Staff in charge and children	
 Organize payment of water and electricity bills (where applicable) 			
 Procure hygiene consumables and tools for maintenance 	Example: Monthly	Example: Administrative staff	
 Conduct routine functionality check (see Template D) 			
 Check functionality of ventilation systems in toilet facilities 	Example: Weekly	Example: Janitor/trained staff in charge of supervision	
 Conduct check for integrity and cleanliness of individual school water supply (e.g. well) 			
 Clean drinking-water containers 	Example: Daily	Example: Janitor/trained staff in charge of supervision	
 Conduct check for availability and refill hygiene consumables (see Template E) 	Example: Daily (more than once)	Example: Janitor/staff or children in charge of routine checks	



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Template B. Operation and maintenance planning chart contd

WHAT Activity to be carried out to ensure WASH provisions at school	WHEN Frequency of this activity	WHO Responsible person	RESOURCES Financial and technical resources needed (e.g. materials, spare parts, tools and equipment)
 Conduct routine cleaning of the WASH facilities (see Template F) 			
 Empty or replace bags of waste bins (see Template F) 	Example: Daily (more than once)	Example: Janitor/cleaning staff	
 Repair identified functionality issues 			
 Replace toilet brushes 	Example: On demand	Example: Janitor	
 Communicate to authorities or operating bodies issues that require major repair/replacement 		Example: Janitor/school manager	
 Check functionality of water supply system 			
 Flush drinking-water system 	Example: After the holidays	Example: Janitor/staff in charge	
 Monitor and/or check functionality of water treatment (if applicable) 	Example: Depending on the treatment	Example: External personnel/ janitor	

Sources: adapted from Adams J, Bartram J, Chartier Y, Sims J, editors. 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/);

School WASH facilities: operations and maintenance guidelines. Washington DC: United States Agency for International Development; 2015 (http://www.washplus.org/sites/default/ files/zambia-om_guidelines.pdf);

Basic guide for school directors, teachers, students, parents and administrators: WASH-friendly schools. Washington DC: United States Agency for International Development; 2010 (https://www.ircwash.org/resources/basic-guide-school-directors-teachers-students-parents-and-administrators-wash%E2%80%90friendly);

Castro V, Msuya N, Makoye C. 2009. Sustainable community management of urban water and sanitation schemes (a training manual). Nairobi: World Bank Water and Sanitation Program – Africa (https://www.wsp.org/sites/wsp.org/files/publications/africa_training_manual.pdf).

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Suggested roles of the school principal/manager or administrative	Surgested roles of the janitor and/or school cleaning personnel
person responsible for management of WASH at the school	
 Take the lead on improving operation, maintenance and cleaning procedures at school and create conditions to keep staff motivated. 	 Organize annual maintenance procedures such as deep cleaning of facilities, emptying of septic tanks and inspection of ventilation and internal plumbing systems.
 Support the establishment of clearing and maintenance schedules and assign clear roles in cooperation with teachers and/or the janitor. 	 Communicate to inform the school administration of the need for procurement of necessary consumables and tools for maintenance.
 Engage teachers and pupils to maintain and monitor toilet areas. Liaise with the janitor to learn about current issues and occasionally organize 	 Maintain water treatment equipment (if applicable).
 Request results of inspections and/or water quality testing from responsible public authorities or, if not available, organize water quality testing. 	 Inspect and refill facilities daily with consumables.
 Manage the budget for procurement of consumables and repairs. 	 Conduct (or supervise) and record daily dealining. A Banair or ordanize renair of identified functionality issues.
 Communicate improvement needs with responsible education and health authorities. 	
 Inform and engage with staff and parents through parent-teacher associations or similar bodies. 	
Suggested roles of the teachers and school health staff (where applicable)	Suggested roles of the facility supervisors (e.g. janitor, supervising teachers, pupils committee, parents)
Include principles of correct use of facilities into your teaching.	 Be present in the toilets during breaks.
 Empower students to take ownership and practise positive hygiene behaviours. 	 Check availability of water and soap.
 Support the development of routine supervision of toilet conditions at critical times. 	 Check that consumables are readily available for users in WASH facilities. Benort any problems in the facilities to the ianitor or the school manager
 Monitor the state and use of school WASH facilities to ensure their usability. 	 Remind other students about proper toilet manners and handwashing with soap.
 Promote open communication by pupils of possible needs and issues related to WASH. 	 Fill out the toilet inspection protocol.
Remind pupils to practise healthy behaviours and lead by example.	
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Template D. Routine functionality check

