





Meeting of the Parties to the Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes

### Working Group on Water and Health

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Protocol on Water and Health and implementation
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of the coronavirus disease (COVID-19) pandemic

Informal document

# The Protocol on Water and Health and the COVID-19 pandemic: Relevance, lessons learned and future perspectives

Prepared by the joint secretariat in collaboration with the Bureau and lead Parties and countries

The COVID-19 outbreak was declared a Public Health Emergency of International Concern by the World Health Organization (WHO) Director-General on 30 January 2020. It became clear early on that the pandemic was more than a health crisis; it is a socio-economic crisis, a humanitarian crisis, a security crisis, and a human rights crisis, as recognized in the United Nations Comprehensive Response to COVID-19.

The pandemic has clearly highlighted the critical role of water, sanitation and hygiene (WASH) services as a first line of defence in preventing and controlling the spread of infectious disease, including the coronavirus disease, or COVID-19. Investment in WASH is a central policy prescription for a healthy and green recovery from the pandemic. Such "no-regrets" investment pays a rich dividend in health, human rights and inclusive economic growth.

The 2020 World Health Assembly resolution 73.1 COVID-19 response identifies WASH as a central component and calls upon countries "to take measures to support access to safe water, sanitation and hygiene, and infection prevention and control, ensuring that adequate attention is paid to the promotion of personal hygienic measures in all settings, including humanitarian settings, and particularly in health facilities." The important role of hand hygiene is further accentuated by the global initiative *Hand Hygiene for All* led by WHO and UNICEF.

WASH plays a central role in disease prevention, and this basic premise remains a powerful driver for current and future work under the Protocol on Water and Health, serviced by the United Nations Economic Commission for Europe (UNECE) and WHO Regional Office for Europe. Through its target setting and accountability framework, the Protocol can play a vital role in "building forward better and fairer" from the pandemic and ensuring a recovery process towards a better post-COVID-19 world by promoting safe, resilient and equitable WASH services for all in all places, maintaining effective public health surveillance

and response systems, and offering a pan-European platform for exchange of good practices and mutual support across countries.

This information paper primarily aims to provide a summary of WASH-related considerations and recommended measures in relation to COVID-19 based on existing WHO technical guidance documents. It also offers a conceptual overview of the current and possible future role of the Protocol in prevention and control of epidemics and pandemics of infectious disease, including COVID-19.

#### 1. WASH considerations in the context COVID-191

The provision of safe WASH services and conditions is essential for preventing infectious disease outbreaks and for protecting human health. Ensuring evidenced-based and consistently applied WASH practices in communities, homes, workplaces, schools and health care facilities will help prevent human-to-human transmission of pathogens, including SARS-CoV-2, the virus that causes COVID-19. In the following, the note further summarizes the relevance and significance of WASH in relation to COVID-19.

Hand hygiene. Frequent and correct hand hygiene is one of the most important public health measures to prevent respiratory illness. The need to improve hand hygiene practices to help prevent transmission of SARS-CoV-2 is broadly recognized. The WASH community should work to enable, inform and motivate regular hand hygiene. This can be done by securing political leadership, building a supportive institutional and policy environment to improve and sustain access to hand washing facilities and by using a multimodal strategy to support good hand hygiene behaviour. Access to a reliable source of water is critical to allow for hand washing with soap. The provision of hand washing facilities at the entrance of public or private buildings and public transport facilities is also an important intervention.

**Sanitation.** SARS-CoV-2 is an enveloped virus and is less stable in the environment compared to non-enveloped human enteric viruses with known waterborne transmission. While viral RNA fragments were found in untreated wastewater and open water bodies contaminated by untreated sewage, infectious SARS-CoV-2 has not been detected in untreated or treated sewage or open water bodies. Standard treatment processes are effective for enveloped viruses, including SARS-CoV-2. Wastewater utilities' personnel are essential for operational support and continuation of services during the COVID-19 pandemic. They should be briefed on COVID-19 preventive measures and have access to personal protective equipment.

