

Prioritizing pupils' education, health and well-being

Water, sanitation and hygiene in schools
in the pan-European region



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Rights to education and to water and sanitation are important milestones for modern society. For all children, a healthy learning environment is a prerequisite for a decent life in the 21st century. The provision of easy access to safe and sustainable water, sanitation and hygiene (WASH) services in all child-care settings is vital for children's best health, well-being and learning. There is no good learning if there is no good health and there is no good health without good WASH.

It is an unfortunate reality that a considerable proportion of children in the pan-European region attend schools which do not provide WASH services that meet pupils' needs. A lack of adequate toilets, toilet avoidance, dehydration, poor hand hygiene and inadequate provisions for menstrual hygiene management are common phenomena across the region.

There is good policy momentum for tackling the challenges related to WASH in schools. The 2030 Agenda for Sustainable Development aspires to reach universal and equitable access to safe WASH services and to create education facilities that provide safe learning environments for all. Attainment of healthy school environments for all children in the pan-European region is a core pillar of the 2010 Parma Declaration on Environment and Health.

Zsuzsanna Jakab

WHO Regional Director for Europe

Improvement of WASH in schools requires leadership by the education sector, as well as a whole-of-society approach in which all concerned sectors (e.g. education, health, water, environment and finance) work in partnership with each other and with nongovernmental actors, including civil society.

As the primary pan-European policy instrument in the WASH domain, the Protocol on Water and Health provides a practical tool to facilitate the development of integrated policies and targets to achieve universal access to WASH in educational settings.

This publication aims to highlight the evidence, challenges and benefits around WASH in schools in the pan-European region. It is also intended to inspire action towards progressive improvement by capitalizing on the opportunities provided by the Protocol on Water and Health – as a platform for partnership and cooperation across all concerned sectors.

Pupils' rights and dignity are protected by the provision of safe learning environments. This includes universal access to WASH in all schools. Implementation of WASH services in schools in the region is achievable. Let us act on this – for the children of today and tomorrow.

Christian Friis Bach

Executive Secretary
United Nations Economic Commission for Europe

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Executive summary



The good health, well-being, education and dignity of schoolchildren cannot be guaranteed without access to adequate water, sanitation and hygiene (WASH) in schools.

It is an unfortunate reality that a considerable proportion of children in the pan-European region spend their days in schools that do not provide even basic WASH services. For example, in the Caucasus and central Asia 30% of schools do not provide adequate toilets and 37% of schools do not have access to adequate water supplies. Though access to usable WASH facilities differs throughout the region, toilet avoidance, poor hand hygiene practices and dehydration are common among pupils across all these countries, leading to negative health and educational outcomes.

Every school should be a health-promoting location for learning and working. Attainment of healthy school environments for all children in the pan-European region is a core pillar of the 2010 Parma Declaration on Environment and Health. All countries of the region have committed to provide all child-care centres, kindergartens and schools with safe drinking-water and sanitation and to revitalize hygiene practices by 2020.

The impact of inadequate WASH in schools transcends sector boundaries. Health, education, nutrition and WASH are closely associated and complementary (see Box 1). This is well reflected in the European health policy framework Health 2020, which emphasizes the need for enhanced collaboration and joint investment between health and other policy sectors, such as education.

Clearly underpinned by the human rights to water and sanitation and to education, the 2030 Agenda for Sustainable Development aspires to reach universal and equitable access to safe WASH

Box 1. WASH in schools: a matter of health, well-being and education

Children who drink regularly in school stay hydrated and have better cognitive performance.

Functional and clean school toilets contribute to well-being and concentration as students are less likely to hold back toilet needs.

Good hand hygiene in schools helps to keep children healthy and in attendance.

Schools that strive to provide equal learning opportunities for all boys and girls have provisions for menstrual hygiene management and facilities accessible for children living with a disability.

services and create educational facilities that provide safe learning environments for all.

National policies on WASH in schools and standards are in place in the majority of countries in the pan-European region, yet common bottlenecks arise from a lack of regular monitoring, local enforcement and financing. Improvements in WASH in schools require neither cutting edge science nor, in most circumstances, large additional resources or skills. Rather, they result from better management and improved collaboration between stakeholders. More children are kept away from using school toilets by a lack of privacy, cleanliness and supplies (e.g. toilet paper, soap, bins for menstrual hygiene products) rather than the absence of toilets. Recurrent costs of routine maintenance are frequently overlooked in existing budgets so reliable financial allocations are needed for cleaning and the provision of consumables and durable goods.

The 1999 Protocol on Water and Health is the primary policy instrument in the WASH domain in the pan-European region, aiming to ensure access to drinking-water and sanitation for everyone – including children in schools. The Protocol supports countries seeking to translate and implement global and regional policy ambitions into clear national or local targets and action plans. As a progressive tool for developing integrated policies on water management, sanitation and health, the Protocol provides a platform to work in partnership with all concerned sectors, including education.

Countries can specifically address WASH services in schools when setting national or local targets under the Protocol, but these should focus on more than building new or refurbishing existing infrastructure. Access to safe and sustainable WASH in schools for all students can only be attained by taking account of pupils' perspectives and all (including recurrent) costs. Good targets are underpinned by national standards and should be accompanied by routine surveillance.

Progress towards universal access to WASH services in schools, and realization of children's rights, will vary across the region depending on each country's priorities and available resources. Progressive realization implies that levels of service can increase in a stepwise fashion – incremental improvements can achieve a basic level of WASH even when budgets are constrained, and further upgrades may follow over time.

The cross-sectoral nature of the action requires strong coordination and cooperation between the education, environmental health and finance sectors, among others. By underlining how inadequate WASH in schools compromise pupils' education, health and well-being, this publication advocates for policy-makers of all involved sectors to prioritize this in the context of the Protocol, incrementally realizing the aspirations of the 2030 Agenda for Sustainable Development and the Parma Declaration on Environment and Health.

Key messages for policy-makers

1. Underpinned by the human rights to water and sanitation and to education, WASH in schools is a precondition for the health, well-being, education and dignity of schoolchildren. Governments should take progressive action to ensure realization of these rights. The Parma Declaration on Environment and Health and the 2030 Agenda for Sustainable Development provide strong impetus to address the challenges related to provision of safe and sustainable WASH in schools in the pan-European region.
2. Improvement of WASH in schools requires leadership from the education sector in close coordination and cooperation with all relevant sectors, especially environmental health and finance.
3. Provision of adequate WASH services in schools is essential for maximizing educational outcomes and attaining lifelong learning skills. Students need to be listened to and proactively engaged if there are to be reductions in school toilet avoidance and improvements in hygiene behaviours.
4. National and local targets on WASH in schools set under the Protocol on Water and Health can drive stepwise improvements. All countries merit targets that aim at improving hygiene practices, reducing toilet avoidance, improving hydration practices, ensuring proper menstrual hygiene management and (eventually) ensuring accessible, safe and sustainable WASH services in schools.
5. Achievement of high levels of hygiene practices and functional WASH facilities in schools requires governments to plan and allocate sustained budgets reflecting all the day-to-day costs of operation, cleaning, maintenance and hygiene promotion. Routine surveillance is required to obtain an accurate picture of discrepancies between standards and the reality in schools.



Challenges

1

Key messages

Water, sanitation and hygiene (WASH) conditions in schools across the pan-European region are diverse and uneven, yet all countries face challenges in the creation of healthy learning spaces that ensure dignity, health and well-being.

Lack of privacy and cleanliness in school toilets; absence of soap for handwashing and bins for disposal of menstrual hygiene products; and poor hydration habits are examples of common problems in schools across the pan-European region. In some parts of the region, a large proportion of schools provide no water, sanitation or hygiene facilities.

Challenges related to WASH in schools in the pan-European region¹ are diverse. These include schools lacking any access to drinking-water and/or toilets as well as schools providing toilets that do not meet pupils' privacy and cleanliness needs.

