

IMPROVING WATER, SANITATION AND HYGIENE IN HEALTH CARE FACILITIES

Meeting report

27-28 September 2017

Bonn, Germany





**World Health
Organization**

REGIONAL OFFICE FOR **Europe**

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ABSTRACT

On 27 and 28 September 2017, a meeting on water, sanitation and hygiene (WASH) in health care facilities took place in Bonn, Germany, organized by the European Centre for Environment and Health of the WHO Regional Office for Europe. The meeting was targeted at national policymakers from the WHO European Region who deal with WASH issues in health care settings. It sought to increase their awareness and understanding of the significance of these issues, and to strengthen their commitment to addressing them through the frameworks of the Sustainable Development Goals (SDGs) and the Protocol on Water and Health.

Participants reviewed how these and other global and regional instruments could be used to improve WASH in health care facilities; surveyed relevant evidence from the Region; shared their countries' efforts in the area and the challenges they face; and discussed the ramifications that WASH services in health care facilities have on maternal and child health, the environmental sustainability of health services, and antimicrobial resistance (AMR).

Keywords

ANTIMICROBIAL DRUG RESISTANCE
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Executive summary

Background and objectives

Providing adequate water, sanitation and hygiene (WASH) services in health care facilities is central for achieving universal, equitable access to WASH for all. The safe management of such services is essential to ensuring quality of care, preventing and controlling infections, combating antimicrobial resistance (AMR) and improving the environmental sustainability of health systems. Finally, improving and maintaining WASH in health care facilities is a building block in attaining the Sustainable Development Goals (SDGs), particularly the call to ensure healthy lives and promote well-being for all in SDG 3 and to provide equitable, universal access to safely managed drinking-water and sanitation services in SDG 6.

Recent global evidence suggests that there is a widespread lack of access to basic WASH services in health care facilities. In the WHO European Region, the limited data available lend credence to the global estimates, especially the data from lower middle-income countries. It is important to note, however, that WASH-associated infections in health care settings are a concern for all countries in the Region.

[The global action plan on WASH in health care facilities](#), launched by WHO and the United Nations Children's Fund (UNICEF) in 2015, provides a clear worldwide framework for efforts to prioritize WASH in health care settings. Improving WASH is also one of the five objectives in the WHO [global action plan on AMR](#).

At the regional level, strengthening WASH in institutional settings was recognized as a priority area in the 2017–2019 programme of work adopted by the Parties to the [Protocol on Water and Health](#) (hereafter the Protocol). In addition, the 2017 [Declaration of the Sixth Ministerial Conference on Environment and Health](#) (the Ostrava Declaration) calls on countries in the European Region to provide adequate WASH services in health care facilities and dispose of wastewater safely.

This meeting was organized to promote the progressive implementation of global and regional commitments to improve WASH in health care settings and prioritize it on national policy agendas. It had several specific objectives with respect to WASH in health care facilities:

- to position such services as a priority in the context of the SDGs and the Protocol;
- to appraise the available evidence in the Region;
- to review the national situations, policies and best practices of countries represented at the meeting, including with respect to the disposal of wastewater;
- to introduce the global action plan on WASH in health care facilities and discuss ways to translate it into national action;
- to introduce the set of indicators for global monitoring and discuss linkages with national monitoring;
- to discuss the linkages between adequate WASH and health care service provision, particularly with regard to maternal and child health, the environmental sustainability of health services, and AMR; and
- to discuss actions to strengthen WASH in health care facilities at the national and regional level, including possible activities under the Protocol.

The meeting was expected to increase the participating policymakers' awareness and understanding of the relevance of WASH in health care facilities, and to strengthen national commitments to improvement through the SDGs and the Protocol. The meeting will form the basis of future activities addressing the issue in the Region.

Meeting programme

In addition to the opening session, the meeting consisted of eight thematic sessions over the course of two days.