To be filled by person Name: Date:	To be filled by personnel in charge of operation and maintenar Name:	and maintenance		To be filled by school management Name: Date:	agement
	Status	Problem location	Proposed solution	Responsible	Deadline
Example: Door locks	🗖 Good 🖾 To repair	First floor, east side, female toilet	Order and install new lock	Caretaker V.G.	By end of the week (15 May)
Toilet doors	🗖 Good 🗖 To repair				
Toilet door locks	🗖 Good 🔲 To repair				
Toilet seats	🗆 Good 🗖 To repair				
Toilet flush	🗖 Good 🔲 To repair				
Light bulbs	🗖 Good 🔲 To repair				
Waste bins	🗖 Good 🔲 To repair				
Drinking-water points (taps or fountains)	🗖 Good 🗖 To repair				
Sinks (taps and drainage)	🗆 Good 🗖 To repair				
Soap dispensers	🗖 Good 🔲 To repair				
Hand-drying devices/ towel dispensers	🗆 Good 🗖 To repair				

Template E. Routine consumables refill

Person in charge: Date: Time:		1		Signature:				
	Fema	Female toilet facilities Indicate toilet facility/location:	lities location:	<u> </u>	Male toilet facilities Indicate toilet facility/location:	t facilities acility/locatio	Ë	Stocks for refilling not available
Tick if you have refilled consumables or they were available in sufficient quantity								
Soap					۵			
Toilet paper		۵	۵		۵			
Paper towels or cotton towel rolls					٦			
Menstrual products (e.g. pads and/or tampons)				I	I	I	I	
Sanitary bags for disposal of used menstrual products			۵	I	I	I	I	
Other [add any further consumables required here]								





Template F. Routine cleaning record sheet

To be filled by personnel in charge for cleaning

Toilet facility/location:

Date	Time			Cle	aning routi	ne for the	Cleaning routine for the WASH facilities	ties			Name	Signature
I	I	Consumables refilled (see Template E)	Sanitary bins emptied	Waste bins emptied (or bags replaced)	Floors cleaned	Other surfaces cleaned (tiles, doors, etc.)	Handles and light switches cleaned	Toilets cleaned	Handwashing stations cleaned	Drinking- water points cleaned	I	I
									٦			

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Costing matrix
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Cost item	Cost per unit	Number of units (per year)	Yearly expenditure [quantity] X [cost]	Financial source (budget line or type of external resource)
Emptying of septic tanks				
Maintenance of WASH facilities				
Water quality testing				
Equipment for water treatment at school				
Communal services (electricity and water supply)				
Materials for maintenance [TOTAL]	I	I		
 Cleaning products 				
Cleaning materials				
 Repairment tools 				
Repairs/spare parts [TOTAL]	I	1		
Door locks				
 Door handles and grips 				
Toilet seats				
 Toilet brushes 				
 Hand-drying devices 				
 Light switches 				
 Waste bins 				
Sink and toilet fixtures (including flush system)				



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Template G. Costing matrix contd

Cost item	Cost per unit	Number of units (per year)	Yearly expenditure [quantity] X [cost]	Financial source (budget line or type of external
Consumables [TOTAL]	ı	ı		resource)
 Light bulbs 				
• Soap				
 Toilet paper 				1
Paper/cotton towels				
Menstrual products				
 Sanitary bags 				
Bin bags				
Staff for operation and maintenance of WASH facilities				
Staff for cleaning of WASH facilities (if different from the staff for operation and maintenance)				
TOTAL				

Sources: adapted from Toilet rehabilitation for school communities in the autonomous region of Muslim Mindanao, Philippines. Bonn: Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ); 2017 (http://www.fitforschool.international/wp-content/ezdocs/gizffs_Toilet_Repair_Manual_English_20170522.pdf);