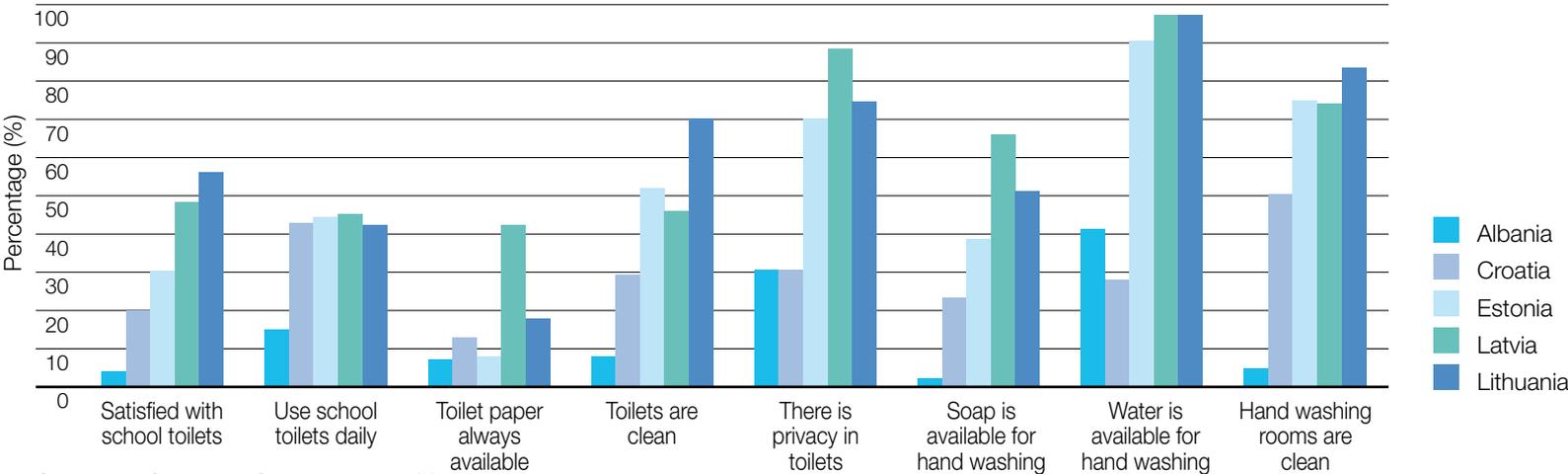
A growing number of countries regularly monitor compliance with national standards on WASH in schools and track progress. Yet unlike the standardized monitoring of access to water and sanitation in households, the information available for schools often provides an incomplete picture and cannot be compared easily across countries because definitions, indicators and data sources are not harmonized (1).

Recent efforts to better acknowledge pupils' perceptions have helped to provide a more detailed picture on the actual conditions of WASH in schools. A recent survey undertaken by the WHO Regional Office for Europe in five countries in the region shows not only the degree of pupil dissatisfaction with school toilets but also the large differences between countries (see Fig.1).

Analysis of available evidence related to WASH in schools reveals clearly that, although problems may vary by nature and by magnitude across the pan-European region, every country experiences challenges, regardless of economic status. Table 1 provides an overview of the range of issues that emerge from the available information.

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

Fig. 1. Pupils' satisfaction with sanitation facilities in urban schools



Source: WHO Regional Office for Europe (2).



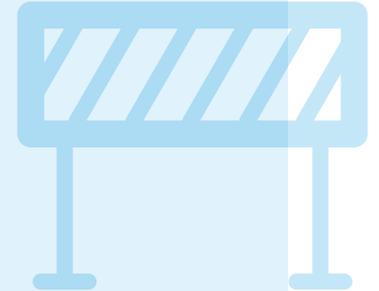
Table 1. Overview of WASH in school conditions in pan-European region

Availability

- **Central Asia and Caucasus^a (4)**
Proportion of schools with adequate water supplies: 63%
Proportion of schools with adequate sanitation: 70%
- **Eastern and south-eastern Europe^b (4)**
Proportion of schools with adequate water supplies: 89%
Proportion of schools with adequate toilets: 90%
- **Western and northern Europe^c**
Universal or near-universal availability of water supplies and toilets in schools

Estimates are for 2013. They present unweighted averages from the annex of UNICEF (4) for the countries in each subregion. The meaning of adequate varies between countries from the presence of infrastructure to consideration of availability and usability. Urban–rural disparities are not shown by these averages.

a: Based on data from Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan; b: Based on data from Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, Republic of Moldova, Romania, Serbia and Ukraine; c: Based on data from France, Hungary, Italy and United Kingdom.



Accessibility

- There is evidence showing that **pupils living with a disability are less likely to have access to a school toilet**. Limited accessibility can range from 10% of schools in high-income countries to 47% in middle-income countries.
- **Facilities are available but not accessible**. There are examples in which far too many students have to share a single toilet (e.g. from 55 pupils up to 400 pupils), in both high- and low-income countries. Facilities in some schools may be located outside the building and therefore have reduced accessibility, especially in winter. Cases of discontinuous drinking-water supplies have also been reported, particularly in low- and middle-income countries. Access to drinking-water may also be impaired if there is no water point outside toilets.

Table 1 contd

Quality and safety

- **Water quality is not guaranteed.** Although the type of drinking-water source is often known, there is scarce information on actual water quality in schools across the region. Evidence from a few countries indicates that compliance with respective national water quality standards is not always guaranteed.
- In some countries **inadequate ventilation** is reported to cause mould in sanitation facilities.

Hygiene and health promotion

- Hand hygiene practices may be compromised if **basins are located too far from toilets**, as reported in several countries.
- **Hydration practices in schools may cause dehydration.** Despite the availability of continuous water supplies in schools, there is evidence that students easily become dehydrated as a result of lack of water outside toilets and/or restrictive school policies on drinking water in classrooms, among other factors.
- **Hygiene education** is not a standard element of curricula in various parts of the region and may not be comprehensive on handwashing practices and menstrual hygiene management.
- **Presence of soap is not guaranteed.** There is evidence that the absence of soap at handwashing stations near school toilets is a recurrent problem in all countries, irrespective of economic status. The presence of soap can range from over 80% of schools in high-income countries to close to none in some low- and middle-income countries.
- **Presence of toilet paper is not guaranteed.** There is evidence that the absence of toilet paper is common in all countries of the pan-European region. The presence of toilet paper in school toilets can range from nearly zero in low- and middle-income countries to over 90% in high-income countries. However, reports of students and nongovernmental organizations in high-income countries indicate that the percentages for consistent availability of toilet paper can be significantly lower (e.g. in France, Italy, United Kingdom).
- **Facilities for disposal of menstrual hygiene products may be lacking.** There is a dearth of information on this. Limited evidence suggests irregular (24–94%) presence of sanitary bins inside girls' school toilets in high-income countries. It is assumed that this is lower in low- and middle-income countries.

Acceptability, dignity and privacy

- **Toilet avoidance is common.** Reports from France, Sweden and the United Kingdom show similar experiences. Considerable proportions of pupils frequently report never urinating or defecating during school hours (see Table 2).

Table 2. Examples of studies showing avoidance of toilets by schoolchildren

Study	General avoidance (% of pupils)	Defecation avoidance (% of pupils)
France (5)	34	85
Sweden (6)	16	63
UK (England) (7)	N/A	65
UK (Scotland) (8)	46	10
UK (Wales) (9)	34	26

The reasons why pupils deem toilets to be unacceptable relate to lack of privacy, dignity and cleanliness; supervision; availability of consumables; bullying; embarrassment; and the obligation to ask for permission to use toilets.

- **Privacy may be lacking.** Lack of gender-separated facilities and/or missing or inadequate doors and partitioning are observed in both high- and low-income countries.
- **Cleanliness may be inadequate.** Facilities are often reported to be smelly and beneath pupils' hygiene standards, even where cleaning is conducted daily.
- **Maintenance may not be carried out regularly.** Facility acceptability is compromised by damaged toilet seats, doors, handwashing facilities and pipes.
- **Inadequate temperature and illumination may prevent toilet use.** Freezing water, unacceptable room temperature and lack of illumination are other factors hindering acceptability and use of WASH facilities in some countries of the region, especially during winter.

Source: WHO Regional Office for Europe (3), unless otherwise indicated.