- Session 1 described how three instruments – the WHO/UNICEF global action plan, the Ostrava Declaration and the Protocol – address WASH in health care facilities.
- Session 2 was devoted to existing research, including a systematic review of evidence from the Region and a look at the results of a pilot programme in Hungary.
- Session 3 covered maternal and newborn health, hand hygiene, AMR, the management of waste and wastewater, and environmentally sustainable health services.
- Session 4 was a roundtable based on individual country statements on national situations challenges.
- Session 5 considered global and national monitoring, a mobile monitoring tool, a case study on a pilot survey in Kazakhstan, and how to strengthen monitoring of conditions.
- Session 6 provided an introduction to the Water and Sanitation for Health Facility Improvement Tool (WASH FIT).
- Session 7 included case studies from Italy and Serbia, a presentation on international cooperation, and a roundtable discussion on plans and support needs in specific countries.
- Session 8 featured conclusions drawn from the meeting, and recommendations for follow-up actions.

Conclusions

Rationale

Quality health care requires good WASH services; poor WASH services lead to poor health and environmental outcomes. The focus of implementation programs and research to date has been largely on low- and middle-income countries outside the European Region, however. Adequate WASH is a public health challenge for all countries, though the issues and challenges tend to be different for high-income countries.

Scope of WASH issues in health care facilities

Major areas of WASH concern include:

- water availability, accessibility and safety
- sanitation availability and accessibility
- safe disposal of health care waste and wastewater
- hygiene and its role in infection prevention and control in health settings.

It is essential for health systems to address all dimensions of WASH: water, sanitation, hygiene and health-care waste management.

Policy frameworks

The key international policy frameworks for countries in the European Region that call for action to ensure safe and sustainable WASH for all and for all settings (such as health care facilities) include the following:

- SDG 3 on health and SDG 6 on water and sanitation
- the global action plan on WASH in health care facilities
- the Ostrava Declaration on Environment and Health
- the Protocol on Water and Health.

Drivers and entry points for action

It is important to align and integrate WASH efforts with existing programmes where possible, including initiatives devoted to the following issues:

- universal health care
- quality of care
- infection prevention and control
- maternal and child health
- AMR
- environmentally sustainable health systems
- climate change adaptation and resilience.

The situation in countries of the Region

- While all participating countries already have some relevant policies and regulations in place, most of them have gaps, and enforcement is often uneven.
- National programmes targeting the implementation of WASH in health care facilities are rare. Instead, some dimensions of WASH in health care tend to be an integral part of general WASH programmes and action plans, and of other programmes and action plans that mainly address facility renovation, water supply, sanitation, etc.
- There are programmes targeted at health care facilities with respect to AMR or environmental sustainability, but they rarely include a WASH component.
- Very few countries have a full picture of the national situation of WASH in their health care facilities. Many countries conduct some routine and ad hoc surveillance at the national or the subnational level, especially of hospital hygiene, though they do not always collect surveillance data centrally or use it for policy improvements. Concerns were raised on the quality of data due to the use of non-harmonized indicators or poor methodology.
- WASH in health care facilities is generally overseen by the health sector, with some exceptions for sanitation and wastewater and for water infrastructure. Responsibility is spread among national and local authorities, in some cases being left only to local actors or to the individual facilities themselves when small water systems are in use.
- Few countries have established specific targets on WASH in health care facilities within the framework of the Protocol on Water and Health.

Strengthening monitoring and assessment

Key actions in developing robust national monitoring and assessment programmes for WASH in health care facilities include the following.

- Establish robust routine and ad hoc surveillance, supported by a regulatory framework, including surveillance of AMR and nosocomial infections. Where possible, align national indicators with global ones and integrate them into existing surveillance and inspection schemes.
- Request WHO support in formulating definitions of indicators, especially for advanced service levels that apply to the national context, and in helping raise awareness of key terms and definitions.
- Incorporate core WASH indicators in health information and reporting systems, as well as in hospital licensing and accreditation processes.
- Conduct a systematic national analysis of existing surveillance efforts and data, including local efforts, and establish the centralized collection of data at the national level.
- Prepare an inventory of existing monitoring tools. Utilize mobile solutions where practicable.
- Appoint a national coordinator to oversee WASH monitoring, and explicitly include WASH in health care settings in the coordinator's remit.

Advocacy

Participants were challenged to be advocates and ambassadors for better WASH policies and practices in their countries' health care settings. Actions they can take include the following:

- Seek out key decision- and policymakers and communicate the benefits of good WASH policy and services in health care settings.
- Stimulate situation assessments and discuss the range of policy options for integrating WASH into national health and other relevant strategies, regulations and action plans in areas such as maternal and child health, quality health care, infection prevention and control, AMR and the environmental sustainability of health systems.
- Set up a national working group on WASH in health care settings with representatives from all key stakeholders and relevant sectors.
- Incorporate WASH indicators for health care facilities in national baselining, target-setting and reporting under the Protocol on Water and Health.
- Make use of data to inform the public, to prioritize actions on WASH in health care facilities on national agendas and to advocate for increased funding.
- Explore opportunities for and advocate for the allocation of adequate financial support for the implementation of policies and surveillance.