School WASH facilities: operations and maintenance guidelines. Washington DC: United States Agency for International Developpment; 2015 (http://www.washplus.org/sites/default/ files/zambia-om_guidelines.pdf);

Operation and maintenance financing for school WASH Facilities in Armenia. London: Save the Children; 2016 (http://washinschoolsmapping.com/wengine/wp-content/ uploads/2017/03/1.-Armenia-Formatted.pdf); Operation and maintenance financing for school WASH Facilities in Tajikistan. London: Save the Children; 2015 (washinschoolsmapping.com/wengine/wp-content/uploads/2017/03/7-Tajikistan-Formatted.pdf);

McGinnis SM, McKeon T, Desai R, Ejelonu A, Laskowski S, Murphy HM. A systematic review: costing and financing of water, sanitation, and hygiene (WASH) in schools. Int J Environ Res Public Health. 2017;14(4):pii:E442. doi:10.3390/ijerph14040442.

Template H. Prioritization chart

- List the WASH issues identified during the checks (from Chapters 1–5), observed or reported by users. Discuss with your team the level of importance of the issue. The importance can be evaluated by considering criteria such as the impact on the health, well-being, comfort or equity for the users. Identify so the correct position for the specific issue on the chart horizontally
- to solve the identified issue based on available time, financial and human resources. Identify so the correct position for the specific action on the chart • List the identified improvement actions to mitigate the identified issues. Discuss with your team the level of feasibility of a certain improvement action vertically (see Resources required column in improvement plan).
- Write the number corresponding to the specific WASH issue/improvement action in the chart reflecting the identified position for feasibility (vertical axe) and importance (horizontal axe) •

		0 ← example										
	Very important	0	Less important very important	and nignly	leasible - to do leasible - to do nov+			less important Verv important	and less	feasible – to do feasible – to do	next	
	Less important		Less important	and nignly	16351016 - 10 00	IIGAL		less important	and less	feasible – to do	last	
		əlo	dizsə	յ չіհն	уiН					əldi	feasi	ssəŢ
	Area for improvement action	Example: Improve plan for refilling soap/consumables										
Identified issues/actions	Issue	Example: Soap is not available at all handwashing facilities										
Identil	No.	0	-	2	ო	4	5	9	7	ω	6	10

Source: adapted from Water and sanitation for health facility improvement tool (WASH FIT): a practical guide for improving quality of care through water, sanitation and hygiene in health care facilities. Geneva: World Health Organization; 2018 (https://www.who.int/water_sanitation_health/publications/water-and-sanitation-for-health-facility-improvement-tool/en/)



Improvement goal	Specific improvement actions	Responsible	Time to	Resources required
You may use the checklists, or other observations, to find what you want to prioritize	Identify actions to address the improvement goal. Start with a limited number of feasible actions and review them periodically	person(s)	complete It should reflect the priority level	It should include personnel, materials, costs
Source: adapted from Local action: c	- Source: adapted from Local action: creating health promoting schools. Geneva: World Health Organization; 2000 (http://www.who.int/iris/handle/10665/66576).	Drganization; 2000 (http://	www.who.int/iris/hanc	le/10665/66576).



Suggestions for child-friendly WASH teaching methods	Take notes and write down ideas on how to introduce or improve child-friendly teaching methods
Activity-based	
	Example: To discuss WASH topics, including menstrual hygiene or sanitation, you can use games or initiate a discussion, such as a crossword or a more complex activity such as a survey for older students.
Joyful/playful for children	
	Example: To address the importance of hygiene practices, make use of roleplays to showcase good versus bad practices, showing how bacteria are removed by soap or how dirty hands spread diseases; for smaller children, let them get their hands dirty with coloured materials, or simply initiate a discussion in an informal environment, letting children stand or sit in a circle.
Promoting learning by doing and personal experience	
	Examples: Collect opinions and experiences after an interactive game or another activity about any WASH topics, ask about the links between the lesson and pupils' everyday lives or what they have experienced in the past.
□ Give children the chance to learn at their own pace and style	
	Examples: To discuss sanitation practices, you could start with an open question such as "What do you think should be the first step after entering a toilet block and why?" The teacher can initiate a discussion, based on the children's answers, about correct steps and why, followed by a full explanation of the correct habits and hygienic practices.
Give children the chance to experience, discover, create and construct their own knowledge	
	Examples: To understand what WASH is, create a map with children of the WASH facility or take some hygienic materials