Human rights and policy context

2

Key messages

WASH in schools is strongly underpinned by human rights and is a precondition for the health, well-being, learning and dignity of schoolchildren. Governments should take progressive action to ensure and monitor realization of these rights.

The 2030 Agenda for Sustainable Development and the Parma Declaration on Environment and Health provide clear impetus for improving WASH in schools for better health and educational outcomes.

In the European child and adolescent health strategy 2015–2020: investing in children, governments are urged to ensure that children and adolescents have access to a regular supply of safe drinking-water, good sanitation and hygiene facilities in homes, preschools and schools.

Policies and interventions addressing WASH in schools are strongly underpinned by the human rights to water and sanitation. Ensuring equitable access to safe and sustainable WASH services in schools is also essential to

fulfill the mandate of the Convention on the Rights of the Child and builds a foundation of health and learning for all children (see Boxes 2 and 3).

Box 2. The human rights to water and sanitation

By resolution 64/292 of 28 July 2010, the United Nations General Assembly recognized the human right to safe and clean drinking-water and sanitation (10). In resolution 70/169 of 17 December 2015, the Assembly recognized that water and sanitation are distinct human rights (11):

The human right to safe drinking-water entitles everyone, without discrimination, to have access to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic use.

The human right to sanitation entitles everyone, without discrimination, to have physical and affordable access to sanitation, in all spheres of life, that is safe, hygienic, secure, socially and culturally acceptable and that provides privacy and ensures dignity.

Box 3. The right of the child to health and education

Adopted by the United Nations General Assembly in resolution 44/2520 of 20 November 1989 (12), the Convention on the Rights of the Child (CRC) spells out governments' obligations to facilitate pupils' right to learn in a safe and secure environment.

Article 24 of the CRC requires that: *States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health.*

To achieve this, amongst others, they commit to take appropriate measures: *... to combat disease ... through the provision of ... clean drinking-water.*

And to: *... ensure that all segments of society ... are supported in the use of basic knowledge of ... hygiene and environmental sanitation.*

General Comment No. 1 of 17 April 2001 on the CRC (13) emphasizes: *Children do not lose their human rights by virtue of passing through the school gates. ... education must be provided in a way that respects the inherent dignity of the child.*

This concludes that: *Every child has the right to receive an education of good quality which in turn requires a focus on the quality of the learning environment.*





The 2030 Agenda for Sustainable Development (14) sets new global goals and targets on health, education and WASH (see Box 4). Sustainable Development Goal 6 (SDG 6) on water and sanitation explicitly extends beyond the household level – targets 6.1 and 6.2 call for adequate, equitable and universal access. This implies that WASH facilities and services must be available not just at home but in all settings and places where people spend their time, including educational facilities such as schools and kindergartens. Target 4.a calls for “safe, non-violent, inclusive and effective learning environments for all” and explicitly addresses WASH in schools, with an associated indicator: “Percentage of schools with access to ... (e) basic drinking-water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities”.

In the WHO European Region, the Parma Declaration on Environment and Health adopted at the Fifth Ministerial Conference on Environment and Health in 2010 (15), aims at ensuring healthy and safe environments for all children. Through a series of regional priority goals, the Declaration explicitly addresses the school environment, including ensuring safe WASH services (see Box 5); safe environments in which children can walk and cycle to school; the nutritional quality of school meals; and indoor air quality, among others.

Health 2020 (16) is the WHO policy framework for health and well-being in Europe. This defines the key strategic directions for health policy development, particularly emphasizing the need to take a life-course approach, tackle inequalities, promote effective intersectoral action for health and enable more representative participation.

Box 4. Health, education and WASH-related goals and targets in the 2030 Agenda for Sustainable Development

Goal 3. Ensure healthy lives and promote well-being for all at all ages

Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.

Target 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Target 4.a: Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all.

Goal 6. Ensure availability and sustainable management of water and sanitation for all

Target 6.1: By 2030, achieve universal and equitable access to safe and affordable drinking-water for all.

Target 6.2: By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.

Box 5. Parma Declaration on Environment and Health**Regional Priority Goal 1: Ensuring public health by improving access to safe water and sanitation**

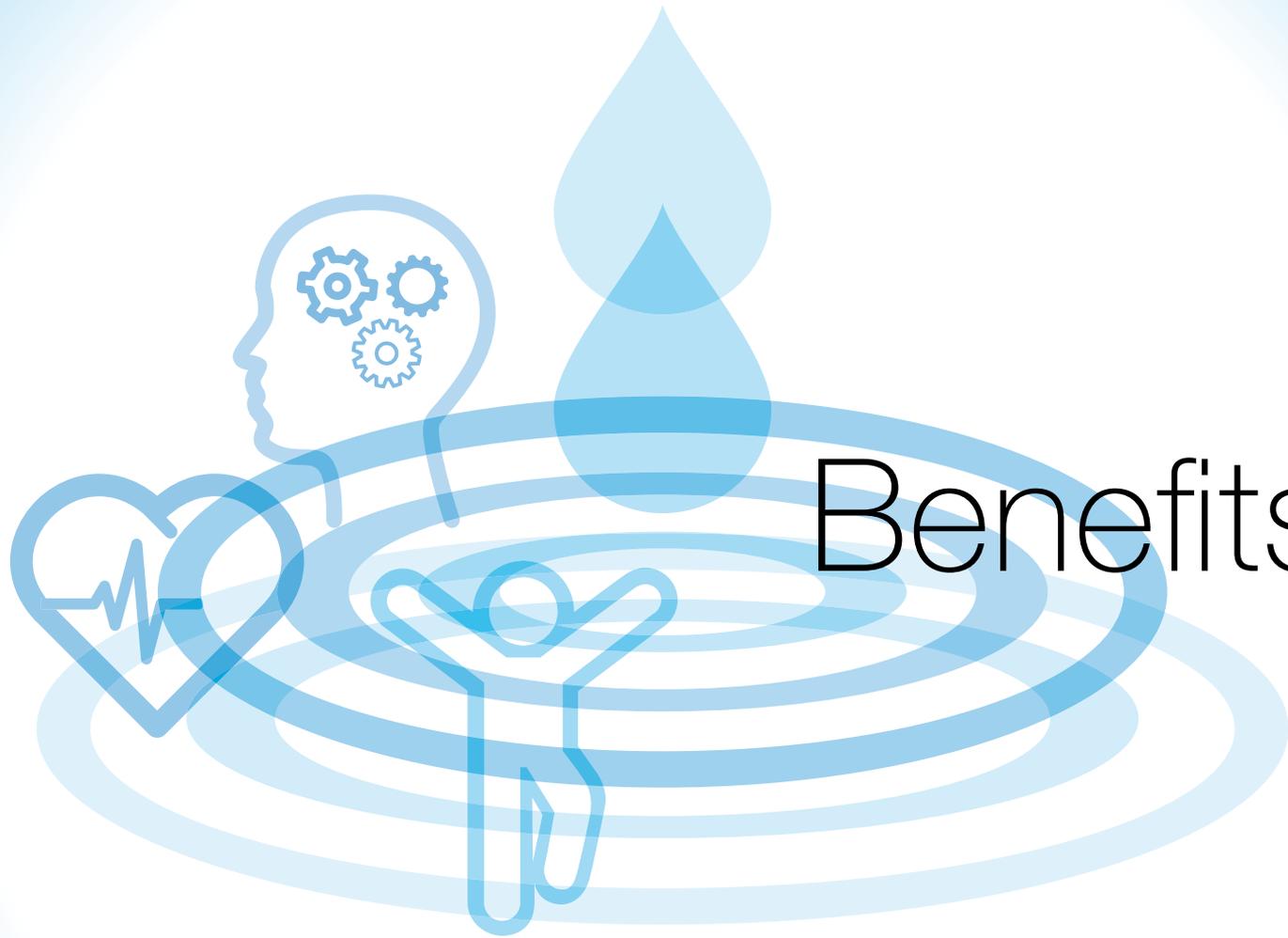
- (i) We will take advantage of the approach and provisions of the Protocol on Water and Health as a rationale and progressive tool to develop integrated policies on water resource management and health, addressing the challenges to safe water services posed by climate change, with clear targets and objectives, working in partnership with all concerned sectors.
- (ii) We will strive to provide each child with access to safe water and sanitation in homes, child care centres, kindergartens, schools, health care institutions and public recreational water settings by 2020, and to revitalize hygiene practices.