**Drinking-water supply.** While the presence of SARS-CoV-2 in untreated water is possible, there is no indication that infectious virus can persist in drinking-water. Conventional water treatment methods that utilize filtration and disinfection significantly reduce the concentration of SARS-CoV-2. In places where safe piped-water supplies are not available, several household water treatment technologies are effective in removing or destroying viruses (for example, technologies that meet performance standards of the WHO International Scheme to Evaluate Household Water Treatment Technologies). Water supply personnel is essential for operational support and continuation of services during the COVID-19 pandemic.

Water supply in buildings. Due to the temporary closure of public or private buildings as part of the pandemic response (including workplaces, schools, kindergartens), many premises may experience low or no water flow over a period of weeks or months. This may result in water stagnation and an associated deterioration of water quality (e.g. survival or regrowth of microbial pathogens such as Legionella and leaching of harmful metals from pipework). This deterioration may pose a public health risk when such premises are re-inhabited. To minimize such risks, a site-specific programme of flushing pipes and disinfection should be undertaken within the premises before re-occupancy.

**WASH in health care facilities.** WASH provisions and waste management measures in health-care settings are important for providing adequate care for patients and protecting patients, staff and caregivers from

<sup>&</sup>lt;sup>1</sup> The wording in this section is based on guidance resources listed in section 5, in particular the WHO/UNICEF *Interim guidance:* Water, sanitation, hygiene, and waste management for SARS-CoV-2, the virus that causes COVID-19 (29 July 2020) and the UNESCO/UNICEF/WHO Considerations for school-related public health measures in the context of COVID-19 (14 September 2020).

infection risks. This includes departments that have been temporarily opened for COVID-19 testing, vaccination or care purposes. To prevent SARS-CoV-2 transmission, the following standard WASH-related actions are particularly important: engaging in frequent hand hygiene using appropriate techniques; implementing regular and adequate environmental cleaning and disinfection practices; managing excreta and health care waste safely. Other important measures include providing sufficient and safe drinkingwater to staff, caregivers and patients; ensuring that personal hygiene can be maintained, including hand hygiene for patients, staff and caregivers; regularly laundering bedlinen and patients' clothing; providing functional, private and accessible toilets separated for staff and patients (including separate facilities for confirmed and suspected COVID-19 cases).

WASH in schools. Hand hygiene and environmental cleaning are key measures to limit exposure to infection in school settings, among other precautionary measures. Essential actions for their implementation include integrating key health and hygiene messages, including on the prevention of COVID-19, in school curricula and professional development programmes for teachers and school staff; providing hand washing facilities with sufficient soap and clean water or alcohol-based rub at entrances, exits (or classrooms), toilet areas, gyms and canteens; increase the frequency of cleaning, ensure availability of sufficient cleaning materials and hygiene consumables, staffing and updated protocols/checklists for regular cleaning of the school environment, including toilets, and for cleaning and disinfecting frequently touched surfaces.

**Environmental surveillance of wastewater.** An increasing number of countries have adopted sewage surveillance programmes for detecting non-infective SARS-CoV-2 RNA fragments in communal wastewater. Such surveillance is used as early warning for the emergence and re-emergence of SARS-CoV-2 circulation in communities, the identification of hot spots, tracking back of first occurrences of the virus by investigating conserved wastewater samples for SARS-CoV-2 RNA, and determining the presence of mutations and SARS-CoV-2 variants of concern. Complementary to clinical surveillance of COVID-19, information on spatial and temporal trends of SARS-CoV-2 RNA in wastewater can be used to inform public health decisions and manage the response to the pandemic.