Suggestions for child-friendly WASH teaching methods	Take notes and write down ideas on how to introduce or improve child-friendly teaching methods
Personalized information to the age of the children and the local context	
	topic suc cribing th ils, for ex ter levels cesses t
Help developing positive attitudes and values	
	Examples: Find a story or initiate a debate to discuss the reasons some healthy practices are important; use the occasion to motivate students to carry them out or to promote healthy practices among their friends and families.
Practising the newly learned skills	
	Examples: Go out of the classroom to let children practise handwashing, setting an appointment for group handwashing before going to lunch or after a break; or distribute hydration charts for pupils to track their water intake and initiate a challenge to see who drinks enough water during the school day.
<i>Source:</i> adapted from Towards effective progra and Sanitation Centre (TP series no. 48; https:	Source: adapted from Towards effective programming for WASH in schools: a manual on scaling up programmes for water, sanitation and hygiene in schools. Delft: IRC International Water and Sanitation Centre (TP series no. 48; https://www.unicef.org/wash/schools/files/rch_effective_programming_2010.pdf).





Annex 2. Practical tips for pupils



In this section, you will find several ready-to-use materials to start integrating WASH in education in or outside the class. Other useful materials can also be provided by your local or national authorities or retrieved from other agencies and organizations working on WASH in schools. You will find a selection of useful resources listed within the individual factsheets.

The materials in this annex are as follows.

- Mentrual hygiene management
- Hydration
- Using the toilet
- Hand hygiene
- Handwashing techniques



MENSTRUAL HYGIENE MANAGEMENT

MENSTRUATION IS NORMAL! IT IS A NATURAL PROCESS FOR ALL GIRLS AND WOMEN. GIRLS TYPICALLY START EXPERIENCING PERIODS BETWEEN THE AGES OF 10 AND 19. THE MENSTRUAL CYCLE IS USUALLY AROUND 28 DAYS BUT CAN VARY FROM 21 TO 35 DAYS. MANY WOMEN AND GIRLS SUFFER FROM PERIOD PAINS SUCH AS ABDOMINAL CRAMPS, NAUSEA, FATIQUE, FEELING FAINT, HEADACHES, BACKACHE AND GENERAL DISCOMFORT.

FOR BOYS



RESPECT GIRLS DURING THEIR PERIOD: JOKES WILL AFFECT THEIR CONFIDENCE AND MAY MAKE THEM WITHDRAW FROM PARTICIPATING IN THEIR USUAL ACTIVITIES.



LEARN WHAT MENSTRUATION MEANS FOR THE GIRLS AROUND YOU BY ASKING FEMALE FAMILY MEMBERS, TEACHERS OR FRIENDS, WHILE MAKING SURE THAT THEY ARE COMFORTABLE TO HAVE SUCH CONVERSATIONS WITH YOU.



SUPPORT GIRLS SUFFERING FROM PERIOD PAINS BY HELPING THEM WITH THEIR CHORES OR DUTIES.

FOR GIRLS



EAT IRON-RICH FOOD (LIKE MEAT , EGGS, BEANS, LENTILS AND GREEN LEAF VEGETABLES) DURING MENSTRUATION.



MENSTRUAL PAIN CAN BE MANAGED BY EXERCISING, WARMTH AND DRINKING PLENTY OF WATER.



MAKE SURE TO KEEP HEALTHY DURING YOUR PERIOD WITH THESE STEPS.



CAPTURE MENSTRUAL BLOOD WITH THE RIGHT MENSTRUAL HYGIENE PRODUCT: USE COTTON FABRIC, SANITARY TOWELS PADS PLACED ON YOUR UNDERWEAR OR TAMPONS OR A MENSTRUAL CUP INSIDE YOUR VAGINA.



CHANGE THE MENSTRUAL HYGIENE PRODUCT EVERY 2-6 HOURS OR MORE FREQUENTLY IF YOU THINK THAT THE BLOOD FLOW IS GETTING HEAVY.