Based on the principles of Health 2020, the European child and adolescent health strategy 2015–2020 (17) aims to enable children and adolescents to realize their full potential for health, development and well-being. Acknowledging that environmental determinants strongly

affect child and adolescent health, the strategy urges governments and policy-makers to ensure that children and adolescents have access to a regular supply of safe drinking-water, good sanitation and hygiene facilities in homes, preschools and schools.

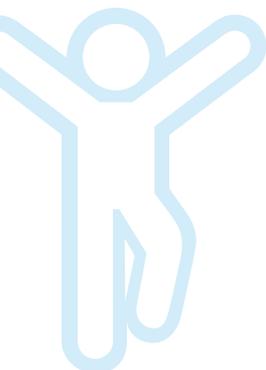






Benefits

3



Key messages

Improvement of WASH in schools contributes to a better learning environment and brings tangible benefits in terms of education, health, well-being and dignity. For example:

- children who drink regularly in school to stay hydrated have better cognitive performance;
- functional and clean school toilets contribute to well-being and concentration;
- good hand hygiene in schools helps to keep children healthy and in attendance;
- schools that strive to provide equal learning opportunities for all boys and girls have provisions for menstrual hygiene management and facilities accessible for children living with a disability.

The past ten years have seen a surge in peer-reviewed research on the benefits of improving WASH in educational settings. The majority of research originates from low- and middle-income countries outside the pan-European region but many findings and evidence are generally valid. This section will discuss the benefits of improving WASH in schools while concentrating wherever possible on research findings from within the pan-European region.

Each of the individual dimensions of WASH introduced below contributes to a more comprehensive perspective of a health-promoting school as described in Box 6.

3.1 Hand hygiene

Handwashing with soap is the most effective way to reduce respiratory and gastrointestinal infections.

Studies conducted in high-income settings outside the pan-European region – the United States of America – demonstrated that handwashing in primary schools and day-care centres reduces the incidence of diarrhoea by an average of 30% (19) and the incidence of respiratory infections in schools by 16% (20). Studies focusing on

Box 6. Health-promoting school

WASH benefits contribute to a comprehensive perspective of a health-promoting school. An integrated approach that promotes healthy lifestyles addresses improved hand hygiene and menstrual hygiene management. Similarly, in the context of preventing noncommunicable disease, schools can advocate for drinking-water instead of high-energy beverages through the provision of fresh and safe drinking-water and clean drinking cups. A whole-of-school approach also aims at strengthening the link between the school and students' families.

The Schools for Health in Europe (SHE) network promotes the health-promoting school – “a school that implements a structured and systematic plan for the health and well-being of all pupils and of teaching and non-teaching staff” (18). The network is represented in 45 countries in the pan-European region by SHE national and regional coordinators who are recognized by their ministries of health and ministries of education.

absenteeism caused by such illnesses in high-income settings further show that the number of days lost as a result of these diseases can fall by around 25% following hand hygiene interventions (21–24). Handwashing promotion initiatives in schools in middle-income countries outside of the region have generated similar results (25–27).

Various studies conducted in the pan-European region also report a beneficial effect of hand hygiene interventions in schools, with significant reductions in absenteeism due to infections (28–32). For example, in Denmark, washing hands with soap three times a day – prior to the first lesson, before lunch and before going home – reduced absenteeism due to infections by about 30% (31). In Spain, an intensive hand hygiene intervention also reduced absenteeism by about 37% (28).

Notwithstanding these results, schools can find it challenging to encourage effective handwashing prior to meals and after toilet use. In addition to providing well-stocked handwashing stations near to toilets, an effective education and promotion strategy is vital to increase the uptake of this critical lifelong skill.

3.2 Safe water supply

Pupils easily become dehydrated when their fluid intake during the school day is insufficient. This can occur when pupils simply consume too little drinking-water or when no water source is available in the school.

Accumulating evidence supports the notion that hydration status affects cognitive ability and mood, especially in schoolchildren (33). For example, pupils in Italy and the



United Kingdom were found to be dehydrated as the result of low levels of fluid intake (34, 35). The evidence demonstrates that short-term memory and vigour are twice as good in hydrated school pupils compared to dehydrated school pupils (34). Schools in a middle-income country outside the pan-European region showed that the introduction of drinking-water inside the classroom can result in a 40% lower absenteeism rate (36).

The provision of drinking-water can thus improve not only a child's general well-being but also learning as pupils are better hydrated. However, the extent to which pupils will actually consume this water is largely determined by school rules on water consumption during the school day. Studies documented a statistically significant increase in water consumption when school pupils were explicitly allowed free access to water in school (35, 37, 38), and in the classroom in particular.

Proactive promotion of drinking-water consumption throughout the school day can also become an integral measure in discouraging the consumption of sugary drinks as part of a healthy lifestyle and thus could contribute to reducing obesity in school-aged children. Changing the rules to allow for consumption of drinking-water during the school day is a simple and inexpensive measure. The provision of safe drinking-water outside school bathrooms (e.g. through taps or water fountains in corridors or school yards) makes drinking water more pleasant and convenient for students (37, 38). Where availability cannot be ensured on school premises, children should be encouraged to bring drinking-water to school.



3.3 Accessibility and acceptability of toilets

Where pupils do not have access to a toilet or avoid going to the toilet, this is linked with a decreased ability to concentrate (39) and increased risks of developing functional bladder and bowel disturbances (e.g.

constipation or incontinence) and urinary infections (6, 41, 42). Inadequate school sanitation, together with poor hygiene behaviours, also contributes to infections with soil-transmitted helminths (see Box 7). Toilet avoidance can also result in reduced fluid intake (42).

Box 7. Soil-transmitted helminthiases – an unresolved issue

Commonly called intestinal worms, soil-transmitted helminths continue to cause a significant health burden, particularly among children. WHO estimates that 4 million schoolchildren in the pan-European region are affected by soil-transmitted helminthiases, with the highest prevalence in countries of central Asia and the Caucasus (43). Studies from Albania, Tajikistan and Turkey provide examples of such infections in schoolchildren (44–46).

The physical, nutritional and cognitive impairments resulting from soil-transmitted helminthiases impact on children's health, school attendance and educational achievement (47). The majority of cases are attributable to inadequate sanitation and hygiene (44), therefore improved WASH (especially sanitation) is a key intervention to break the infectious cycle of helminths and to avoid health consequences such as malnutrition; anaemia; impaired immunological response undermining the effects of vaccination; and, in children with more severe infections, stunting of physical growth and slowing of mental development (44, 45, 48).

The newly adopted WHO global strategy on WASH for accelerating and sustaining progress on neglected tropical diseases for 2015–2020 aims at intensification of efforts to control and eliminate soil-transmitted helminths in endemic areas (49).

Even when school toilets are available, toilet avoidance is common across the pan-European region (see Chapter 1 and Case studies 1 and 2). Enhanced privacy is a key element in reducing toilet avoidance: installing toilet

doors, repairing locks, improving doors that provide insufficient seclusion, and addressing bullying can all mitigate problems related to security and privacy in school toilets (39, 40, 42, 50). Regular cleaning and maintenance





Case study 1. Pupils' perceptions of toilet facilities

In 2015, the European Environment and Health Youth Coalition (EEHYC) conducted a survey on hygiene knowledge, attitude and practice in Lithuania, the Republic of Moldova and Romania (52). More than 2000 students aged between 12 and 19 years were included in the study.

The results show that less than 30% of respondents use their school toilets regularly. About half of the respondents use them sometimes or only when absolutely necessary. The majority of students (around 70%) highlighted unpleasant smells in toilet rooms as a major reason for dissatisfaction, followed by lack of cleanliness, absence of hand and menstrual hygiene equipment and lack of privacy.

of handwashing facilities and toilets and provision of consumables (e.g. soap, toilet paper, hand-drying towels) and durable goods (e.g. bins and brushes) are essential for reducing toilet avoidance (40–42). The establishment of school rules that encourage regular voiding can be an additional inexpensive measure which is essential for the prevention of urinary infections and constipation (51). Consulting pupils about their behaviours and attitudes towards toilet facilities can generate important insights and inform sustainable improvements.