#### 2. Prevention, preparedness and recovery to COVID-19 in the context of the Protocol

In order to achieve the Protocol's objective of protecting human health and well-being through improving water management and preventing, controlling and reducing water-related disease (Article 1), countries should pursue the aim of ensuring access to drinking-water and provision of sanitation for everyone (Article 6). The fundamental requirements stemming from the above provisions are important pillars in responding to the COVID-19 pandemic and in guiding recovery efforts, while promoting the progressive realization of human rights.

Through its governance and accountability framework, the Protocol can play a vital role in "building forward better and fairer" from the pandemic by promoting safe, resilient and equitable WASH services for all in all places, including in communities, health care facilities and schools, and organizing the exchange of good practices and mutual support across pan-European countries.

The Protocol requires Parties to set national targets on water, sanitation and health, regularly review them and report upon their implementation (Articles 6 and 7). As targets shall be periodically revised, countries can use such opportunity to review and amend them to respond to the priorities and needs arisen from the COVID-19 pandemic.

In accordance with Article 8, countries should establish, improve and maintain comprehensive national and/or local surveillance and early-warning systems, and prepare national and local contingency plans for responses to outbreaks of water-related disease, water quality incidents and risks. Although there is no evidence of waterborne transmission of SARS-CoV-2, surveillance of viral RNA in wastewater emerges as an important tool for timely and effective public health decision-making during the pandemic and can therefore be considered in further improving routine surveillance and early warning systems as defined in Article 8.

The requirements set by the Protocol and possible actions to support public health preparedness, response to and recovery from COVID-19 are presented in Table 1 below. These provide a conceptual framework that may support planning, financing, implementing and monitoring WASH interventions to prevent and control COVID-19 outbreaks, as well as other infectious diseases. Countries and partners may choose from the proposed action list and integrate them into national, local and setting-specific response and recovery plans.

Table 1. Conceptual framework of work under the Protocol in the context of COVID-19

# Relevant provisions Programme area 1: Improving governance for water and health: support for implementing the 2030 Agenda through setting targets and implementing measures

Art. 4 (5). The Parties shall take all appropriate action to create legal, administrative and economic frameworks which are stable and enabling and within which the public, private and voluntary sectors can each make its contribution to improving water management for the purpose of preventing, controlling and reducing water-related disease.

Art. 5 (i). Access to information and public participation in decision-making concerning water and health are needed, *inter alia*, in order to (...) express its concerns and to enable public authorities to take due account of such concerns. (...)

Art 6 (2). (...) Parties shall each establish and publish national and/or local targets for the standards and levels of performance that need to be achieved or maintained for a high level of protection against water-related disease. (...)

Art. 7 (5). Each Party shall provide to the secretariat (...), for circulation to the other Parties, a summary report of the data collected and evaluated and the assessment of the progress achieved. (...)

Art. 10 (1). As a complement to the requirements of this Protocol for Parties to publish specific information or documents, each Party shall take steps within the framework of its legislation to make available to the public such information as is held by public authorities and is reasonably needed to inform public discussion of: (a) The establishment of targets and of target dates for their achievement and the development of watermanagement plans in accordance with article 6; (...)

- Review and revise national and/or local targets taking into account aspects related to COVID-19, considering each of the aspects listed below under the respective programme areas.
- Link the (revised) targets to national and/or local preparedness, response and recovery programmes and measures for COVID-19 and secure appropriate investment and funding.
- Monitor the implementation of COVID-19 sensitive WASH targets, including financial aspects, and take corrective measures to address any deficiencies in implementation.
- Make information on the implementation of the COVID-19 sensitive targets available to the public.

#### Programme area 2: Prevention and reduction of water-related diseases

Art. 4 (2.e). The Parties shall, in particular, take all appropriate measures for the purpose of ensuring: Effective systems for monitoring situations likely to result in outbreaks or incidents of water-related disease and for responding to such outbreaks and incidents and to the risk of them.