PUT A REUSABLE HYGIENE PRODUCT MADE OF COTTON INTO A PLASTIC BAG AFTER USE UNTILYOU CAN WASH IT ,THEN WASH IT WITH DETERGENT ,DRY IT IN THE SUN OR IRON IT .



DI&PO&E OF NON-REU&ABLE MEN&TRUAL HYGIENE PRODUCT& BY WRAPPING THEM IN PAPER OR A &ANITARY BAG AND THROW THEM IN A BIN WITH A LID.DO NOT THROW THEM IN THE TOILET.



WASH YOUR PRINATES AT LEAST TWICE A DAY DURING YOUR PERIOD, CLEANING FROM FRONT TO BACK. ANOID GETTING SOAP INSIDE YOUR VAGINA.



WASH YOUR HANDS WITH WATER AND SOAP BEFORE AND AFTER USING THE TOILET.



KEEP UNUSED MENSTRUAL HYGIENE PRODUCTS CLEAN (WRAPPED IN TISSUE OR A PLASTIC BAG) FO FURTHER USE.

Sources: Resources. In: Be amazing! Menstrual hygiene management [website]. New York: United Nations Children's Fund; 2017 (http://www.menstrualhygienegh.org/resources.php);

Stevens G, Finucane M, De-Regil L, Paciorek C, Flaxman S, Branca F et al. Global, regional, and national trends in haemoglobin concentration and prevalence of total and severe anaemia in children and pregnant and non-pregnant women for 1995–2011: a systematic analysis of population-representative data. Lancet Glob Health. 2013;1:e16-e25. doi:10.1016/S2214-109X(13)70001-9;

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/sites/g/files/jkxoof256/files/Menstrual%20hygiene%20 matters%20low%20resolution.pdf).

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HYDRATION

WATER IS NITAL FOR ALMOST EVERY FUNCTION IN THE BODY .DRINKING WATER BALANCES THE FLUIDS LOST DURING DAILY ACTIVITIES.

SYMPTOMS OF DEHYDRATION ARE TIREDNESS, DRY MOUTH, THIRST OR HUNGER AND HEADACHE.





DRINK AT LEAST 6-8 GLASSES OF WATER THROUGHOUT THE DAY. REMEMBER TO DRINK IN THE MORNING AND AT REGULAR INTERVALS: THIS WILL HELP YOU CONCENTRATE AND MEET YOUR BODY'S WATER REQUIREMENTS. WATER IS ONE OF THE HEALTHIEST WAYS TO HYDRATE, AS IT HAS NO CALORIES OR SUGAR.



RVOID SUGAR-SWEETENED DRINKS, SPORT DRINKS, ICED TEA AND OTHER SWEET DRINKS. THIS WILL HELP YOU STAY HEALTHY WITHOUT GAINING WEIGHT AND WILL PREVENT PRINFUL TOOTH DECRY.



FOODS CAN HELP YOU TO HYDRATE TOO: EAT PLENTY OF FRUIT AND VEGETABLES.



MONITOR CHANGES IN YOUR HYDRATION STATUS BY CHECKING THE COLOUR OF YOUR URINE. DARK YELLOW URINE MEANS YOUR BODY NEEDS WATER.



REMIND YOUR FRIENDS TO DRINK WATER AFTER EXERCISING OR AFTER SPENDING TIME IN HOT AND DRY WEATHER.

Sources: Jéquier E, Constant F. Water as an essential nutrient: the physiological basis of hydration. Eur J Clin Nutr. 2010;64(2):115–23. doi:10.1038/ejcn.2009.111;

Mitchell HH, Hamilton TS, Steggerda FR, Bean HW. The chemical composition of the adult human body and its bearing on the biochemistry of growth. J Biol Chem. 1945;158(3):625–37;

Shaheen NA, Alqahtani AA, Assiri H, Alkhodair R, Hussein MA. Public knowledge of dehydration and fluid intake practices: variation by participants' characteristics. BMC Public Health. 2018;18(1):1346. doi:10.1186/s12889-018-6252-5; Poo and wee. Bristol: ERIC; 2016 (https://www.eric.org.uk/Handlers/Download.ashx?IDMF=b7e6059b-db44-47ae-9c15-b7c7df1c88a4).