Case study 2. Toilet avoidance in France

A recent study of girls in a middle-school in France (53) shows that:

- 10% regularly experience bladder leakage;
- 33% never visit the school toilets because they are considered dirty;
- 70% never feel secure in the toilet due to a lack of privacy;
- visiting the toilet is hardly ever allowed during class;
- 43% report abdominal pain as a result of not going to the toilet causing discomfort and impacting on their ability to concentrate and learn at school.

3.4 Menstrual hygiene management

Menstrual hygiene management is a matter concerning pupils' dignity that transcends the issue of toilet acceptability. Often identified as a key aspect of inequity in school participation, it is a complex matter involving social norms, taboos, misunderstandings, sexuality and coming-of-age. It also has a technical dimension which includes the availability of functional toilet doors with locks, disposal facilities and menstrual hygiene products in schools (54).

Girls experience menarche at different ages, some before they start secondary school. Girls' school toilet avoidance or even absence from school during menstruation can

have both physical (e.g. pain) and psychological causes (e.g. feelings of fear, confusion and shame in class) (55). It is particularly beneficial for girls' well-being if the school management acts on menstrual hygiene management by ensuring that toilets are lockable, single-sex and private; are equipped with a closed bin for used menstrual hygiene products; and have water and soap available for washing.

There is little current information on education, support and disposal facilities for menstrual hygiene management in schools in the pan-European region. Available evidence suggests that in high-income countries the presence of sanitary bins inside girls' school toilets is reported to be irregular, ranging from 24% (56) to 94% (57). Furthermore, if menstrual hygiene products are available, girls often have to ask an adult for them (58).

Menstrual hygiene management is not just about the biological aspects of the menstrual period but also the need to address the surrounding societal beliefs and taboos. Sufficient knowledge, guidance and support for girls in preparation for and during menstruation form an integral part of WASH in school programming.

Postpubescent girls and female staff cannot be expected to attend school comfortably when required to manage their personal hygiene without suitable provision of privacy, water, soap and facilities for safe disposal of menstrual materials. The fundamental premise of WASH in school requires menstrual hygiene management to be embedded in education curricula and facility planning and management. An example on how to engage students on menstrual hygiene management and related WASH issues is presented in Box 8.

Box 8. Peer-to-peer education on hygiene in schools

Recognizing that young people are at the core of action on WASH, the EEHYC has been working on engaging young people in daily handwashing promotion, menstrual hygiene education and raising awareness about the importance of safe functioning WASH facilities in schools.

Under the framework of the Protocol on Water and Health, the EEHYC developed HYGIENE MUCH, a youth-friendly brochure which addresses students of all ages, aiming to encourage good hygiene practices by providing health facts, memorable tips and tricks presented in a humorous way. These include a discussion on different problems that young people face when using WASH facilities in schools. Special attention has been given to menstrual hygiene management: the chapter entitled "Menstruation – full disclosure!" identifies the importance of breaking taboos around this topic and the need for adequate menstrual hygiene education together with good access to menstrual materials in schools.

The brochure is available in English, German and Russian (www.eehyc.org).





Underlying issues

4

Key messages

Improvement of WASH in schools requires a whole-of-society approach. Leadership from the education sector is as important as close collaboration with environmental health, finance and other relevant sectors.

Attainment of high levels of hygiene practices and functional facilities in schools requires governments to plan and allocate budgets reflecting the actual costs of construction, operation, maintenance and hygiene promotion.

Routine surveillance is required to obtain an accurate picture of the discrepancy between standards and the reality in schools.

Reduction of school-toilet avoidance and improved hygiene behaviours require consultation with, and engagement of, students.

The need for joint investment between health and education is underlined in the European health policy framework, Health 2020. The multisectoral nature of WASH in schools

requires a whole-of-society approach – a concerted effort from all relevant actors (see Box 9). Leadership from the education sector is as essential as strong cooperation

Box 9. A whole-of-society approach

Joint investment and action between sectors are well-known success factors and there are many examples of approaches to strengthen cooperation, commitment and implementation (59). Strengthening of joint work between health and education is essential for successful implementation of effective WASH in schools. In turn, the success of such joint working is highly dependent on investment in the sectors' capacity to work together (60), resulting in co-benefits for both health and education. A whole-of-society approach places additional emphasis on the roles of the private sector and civil society as well as communities and individuals, and works through trust-building among various actors (61). The inclusion of communities and the strengthening of pupil-centredness not only ensures that the services are appropriate, but also empowers these stakeholders by strengthening their ownership and (eventually) their influence on decisions that affect them and their environment (62). Empowered, resilient communities and pupils who are able to engage and to express their needs enable better design and sustainability of WASH in schools.

with relevant sectors such as environmental health and finance. In this role, the education sector can reduce the gap between policy ambitions and actual coverage of WASH services in schools; improve management of the facilities; secure adequate financing; and promote consideration of pupils' perceptions. This chapter highlights a number of examples in which the education sector takes charge of WASH in schools.

4.1 High standards, low compliance

Although schools in the pan-European region face diverse WASH challenges, the underlying causes for the suboptimal situation in many countries show many similarities. Analysis of the enabling environment in a large set of countries shows a common set of shortcomings (summarized in Table 3). Often, these exist despite comprehensive national policies and standards on WASH in schools, with national requirements that are frequently in line with the WHO standards for schools (see Box 10). In contrast, concrete targets, implementation plans and routine surveillance are much less common. The governmental budget available for the sector is a strong limiting factor – for infrastructure and particularly for routine maintenance, consumables and durable goods.

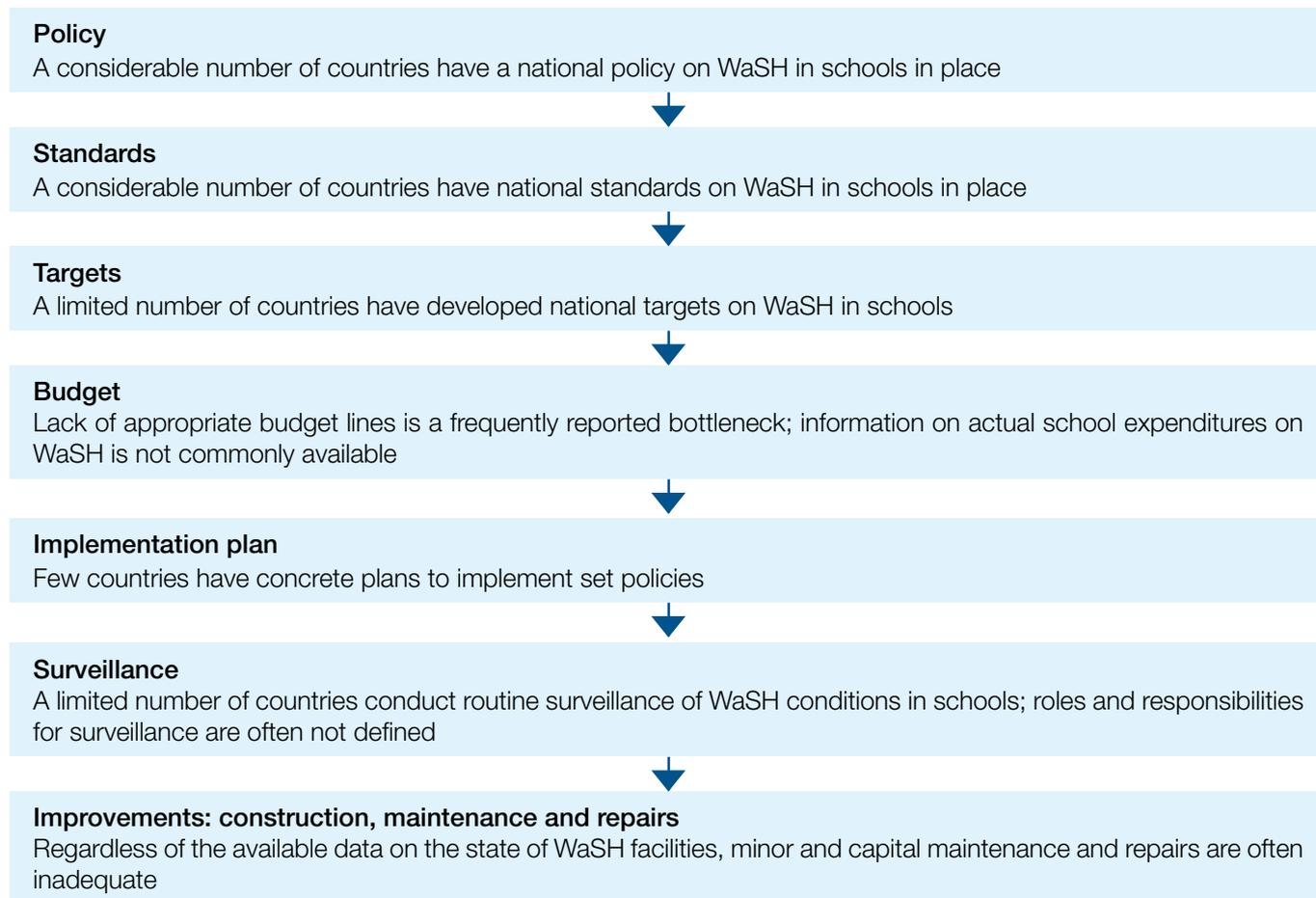
Box 10. WHO WASH standards for schools in low-cost settings