Art. 6 (5.e). In order to promote the achievement of the targets referred to in paragraph 2 of this article, the Parties shall each: Establish and maintain a legal and

- Improve surveillance of water supply and sanitation systems in the community, including in places where vulnerable groups are present, including in temporary settings opened for responding to the COVID-19 emergency (for testing, vaccination, care).
- Establish procedures for the safe recommissioning of buildings to prevent the occurrence of waterrelated disease as a secondary consequence of the temporary closure of buildings in COVID-19 affected

#### **Relevant provisions**

institutional framework for monitoring and enforcing standards for the quality of drinking-water.

Art. 8 (1.a). The Parties shall each (...) ensure that: Comprehensive national and/or local surveillance and early-warning systems are established, improved or maintained (...)

Art. 8 (2). Surveillance and early-warning systems, contingency plans and response capacities in relation to water-related disease may be combined with those in relation to other matters.

Art. 9 (4.b). The Parties shall encourage: Development of integrated information systems to handle information about long-term trends, current concerns and past problems and successful solutions to them in the field of water and health, and provision of such information to competent authorities.

#### **Possible actions**

areas and the associated non-use of water and sanitation systems.

- Establish procedures for prevention and control of Legionella in building plumbing systems, including relevant monitoring requirements.
- Ensure universal access to hand washing facilities in public places (e.g. health care facilities, markets, shops, places of worship, educational institutions) and transport facilities.
- Develop a national roadmap to ensure universal hand hygiene for all, aligned with the WHO/UNICEF global initiative and recommendations. Regularly monitor and assess the situation regarding hand washing facilities and practices in different settings and public spaces.
- Introduce a programme for environmental surveillance of SARS-CoV-2 and other disease agents in wastewater of communities and vulnerable institutions, integrate data with clinical surveillance and use it in public health decision making.

#### Programme area 3: Institutional water, sanitation and hygiene

Art. 5 (k). Special consideration should be given to the protection of people who are particularly vulnerable to water-related disease.

Art. 6 (1). In order to achieve the objective of this Protocol, the Parties shall pursue the aims of: (a) access to drinking water for everyone; (b) provision of sanitation for everyone (...)

Art. 9 (3). The Parties encourage the education and training of the professional and technical staff who are needed for (...) operating systems of water supply and sanitation (...). This education and training shall include relevant aspects of public health.

- Issue national guidance on reopening schools and contingency plans to support schools in restoring WASH services, including, for example, procedures for flushing and disinfecting distribution pipes to prevent water contamination. This point is also relevant for other building types (e.g. office and commercial buildings, hotels, sports facilities, etc.).
- Set requirements to establish and implement WASH policies and plans in schools and health care facilities, incorporating WASH-related COVID-19 response measures..
- Establish requirements and ensure regular surveillance of WASH conditions in schools and health care facilities.
- Undertake systematic national assessments of WASH conditions in health care facilities and schools by using, *inter alia*, the existing guidance and resources developed under the Protocol, to identify improvement needs and programming, in general and in the context of COVID-19.
- Set requirements for the installation and maintenance of hand washing facilities and ensure the provision of water and soap. Promote hygiene behaviour change in schools by using, inter alia, the existing guidance and resources developed under the Protocol.
- Ensure safe WASH and adequate waste management, environmental cleaning and disinfection practices in health care facilities for improved infection prevention and control (IPC), including consideration of securing supplies for

appropriate types of disinfectants, cleaning and hand hygiene materials, and personal protective equipment (PPE).  Establish special training programmes for personnel responsible for cleaning, plumbing and waste management, and ensure adequate numbers of staff are available during a pandemic when workloads are
responsible for cleaning, plumbing and waste management, and ensure adequate numbers of staff are available during a pandemic when workloads are
increased.
<ul> <li>Monitor IPC and WASH implementation and environmental and engineering controls in health care facilities by using WHO tools, such as the IPC assessment framework, the hand hygiene self- assessment framework, hand hygiene compliance observation tools, and the WASH facilities improvement tool.</li> </ul>
<ul> <li>Develop educational and health promotion materials on different WASH topics, including COVID-19 related measures, targeting different audiences in schools and health care facilities.</li> </ul>
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#### Programme area 4: Small-scale water supplies and sanitation

Art. 5 (I). Equitable access to water, adequate in terms both of quantity and of quality, should be provided for all members of the population, especially those who suffer a disadvantage or social exclusion.