Layout and design: Imre Sebestyén/Unit Graphics







KEEP THE TOILET BOWL CLEAN BY FLUSHING AFTER USE AND USING THE TOILET BRUSH: THIS WILL MAKE YOUR FRIENDS AND SCHOOLMATES FEEL MORE COMFORTABLE USING THE TOILETS.

WASH YOUR HANDS WITH WATER AND SOAP BEFORE AND AFTER USING THE TOILET: THIS WILL HELP KEEPING YOU AND YOUR FRIENDS HEALTHY, BREAKING THE CHAIN OF INFECTION.

TELL & CHOOL & TAFF ABOUT ANY ISSUES YOU FIND IN THE TOILET: THIS WILL HELP KEEP THE TOILETS AN ADEQUATE AND COMFORTABLE & PACE TO MEET YOUR NEEDS.

Sources: 7 fast facts about toilets [website]. New York: United Nations Children's Fund; 2018 (https://www.unicef.org/stories/7-fast-facts-about-toilets);

van Maanen P, Shinee E, Grossi V, Vargha M, Gabriadze N, Schmoll O. Prioritizing pupils' education, health and wellbeing: 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);

Burgio KL, Newman DK, Rosenberg MT, Sampselle C. Impact of behaviour and lifestyle on bladder health. Int J Clin Pract. 2013;67(6):495–504. doi:10.1111/ijcp.12143;

Poo and wee. Bristol: ERIC; 2016 (https://www.eric.org.uk/Handlers/Download.ashx?IDMF=b7e6059b-db44-47ae-9c15-b7c7df1c88a4);

Toilet Tactics challenge: teaching kids healthy habits for life [website]. Surrey Hills: Continence Foundation of Australia; 2017 (https://continence.org.au/news.php/523/toilet-tactics-challenge-teaching-kids-healthy-habits-for-life);

Wennergren HM, Oberg BE, Sandstedt P. The importance of leg support for relaxation of the pelvic floor muscles. a surface electromyograph study in healthy girls. Scand J Urol Nephrol. 1991;25(3):205–13. doi:10.3109/00365599109107948.

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WASHING YOUR HANDS IS ONE OF THE ERSIEST WAYS TO PROTECT YOURSELF AND YOUR FRIENDS AND FAMILY FROM ILLNESSES SUCH AS DIARRHOEA, COLD AND FLU.

HAND HYGIENE

HANDWASHING HELPS YOU TO STAY HEALTHY AND ATTEND SCHOOL.

MANY SORTS OF ILLNESSES CAUSED BY INFECTION ARE TRANSMITTED BY BACTERIA, WHICH Can easily get from your hands to your mouth and face.

GERM& LIKE WET AND WARM ENVIRONMENT&, LIKE YOUR HAND&.

WASH YOUR HANDS WITH SOAP AND WATER:



WHEN HAND& ARE VI&IBLY DIRTY



D+•

BEFORE AND AFTER USING THE TOILET



BEFORE AND AFTER PREPARING FOOD



BEFORE EATING FOOD



BEFORE AND AFTER CARING FOR SOMEONE WHO IS SICK



AFTER BLOWING YOUR NOSE, COUCHING OR SNEEZING

ONCE YOU'VE FINISHED WASHING, DRY YOUR HANDS WITH A CLEAN PAPER TOWEL OR COTTON ROLL. THIS WILL FURTHER CLEAN YOUR HANDS AND REDUCE THE PROBABILITY OF RE-CONTAMINATION.



WHERE SOAP AND RUNNING WATER ARE NOT AVAILABLE, USE AN ALCOHOL-BASED HANDRUB OR HAND SANITIZER.