In 2009, WHO published a set of minimum standards for WASH in schools – primarily for low-income settings (63), but applicable and relevant in all settings. They are intended to be used as a basis for setting standards at national level.

The publication provides practical guidelines in several WASH domains, including water quality; water quantity; water facilities and access to water; hygiene promotion; toilets; control of vector-borne disease; cleaning and waste disposal; and food storage and preparation. These guidelines are accompanied by guidance notes that advise on applying each guideline, as well as indicators that can be used as benchmark values for assessing existing situations, planning new facilities or improving existing ones, monitoring progress and monitoring ongoing maintenance of facilities.

One of the most recognized indicators in the sector originates from these standards: “Sufficient toilets are available – one per 25 girls and one for female staff; one toilet plus one urinal (or 50 cm of urinal wall) per 50 boys, and one for male staff.”

Table 3. Bottlenecks in WASH in schools in the pan-European region



Source: WHO Regional Office for Europe (3).

Routine surveillance is required to obtain an accurate picture of the discrepancy between policies and the reality on the ground. It is not possible to monitor compliance against national standards and track progress towards achievement of national targets without vigilant surveillance in place. Hungary provides an example of a comprehensive surveillance system: routine inspection visits by public health officers are complemented by comprehensive one-shot surveys through which all WASH facilities in educational institutions are assessed (see Case study 3).

Case study 3. Regular surveys of all child-care institutions in Hungary

Regular surveys have been performed in all child-care institutions (e.g. nurseries, kindergartens, primary and secondary schools, family day care premises and play centres) in Hungary since 2001. Such surveys function as a rolling system in which the educational setting under investigation changes every year. Surveys are conducted by the local public health authorities with the coordination of the National Institute of Environmental Health, using a standardized questionnaire. Covering various aspects of the school environment (e.g. air quality, lighting, safety, heating) in addition to the WASH aspects, the in-depth surveys are complementary to the routine yearly surveillance conducted by the public health authorities, and aim to assess mid-term trends and needs.

4.2 Financial aspects of sustainability

Safe and sustainable WASH services in all schools can only be attained by taking account of the recurrent costs of all expenses, including the provision of soap, toilet paper and menstrual hygiene products as well as cleaning and maintenance.

Yet, improvement programmes in countries with large gaps in infrastructure coverage tend to focus on the construction of costly infrastructure. If sustained use of such infrastructure is not emphasized and budgeted for, these can easily become unhygienic, poorly maintained or dysfunctional WASH facilities.

*Everybody wants to build,
nobody wants to do the maintenance (64).*

There is a need to focus more attention on promoting facilities that students find appropriate and for which the operation and maintenance can be sustainably financed. Such an approach enables compliance with national standards to be achieved in a stepwise fashion: services are improved incrementally on the basis of the education system's financial reality. Box 11 provides an example of an approach aimed at financially sustainable solutions. The Ministry of Education's role in increasing the sustainability of WASH services in schools in Azerbaijan is presented in Case study 4.



Box 11. Cost-effective stepwise improvement approaches

The Three Star Approach (65) for WASH in schools is designed to improve the effectiveness of hygiene behaviour change programmes for children. This promotes a system of cost-effective hygiene measures in schools to which additional services can be added over time. Cautioning against overestimating the budgets available for the operation and maintenance of complex infrastructure, this approach recommends starting with simple and affordable hygiene practices (1 star). Subsequent improvements can be made in a stepwise fashion, working progressively towards compliance with the national WASH standards (3 stars). The guiding principle for interventions at all stages is “Keep it simple, scalable and sustainable”, enabling the approach to be expanded sustainably countrywide at low cost. For example, a single toilet which is used and properly maintained can be superior to toilet blocks that have fallen into disrepair and become unusable. Likewise, a school that makes water filters available can offer a more suitable temporary solution than upgrading the school water source.



Case study 4. Focusing on sustainability in Azerbaijan

A recent assessment in 197 schools revealed that many (particularly those in rural areas) lack any drinking-water or sanitation facilities, or have facilities that are inadequate in terms of quality, hygiene conditions and quantity (Parviz Yusifov, Ministry of Education Azerbaijan, personal communication, 2016). The assessment also indicated that the sustainability of the WASH facilities is a serious concern. Despite past investments in the renovation/building of secondary schools, there is no reliable information about WASH facilities in urban and rural areas. Consequently, the Ministry of Education identified WASH in schools as its top priority for 2016 and developed a plan for secondary schools comprising the following four objectives:

1. development of national WASH standards and norms
2. renovation or building of sanitary facilities in 30 schools
3. training of teachers and promotion among pupils
4. creation of proper monitoring at educational facilities.

Through cooperation with other partners, the Ministry aims to develop a legislative framework to ensure operation and maintenance. Future actions will also target the involvement of parents and other stakeholders in the creation of a monitoring system to assure sustainability of WASH facilities in schools. In addition, the Ministry will create a special budget line for regular funding of WASH in schools.

4.3 Acknowledging and integrating pupils' perspectives

Poor acceptability of school toilets is one of the most common problems in the pan-European region. Yet, students are rarely consulted about this and, without their input, it is unlikely that any significant reduction in toilet avoidance can be achieved. Security, privacy, dignity, comfort, shame and convenience are dimensions of toilet use on which many engineers and public health

surveillance staff need more user input and feedback. The creation of healthy learning environments for children requires the education sector to lead on advocating for a pupil-centred perspective which can lead to WASH solutions that meet pupils' needs.

Consultation with pupils should also be an integral part of ongoing public health surveillance activities as their experiences, attitudes and perceptions are critical to inform improvement actions that serve students' needs. Two national examples of surveillance approaches and

programmes are presented below. In France, pupils' perceptions have been solicited through the surveillance programme (see Case study 5); Scotland provides a

unique example of a large-scale student consultation and action initiative (Case study 6).

Case study 5. Surveying pupils' perspectives in primary and secondary schools in France

In France the National Observatory for the Accessibility and Security of School Buildings (*L'observatoire national de la sécurité et de l'accessibilité des établissements d'enseignement*, ONS) conducts annual surveys on the condition of school buildings and school equipment. The condition of the toilets in primary and secondary schools has been assessed through occasional thematic surveys. Participation in the survey has been voluntary, anonymous and based on self-reported data. Aside from questions targeting teachers and maintenance staff, the surveys give strong consideration to pupils' perceptions. In particular, the surveys address the reasons for toilet avoidance, thereby providing interesting examples of how to obtain insightful information on sensitive issues. Two surveys on school toilets were conducted: one targeting teachers and CM1 and CM2 (4th and 5th grade) pupils in primary schools in 2007 (66); the other targeting school surveillance staff, maintenance staff and pupils in secondary schools in 2013 (56).