Art. 6 (1). In order to achieve the objective of this Protocol, the Parties shall pursue the aims of: (a) access to drinking water for everyone; (b) provision of sanitation for everyone (...)

Art. 9 (2.a). The Parties shall promote: (a) understanding of the public-health aspects of their work by those responsible for water management, water supply and sanitation; (...)

- Ensure that small-scale water supplies provide safe drinking-water free of contamination. Consider complementing this by promoting water treatment in households where safe water supplies are (temporarily) unavailable.
- Implement local health education programmes, including focus on community action to promote and improve hand hygiene behaviours.
- Advocate small-scale providers to provide sufficient amounts of safe water to allow for IPC measures in health care facilities and hand hygiene in homes, public and institutional settings.
- Establish requirements for the safe management of on-site sanitation systems, including containment, emptying, transport, treatment and disposal.
- Establish, enforce and/or improve surveillance of small-scale water supply and sanitation systems, including individual/private supplies and on-site sanitation systems.

# Programme area 5: Safe and efficient management of water supply and sanitation systems

Art. 4 (2.a). The Parties shall (...) take all appropriate measures for the purpose of ensuring: Adequate supplies of wholesome drinking water which is free from any micro-organisms, parasites and substances which, owing to their numbers or concentration, constitute a potential danger to human health. This shall include the protection of water resources which are used as sources of drinking water, treatment of water and the establishment, improvement and maintenance of collective systems.

- Stipulate adoption of water safety plans (WSPs) and sanitation safety plans (SSPs) to ensure safe management practices by operators of drinkingwater supply and sanitation systems, including under pandemic circumstances.
- Review and update emergency response and contingency plans for water supply and sanitation systems, taking stock of the lessons learned from the COVID-19 pandemic, including "essential staffing" arrangements.

#### **Relevant provisions**

Art. 4 (2.b). The Parties shall (...) take all appropriate measures for the purpose of ensuring: Adequate sanitation of a standard which sufficiently protects human health and the environment. This shall in particular be done through the establishment, improvement and maintenance of collective systems.

Art. 9 (2.a). The Parties shall promote: (a) understanding of the public-health aspects of their work by those responsible for water management, water supply and sanitation; (...)

#### Possible actions

- Establish procedures to maintain supply chains and adequate stocking of treatment chemicals, disinfectants and other essential supplies, including PPE for water supply and sanitation workers.
- Review and update national guidelines for safe management of water supply and sanitation systems, including consideration of pandemic aspects.
- See programme areas 2 and 3 for re-commissioning of buildings.

#### Programme area 6: Equitable access to water and sanitation

Art. 5 (k). Special consideration should be given to the protection of people who are particularly vulnerable to water-related disease.

Art. 5 (I). Equitable access to water, adequate in terms both of quantity and of quality, should be provided for all members of the population, especially those who suffer a disadvantage or social exclusion.

Art. 6 (1). In order to achieve the objective of this Protocol, the Parties shall pursue the aims of: (a) access to drinking water for everyone; (b) provision of sanitation for everyone (...)

- Prioritise providing inclusive WASH services for marginalized and vulnerable groups as the most vulnerable to COVID-19, including people with disabilities, elderly, homeless, dwellers of informal settlements, migrants and refugees, and long-term care populations and populations affected by humanitarian crisis.
- Ensure access to water and sanitation in public spaces to allow access to WASH services by the general public and homeless during lockdown measures.
- Undertake post-COVID systematic equity assessments by using the Equitable access Scorecard developed under the Protocol and the Guidance note to develop action plans to develop policy/technical interventions addressing special challenges faced by vulnerable and disadvantaged population groups in the context of COVID-19.
- See programme area 2 for ensuring universal access to hand washing facilities.
- Advocate for the inclusion of WASH services in economic response packages to support vulnerable, crisis-affected households facing financial difficulties due to the pandemic (e.g. cover service fees).