Sources: Joshi A, Amadi C. Impact of water, sanitation, and hygiene interventions on improving health outcomes among school children. J Environ Public Health. 2013;2013:984626. doi:10.1155/2013/984626;

Jasper C, Le T, 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. doi:10.3390/ijerph9082772;

Patrick DR, Findon G, Miller TE. Residual moisture determines the level of touch-contact-associated bacterial transfer following hand washing. Epidemiol Infect. 1997;119:319–25. doi:10.1111/j.1365-2672.2010.04838.x;

Hand hygiene: why, how and when? Geneva: World Health Organization; 2009 (https://www.who.int/gpsc/5may/Hand_ Hygiene_Why_How_and_When_Brochure.pdf);

When and how to wash your hands [website]. Atlanta, GA: Centers for Disease Control and Prevention; 2016 (https://www.cdc.gov/handwashing/when-how-handwashing.html);

Gould D. The significance of hand-drying in the prevention of infection. Nurs Times. 1994;90:33-5;

Clean hands protect against infection. In: World Health Organization [website]. Geneva: World Health Organization; 2019 (https://www.who.int/gpsc/clean_hands_protection/en/).

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20-30

PROPER HANDWASHING SHOULD LAST 20-30 SECONDS. HUM THE "HAPPY BIRTHDAY" SONG TWICE WHILE WASHING TO KNOW YOU HAVE TAKEN LONG ENOUGH.

Sources: When and how to wash your hands [website]. Atlanta, GA: Centers for Disease Control and Prevention; 2016 (https://www.cdc.gov/handwashing/when-how-handwashing.html);

Hand hygiene: why, how and when? Geneva: World Health Organization; 2009 (https://www.who.int/gpsc/5may/Hand_ Hygiene_Why_How_and_When_Brochure.pdf);

Soule BM. The right way to wash your hands [website]. Water Quality and Health Council; 2016 (https://waterandhealth. org/disinfect/wash-hands/).

Layout and design: Imre Sebestyén/Unit Graphics



Previous publications on WASH in schools



Prioritizing pupils' education, health and well-being. Water, sanitation and hygiene in schools in the pan-European region (2016)

http://www.euro.who.int/en/publications/abstracts/prioritizing-pupilseducation,-health-and-well-being.-water,-sanitation-and-hygiene-inschools-in-the-pan-european-region-2016

By underlining how inadequate WASH in schools compromises pupils' education, health and well-being, this publication advocates for policy-makers of all involved sectors to prioritize this in the context of the 1999 Protocol on Water and Health, incrementally realizing the aspirations of the 2030 Agenda for Sustainable Development and the Parma Declaration.



The situation of water, sanitation and hygiene in schools in the pan-European region (2016)

http://www.euro.who.int/en/publications/abstracts/situation-ofwater,-sanitation-and-hygiene-in-schools-in-the-pan-europeanregion-the-2016

This report provides evidence and examples in support of Member States' deliberations on advancing the agenda for universal access to WASH in schools. It aims to inform future priority activities under the 1999 Protocol on Water and Health's programme of work for 2017–2019 and to support the Parties to the Protocol in informed target-setting and the development of efficient and focused strategies. The findings of the report will also be useful for other stakeholders committed to and working on improving WASH in schools as a fundamental objective to protect children's health and to ensure basic human rights.



Surveillance of water, sanitation and hygiene in schools: a practical tool

http://www.euro.who.int/en/publications/abstracts/surveillanceof-water,-sanitation-and-hygiene-in-schools.-a-practicaltool-2019

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. 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. Water, sanitation and hygiene (WASH) are fundamental child and human rights. Children's success at school is greatly supported by a safe school environment. Adequate WASH in schools plays a fundamental role in ensuring high-quality education and promoting children's cognitive performance and life skills, including health and health literacy.

This information package focuses on a basic provision for a healthy learning environment: safe and adequate WASH. It provides information about the precious benefits of high-quality WASH conditions and outlines how staff, alongside the pupils and the entire community, can contribute to deliver improvements to WASH in schools. It provides guidance and support to address common problems, along with practical solutions, tips and ready-to-use templates.

To create WASH-friendly and health-promoting schools, common problems beyond the provision of proper WASH infrastructure – such as toilets and taps – need to be addressed. To this end, efforts need to ensure proper operation and maintenance, supportive school rules and WASH education, and should tackle persisting taboos, such as talking about toilet use and menstrual hygiene matters. This information package will help schools strengthen health education and implement whole-school policies that promote the health, well-being and dignity of pupils and school staff, making every school a health-promoting school.



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