On the basis of the surveys, the ONS has put forward various recommendations for improvement of standards on proper use of school toilets; reducing toilet avoidance; and related urinary troubles. One such recommendation is the use of door hangers providing advice for the prevention of bowel and bladder problems, as shown below (66).

MY TIPS FOR PEEING PROPERLY

If I'm a girl

- 1 I do not wait until the last moment;
- 2 I lower my underwear to my ankles;
- 3 I sit comfortably with my feet flat on the floor;
- 4 I spread my knees properly;
- 5 I relax, sing a song, take my time until the last drop;
- 6 I do not strain;
- 7 I wipe in the right direction – from front to back;
- 8 When finished I wash my hands.

Peeing, that can be learned too

Case study 6. Consulting with young people in Scotland

In 2010, Scotland's Commissioner for Children and Young People conducted a national consultation involving 74 059 Scottish children and young people. The issue of safe school toilets was raised repeatedly by children and young people when the Commissioner visited schools, youth clubs and care settings.

In a survey conducted under the same project, 2154 young people in 59 secondary schools were asked what they thought about their school toilets (8). The following key findings were drawn:

- only four in ten pupils say they use school toilets whenever they need to (41%);
- of pupils who have to seek permission to go to the toilet, 18% are rarely or never allowed to go;
- a significant number of pupils feel uncomfortable when asking for permission (especially girls);
- almost one third of pupils rate the school toilets as poor or very poor and the majority of pupils' report issues concerning locks, provision of hygiene consumables and overall cleanliness.

Approximately 100 pupils, staff and parents joined an expert working group to help and inform about the areas to prioritize in a guidance document aimed at improving school toilet provision and outlining a management strategy that caters for all children and young people in schools. The guidance is expected to be issued to all Scotland's local authority education departments by the end of 2016. The expert group consists of members from the Scottish Government, Scottish Youth Parliament and different nongovernmental organizations, with continuing involvement from children and young people and Scotland's Commissioner for Children and Young People. The guidance aims to improve the standards and qualities of school toilets in Scotland.





Protocol 5 on Water and Health: a progressive tool



Key messages

The Protocol on Water and Health presents the primary pan-European policy instrument in the water, sanitation and health domain. It provides a platform for partnership and cooperation across government sectors and with nongovernmental actors and civil society.

The Protocol aims to ensure access to drinking-water and sanitation for everyone, including children in schools. In this the Protocol is fully aligned with the 2030 Agenda for Sustainable Development and the Parma Declaration on Environment and Health.

The health and environment sectors have been the main initiators of the Protocol. Yet leadership from the education sector is crucial in the context of formulating strategies, targets and action plans on WASH in schools, as well as overseeing their implementation.

Setting national and local targets on WASH in schools under the Protocol can drive stepwise improvements.

All countries merit targets that, at their core, aim at improvement and maintenance of safe and sustainable WASH services in schools to reduce toilet avoidance and improve hydration practices, hand hygiene and menstrual hygiene management.

Adopted at the third Ministerial Conference on Environment and Health, London, 1999, the Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes (67) is the primary pan-European policy instrument in the water, sanitation and health domain. The Protocol's overall objective is to protect human health and well-being through sustainable water management and by preventing, controlling and reducing water-related disease. Achievement of universal and equitable access to water

and sanitation lies at the heart of the Protocol (see Table 4) and therefore provides a suitable instrument for improving WASH in schools.

As a tool to facilitate the development of integrated policies, the Protocol encourages Parties to work in partnership across all concerned sectors (including health, water, environment and education) and with nongovernmental actors, including civil society.

Table 4. Objectives and underlying principles of the Protocol on Water and Health that support WASH in schools

Premise

Ensuring human health and well-being is a fundamental premise of WASH in schools.

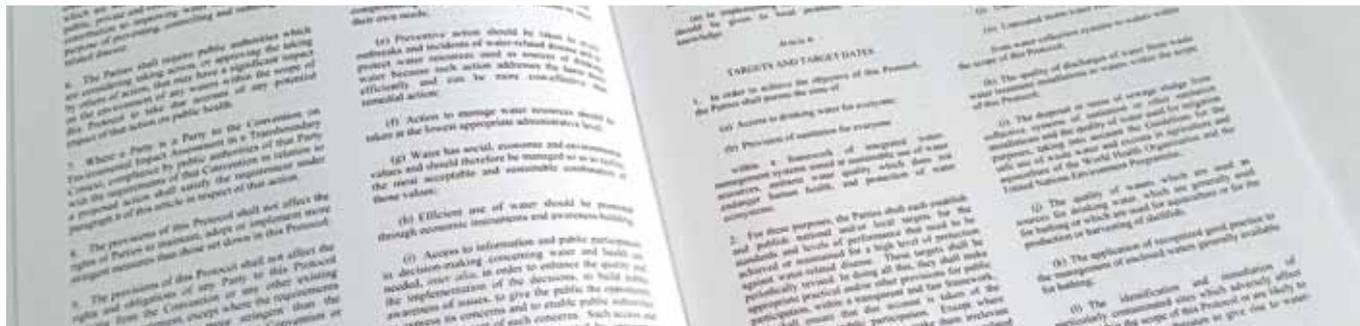
The objective of the Protocol is to promote the protection of human health and well-being (article 1).

Underlying principles

WASH in schools targets **universal access**: all schools should provide all pupils with basic WASH facilities. The Protocol's aim is the provision of access to drinking-water and sanitation for everyone (article 6, paragraph 1).

Inclusive, safe and sustainable WASH facilities in all schools ensure **equitable access** and quality education. The Protocol promotes the protection of people who are particularly vulnerable to water-related disease and fosters equitable access to water for all members of the population, especially those who suffer a disadvantage or social exclusion (article 5, paragraphs k and l).

The principle of **progressive realization** implies that levels of WASH services in schools can increase over time in a stepwise fashion. The Protocol stipulates that where a long process of implementation is foreseen for the achievement of a target, intermediate or phased targets shall be set (article 6, paragraph 4).

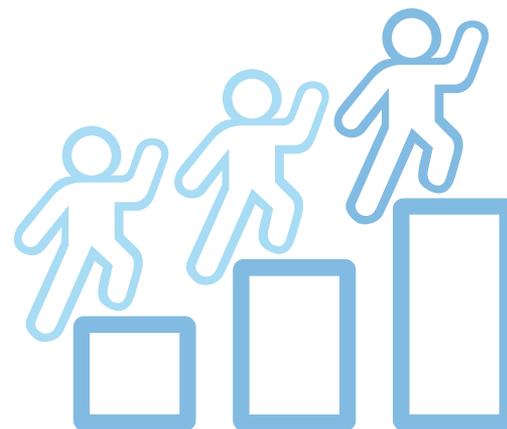


5.1 Target setting

Bringing sectors together and fostering partnerships and coordination is a critical success factor for implementing action on multisectoral challenges such as WASH in schools. Target setting provides incentives for sectors to work together and take action forward. According to the provisions of articles 6 and 7 of the Protocol on Water and Health, Parties are required to set and publish national and local targets for the standards and levels of performance necessary to maintain a high level of protection against water-related disease. Progress of their implementation needs to be reviewed and assessed periodically.

Through this core requirement the Protocol offers an effective tool to help national governments to progressively fulfil the ambitions of the 2030 Agenda for Sustainable Development and the Parma Declaration on Environment and Health, both of which call for increased action and accountability for WASH in schools. The Protocol's planning and accountability approach offers a practical framework that enables Parties to translate and operationalize these global and regional ambitions in a national context by defining and committing to policy interventions and programmes addressing WASH in schools.

Comprehensive guidance has been developed to assist countries in developing such targets (68). The guidance covers, inter alia, matters such as stakeholder involvement, baseline analysis, prioritization, development



of action plans and the selection of appropriate indicators for measuring progress in implementing the targets. Although the health and environment sectors were the main initiators of the Protocol, the education sector plays a crucial leadership role in formulating strategies, targets and action plans on WASH in schools and overseeing their implementation.