#### **Programme area 7: Increasing resilience to climate change**

Art. 6 (2.f). The application of recognized good practice to the management of water supply and sanitation, including the protection of waters used as sources for drinking water.

- Promote climate-resilient WSPs to ensure reliable and sustainable drinking-water service provision that continuous to prevent water-related disease in a changing climate.
- Promote uptake SSPs to ensure safe management of wastewater reuse (e.g. in agriculture) as a frequent adaptation measure to climate-induced water scarcity.

# Programme area 8: Assistance to support implementation at the national level

Art. 11 (a). The Parties shall cooperate and, as appropriate, assist each other: in international actions in support of the objectives of this Protocol; (...)

Art. 14. When cooperating and assisting each other in the implementation of national and local plans (...) the

 Formulate targeted programmes to support national action to strengthen preparedness, response and recovery in relation to WASH and COVID-19.

#### **Relevant provisions**

Parties shall (...) consider how they can best help to promote: (a) preparation of (...) schemes for improving water supply and sanitation; (b) improved formulation of projects (...) in pursuance of such (...) schemes, in order to facilitate access to sources of finance; (c) effective execution of such projects; (d) establishment of systems of surveillance and early-warning systems, contingency plans and response capacities in relation to water-related disease; (e) preparation of legislation needed to support the implementation of this Protocol; (f) education and training of key professional and technical staff; (g) research into, and development of, cost-effective means and techniques for preventing, controlling and reducing water-related disease; (...)

#### Possible actions

- Develop appropriate project proposals and mobilise necessary resources for response and recovery from COVID-19.
- Exchange experience on setting COVID-19 sensitive targets through the Protocol intergovernmental framework and through twinning activities.

#### Programme area 9: Compliance procedure

Art. 15. The Parties shall review the compliance of the Parties with the provisions of this Protocol on the basis of the reviews and assessments referred to in article 7. (...)

 Articulating the connection between the relevant provisions of the Protocol and the concept of hand hygiene, drawing on the expertise of the Compliance Committee of the Protocol.

# 3. Response under the Protocol

The pandemic has impacted work under the Protocol. The scope of the Protocol has been expanded to support country actions related to COVID-19 emergency response and post-pandemic recovery. Adjustments were made in the implementation of the programme of work for 2020-2022; meetings had to be cancelled, postponed or re-arranged to fit a virtual format, and the joint secretariat was obligated to shift priorities and re-purpose human resources to support pandemic response.

Experience with the Protocol's work during this period has shown that its scope and operational modalities can be adapted to the changing situation. Remote working arrangements and virtual events allowed for broad outreach, timely exchange of critical information and the involvement of various stakeholders and partners in the implementation of the Protocol's activities. Despite some limitations (e.g. lack of person-to person interactions) such arrangements could be used in combination with physical events in the future.

As a means of immediate response, the WHO secretariat provided rapid technical advice and communications on COVID-19-related WASH queries at the request of countries. It also organized a webinar on WASH measures for the prevention of COVID-19 (8 April 2020) with the aim to disseminate key messages of WHO guidance documents on drinking-water provision, sanitation management, waste management, hand hygiene, environmental cleaning and disinfection and to provide a platform for exchange on best practices in countries. The joint secretariat disseminated WHO COVID-19 technical guidance documents to the Protocol community to support country actions.

To maintain the flow of information and interaction of the Protocol community, the joint secretariat, in cooperation with the lead parties of the programme areas, has established the *Protocol webinar series*, which addressed several thematic areas of work, including WASH-related aspects of the COVID-19 pandemic. The following webinars were organized so far:

<u>Don't Forget the Small Ones</u> (8 July 2020): the session was dedicated to the launch of the
publication <u>Costing and Financing of small-scale water supply and sanitation services</u> and
showcased examples of action taken by countries in the pan-European region in the area of small
systems.

- Equity in access to WASH (22 July 2020): the session focussed on how the tools developed under the Protocol in the area of equitable access to water and sanitation could support governments in achieving an inclusive COVID-19 response and recovery.
- <u>Surveillance of COVID-19 virus in wastewater</u> (15 October 2020): the session introduced the concept of surveillance of SARS-CoV-2 in wastewater, presented the experience of spearheading countries, and explored the potential benefits and limitations of this surveillance approach in public health decision making to prevent and control the pandemic.

The eleventh meeting of the Task Force on Target Setting and Reporting (3 November 2020) included a specific session on COVID-19, which reviewed experiences on measures taken by countries on WASH and health in the context of the pandemic, including challenges faced, lessons learned and possible ideas for setting COVID-19 sensitive targets under the Protocol in order to increase resilience against the spread of infectious disease.

The twelfth meeting of the Working Group on Water and Health (14–15 April 2021) aims at further discussing the role of the Protocol and its programmatic work in strengthening the COVID-19 national preparedness, response and recovery actions.

# 4. Future perspectives for a better post-COVID-19 world

- The Protocol's framework, objectives and programmatic priorities are consistent with the need to strengthen national and local response, prevention and preparedness capacities for infectious disease emergencies and pandemics. The Protocol is therefore a well-positioned operational instrument to advance the implementation of WHA resolution 73.1 COVID-19 response.
- The Protocol's well-established intersectoral and intergovernmental mechanism allows for networking, exchange of experience and coordinated action to strengthen and sustain WASH-related work in combating COVID-19, contributing to the prevention and control of the spread of COVID-19 at national and international levels.
- Countries are encouraged to set and revise their national targets and action plans under the Protocol, considering lessons learned from the pandemic in the response to and recovery from COVID-19, while ensuring preparedness for other infectious diseases. Concrete targets and measures can include ensuring universal hand hygiene, increasing attention to vulnerable and disadvantaged populations and safely operating WASH services in communities, health care facilities, schools and other settings.
   Likewise, these issues should be duly considered in the upcoming programme of work for 2023-2025 to support overcoming the health and development crisis caused by the COVID-19 pandemic.
- The technical tools and guidance developed under the Protocol and its thematic activities can be used and adapted to support governments and partners in defining and implementing context-specific public health responses to the COVID-19 pandemic and other infectious diseases. A list of relevant tools is provided in section 5.
- The Protocol supports governments to ensure access to safe drinking-water, sanitation and hygiene for all, including ensuring that the populations most affected by COVID-19 (such as people living in informal settlements, homeless people, the elderly, prisoners, people with disabilities, migrants, refugees, people on low incomes) are not left behind. The Protocol is therefore a tool to further support progressive realization of the human rights to water and sanitation.
- Hand hygiene is the first line of defence against the transmission of infectious diseases, including
  COVID-19. The provision of universal access to hand washing facilities in public places and facilities is
  clearly a "no-regrets" investment and the expansion of a "culture of hand hygiene" deserves due
  attention in policy and practice. While the legal text of the Protocol does not explicitly refer to hygiene,
  apart from the mere mention in the definition of "drinking water" in Article 2, which refers to the
  availability of sufficient quantities of water as a prerequisite for safe hygiene practices (personal

- hygiene, including hand hygiene, household hygiene, food hygiene), it appears vital to pay increased attention to (hand) hygiene practices in the context of the Protocol, also by linking it to its water and sanitation related provisions.
- With regard to public health emergencies and pandemics such as COVID-19, increased attention needs to be paid in the upcoming programme of work to the implementation of Article 8 of the Protocol, in particular to strengthening and maintaining effective surveillance and early warning systems, contingency planning and response capacities at national and local levels.