Under the Protocol, specific targets can be set that aim to overcome issues faced by various countries in the pan-European region. These pertain to the availability of adequate WASH facilities in schools, and to their accessibility, quality and acceptability. A number of Parties to the Protocol have developed and implemented such specific targets on WASH in schools (see Table 5 for examples).

Table 5. Examples of targets set on WASH in schools under the Protocol for Water and Health

Target area under article 6 of the Protocol for Water and Health	Countries that set targets in the area	Example target
Quality of drinking-water supplied <i>paragraph 2(a)</i>	Azerbaijan,* Republic of Moldova, Ukraine	<ul style="list-style-type: none"> • Achieve compliance with chemical and microbiological drinking-water quality standards for all schools
Access to sanitation <i>paragraph 2(d)</i>	Armenia,* Azerbaijan,* Kyrgyzstan, Republic of Moldova, Serbia, Ukraine	<ul style="list-style-type: none"> • Estimate investment required to improve access to sanitary equipment, proper wastewater disposal and regular emptying of septic tanks in schools and preschools • Develop plan for improving sanitation facilities in schools • Provide facilities for handwashing with soap in schools
Performance of collective systems <i>paragraph 2(e)</i>	Serbia	<ul style="list-style-type: none"> • Raise awareness of teachers, school staff and pupils on hygiene of sanitation facilities in schools
Application of recognized good practice <i>paragraph 2(f)</i>	Serbia	<ul style="list-style-type: none"> • Introduce new methodology for undertaking annual surveys of WASH conditions in schools

* Refers to draft targets; country is in the process of development and adoption of targets under the Protocol.



5.2 Ladder approaches for eliminating inequalities

In order to achieve universal access to water and sanitation, targets set under the Protocol should call for progressive reduction of inequalities between rich and poor people; urban and rural settlements; disadvantaged groups and the general population; and home and institutional settings, such as schools, health care facilities and workplaces. Inequalities related to individual status based on gender, disability and age should also be reduced.

The Protocol's Equitable Access Score-card (69) provides an analytical self-assessment tool that local and national governments (and other stakeholders) can use in establishing a baseline, tracking progress and prompting discussions on interventions needed to achieve equitable access to water and sanitation, including in schools.

The principle of progressive realization implies that levels of service can improve over time in a stepwise fashion. Not all schools may be able to provide immediate comprehensive access to WASH, but realistic improvements over time may be facilitated by development of a ladder of service levels, specified by multiple criteria derived from the human rights to water and sanitation and other international frameworks. Incremental steps to reach a basic level of service can be made even with no or few additional resources, and positive change can pave the way for additional improvements over time.

Small incremental improvements that bring public health benefits can be part of the progressive realization of pupils' right to a healthy learning environment. For example, a first step may be to improve the operation and maintenance of existing facilities so that they are fully functional and usable for children, rather than investing in construction of a new facility to meet the standards on student/toilet ratios. Similarly, mandatory handwashing with soap at fixed points during the school day (see example from Denmark in section 3.1) is a step upwards on the handwashing ladder. Handwashing with soap at all critical times may then be a longer-term goal.

The WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) proposes a framework for monitoring the progressive realization of WASH in school targets in the Sustainable Development Goals (70). The emerging multiservice ladders use four levels to enable countries at different stages of development to track and compare progress (see Table 6). The basic service level corresponds to the Sustainable Development Goal indicator for education target 4.a. The advanced service level represents a more aspirational benchmark encouraging governments to incorporate comprehensive quality and acceptability aspects of WASH in schools. The no service and limited service levels represent conditions that are inadequate.

Table 6. Emerging JMP service ladders for monitoring WASH in schools in the Sustainable Development Goals

Drinking-water ^a	Sanitation ^a	Hygiene
<p>Advanced service</p> <p>To be defined at national level (see examples in Table 7)</p>	<p>Advanced service</p> <p>To be defined at national level (see examples in Table 7)</p>	<p>Advanced service</p> <p>To be defined at national level (see examples in Table 7)</p>
<p>Basic service</p> <p>Drinking-water from improved source available at the school</p>	<p>Basic service</p> <p>Improved facilities, which are sex-separated and usable at the school</p>	<p>Basic service</p> <p>Handwashing facilities with water and soap available at the school</p>
<p>Limited service</p> <p>Improved source, but water not always available</p>	<p>Limited service</p> <p>Improved facilities, but not sex-separated or not usable</p>	<p>Limited service</p> <p>Handwashing facilities with water but no soap</p>
<p>No service</p> <p>No water source or unimproved source</p>	<p>No service</p> <p>No toilets or latrines, or unimproved facilities</p>	<p>No service</p> <p>No handwashing facilities at the school or handwashing facilities with no water</p>

a: For definitions of improved and unimproved sources of drinking-water and sanitation facilities, please refer to UNICEF & WHO (71).

Source: adapted from WHO & UNICEF (70).

5.3 Progressing to basic and advanced services

The Protocol target-setting process helps countries to define progress, whatever their current situation. Following the emerging JMP framework, the foremost requirement for progressive reduction of inequalities is to prioritize reaching the basic service rung for all schoolchildren. If all WASH service domains meet the basic service level, the next target is an advanced level of service – thereby comprehensively promoting the quality and use of facilities and attaining the full range of benefits of WASH in schools for pupils.

Table 7 provides examples of targets that governments can set to progressively obtain basic and then advanced service levels for all children. These example targets are presented for two categories corresponding to increments in school services, eventually leading to the sustained use of WASH facilities.

1. The basic service includes targets on the provision of usable infrastructure.
2. The advanced service includes targets on ensuring the quality and use of the school WASH facilities.

The sustainability of services is a crucial precondition for the progressive (and cost-effective) realization of universal WASH in schools. In the pan-European region this particularly implies making provision for sustainable

financing of infrastructure, maintenance, cleaning, durable goods and consumables; for surveillance; and for reaching out to students to appreciate and address their perspectives and needs as important inputs to planning, design and day-to-day operation. Table 7 includes example targets that address these preconditions for sustainable services.

All targets should be of a universal nature and time-bound, providing the basis for plans and concrete action towards achieving universal WASH in schools in all countries of the pan-European region.



Table 7. Example targets for progressively attaining universal and sustainable WASH in schools

Service level	Example targets for attaining universal WASH in schools		
	Drinking-water	Sanitation	Hygiene
Advanced Quality and use of facilities	Quality Quality of drinking-water supplied meets national standard and/or WHO guidelines for drinking-water quality (72) Use of facilities Schools have rule on free access to water, allowing children to drink when needed and at their desks Schools provide water points or fountains specifically for water consumption outside school bathrooms	Quality Cleaning and maintenance routine is in operation which ensures that clean, hygienic and usable toilets are available at all times Schools have sufficient improved facilities that are sex-separated and usable (accessible, functional and private) Use of facilities Rules for toilet visits are adapted to children's physical and developmental needs School toilets equipped with toilet paper inside toilet facilities at all times	Quality Schools provide private places to safely dispose of used menstrual hygiene materials; for washing hands, private parts and clothes Curriculum for hygiene education includes handwashing practices, menstrual hygiene management, correct use of toilet facilities and regular voiding Use of facilities Schools actively teach hand hygiene Schools establish rules and daily routines for hand hygiene (e.g. prior to school lunch, after use of toilet)
Basic Usable infrastructure	Schools provide drinking-water from improved source which is available at the school (supplied directly or collected and stored)	Schools provide improved sanitation facilities at school which are sex-separated and usable (accessible, functional and private)	Schools provide handwashing facilities at school with soap and water available
Example targets for attaining sustainable WASH services			
Financing	Education sector has budget lines necessary for establishing and maintaining WASH services in schools, including operation, maintenance and cleaning and provision of consumables and durable goods.		
Pupils' perspectives	Education sector consults with pupils about their experiences, attitudes and opinions regarding WASH facilities in their schools.		
Surveillance	Education and/or health sector establishes and maintains surveillance system that regularly collects, analyses and uses information on the state and progress of WASH in schools.		



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