# 5. Selected further reading and resources<sup>2</sup>

Publications and tools developed under the Protocol

Protocol on Water and Health and the 2030 Agenda: a practical guide for joint implementation. Geneva: United Nations Economic Commission for Europe; 2019 (https://unece.org/environmentpolicy/publications/protocol-water-and-health-and-2030-agenda-practical-guide-joint).

Strengthening drinking-water surveillance using risk-based approaches. Copenhagen: WHO Regional Office for Europe; 2019 (https://www.euro.who.int/en/health-topics/environment-and-health/water-andsanitation/publications/2019/strengthening-drinking-water-surveillance-using-risk-based-approaches-2019).

Surveillance and outbreak management of water-related infectious diseases associated with water-supply systems. Copenhagen: WHO Regional Office for Europe; 2019 (https://www.euro.who.int/en/healthtopics/environment-and-health/water-and-sanitation/publications/2019/surveillance-and-outbreakmanagement-of-water-related-infectious-diseases-associated-with-water-supply-systems-2019).

Improving health and learning through better water, sanitation and hygiene in schools: an information package for school staff. Copenhagen: WHO Regional Office for Europe; 2019 (https://www.euro.who.int/en/health-topics/environment-and-health/water-andsanitation/publications/2019/improving-health-and-learning-through-better-water,-sanitation-andhygiene-in-schools.-an-information-package-for-school-staff-2019.

Surveillance of water, sanitation and hygiene in schools: a practical tool. Copenhagen: WHO Regional Office for Europe; 2019 (https://www.euro.who.int/en/health-topics/environment-and-health/water-andsanitation/publications/2019/surveillance-of-water,-sanitation-and-hygiene-in-schools.-a-practicaltool-2019).

Costing and financing of small-scale water supply and sanitation services. Copenhagen: WHO Regional Office for Europe; 2020 (https://www.euro.who.int/en/health-topics/environment-and-health/waterand-sanitation/publications/2020/costing-and-financing-of-small-scale-water-supply-and-sanitationservices-2020).

Taking policy action to improve small-scale water supply and sanitation systems: tools and good practices from the pan-European Region. Copenhagen: WHO Regional Office for Europe; 2016 (https://www.euro.who.int/en/health-topics/environment-and-health/water-andsanitation/publications/2016/taking-policy-action-to-improve-small-scale-water-supply-andsanitation-systems.-tools-and-good-practices-from-the-pan-european-region-2016).

<sup>&</sup>lt;sup>2</sup> Web links to all documents accessed on 24 March 2021.

- Guidance note on the development of action plans to ensure equitable access to water and sanitation. Geneva: United Nations Economic Commission for Europe; 2016 (<a href="https://unece.org/environment-policy/publications/guidance-note-development-action-plans-ensure-equitable-access">https://unece.org/environment-policy/publications/guidance-note-development-action-plans-ensure-equitable-access</a>).
- The equitable access score-card: supporting policy process to achieve the human right to water and sanitation. Geneva: United Nations Economic Commission for Europe; 2013

  (<a href="https://unece.org/environmental-policy/events/third-session-meeting-parties-protocol-water-and-health/equitable-access-score-card-supporting-policy-process-achieve-human-right-water-and-sanitation.">health/equitable-access-score-card-supporting-policy-process-achieve-human-right-water-and-sanitation.</a>
- Other resources and guidance documents related to COVID-19
- Cleaning and disinfection of environmental surfaces in the context of COVID-19 (16 May 2020). Geneva: World Health Organization; 2020 (<a href="https://www.who.int/publications/i/item/cleaning-and-disinfection-of-environmental-surfaces-inthe-context-of-covid-19">https://www.who.int/publications/i/item/cleaning-and-disinfection-of-environmental-surfaces-inthe-context-of-covid-19</a>).
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