Next steps: follow-up

- Participants were asked to help generate a regional picture of WASH in health care settings through national evidence collection, including by supplying articles that are missing from the ongoing systematic review of regional evidence.
- The secretariat of the European Centre for Environment and Health (ECEH) committed to help country-level efforts in several ways:

- political advocacy, especially for the regional process under the Protocol
- help in the drafting and revision of national targets
- methodological support for assessments and indicator development
- support for national situation analyses
- assistance in adopting WASH FIT and other tools
- provision of and support for capacity-building
- facilitation of information exchange and learning.

Резюме

Общие сведения и цели совещания

Центральное место в достижении всеобщего и справедливого доступа к услугам водоснабжения, санитарии и гигиены (WASH) для всех занимает предоставление соответствующих современным требованиям услуг WASH в медицинских учреждениях. Безопасная организация таких услуг очень важна для обеспечения высокого качества помощи, для профилактики и контроля инфекций, борьбы с устойчивостью к противомикробным препаратам (УПП) и для повышения экологической безвредности систем здравоохранения. Наконец, улучшение и поддержание в надлежащем состоянии систем WASH в медицинских учреждениях является одним из составных элементов достижения Целей в области устойчивого развития (ЦУР), в частности, выполнения требований Цели 3 обеспечить здоровую жизнь и содействовать благополучию для всех и Цели 6 обеспечить равноправный, всеобщий доступ к безопасно организованным услугам питьевого водоснабжения и санитарии

Последние глобальные данные показывают, что отсутствие доступа к базовым услугам WASH в медицинских учреждениях наблюдается повсеместно. В Европейском регионе ВОЗ имеющиеся ограниченные данные, особенно данные из стран со средне-низким уровнем доходов подтверждают глобальные оценки. Однако важно отметить, что инфекции в медико-санитарных учреждениях, связанные с состоянием WASH, вызывают озабоченность во всех странах в Регионе.

На глобальном уровне ясную и понятную систему обеспечения приоритетности WASH в медицинских учреждениях представляет собой [Глобальный план действий по обеспечению WASH в учреждениях здравоохранения](#), который был принят в 2015 г. ВОЗ и Детским фондом ООН (ЮНИСЕФ). Улучшение системы WASH также является одной из пяти целей, поставленных в [Глобальном плане действий ВОЗ по борьбе с устойчивостью к противомикробным препаратам](#).

На региональном уровне укрепление системы WASH в учреждениях признано одной из приоритетных областей деятельности в рамках программы работы на 2017–2019 гг., утвержденной Сторонами [Протокола по проблемам воды и здоровья](#) (далее – Протокол). Призыв к странам в Европейском регионе обеспечивать предоставление соответствующих современным требованиям услуг WASH в медицинских учреждениях и безопасное отведение сточных вод содержится также в [Декларации, принятой на Шестой министерской конференции по окружающей среде и охране здоровья](#) (Оставская декларация 2017 г.).

Данное совещание было организовано с целью содействия последовательному выполнению принятых на глобальном и региональном уровне обязательств улучшить состояние WASH в медицинских учреждениях и обеспечить приоритетность WASH в национальных стратегиях и программах. Оно преследовало несколько конкретных целей, касающихся услуг WASH в медицинских учреждениях:

- позиционировать обеспечение таких услуг в качестве одного из приоритетов в контексте ЦУР и Протокола;
- проанализировать имеющиеся фактические данные о положении дел Регионе;
- изучить ситуацию, политику и передовую практику в странах, представленных на совещании, в том числе в отношении отведения сточных вод;

- представить Глобальный план действий по обеспечению WASH в медицинских учреждениях и обсудить пути воплощения его положений в конкретные меры на уровне стран;
- представить набор показателей для глобального мониторинга и обсудить его связь с национальным мониторингом;
- обсудить связь между соответствующими всем требованиям системами WASH и предоставлением услуг медико-санитарной помощи, в частности, с точки зрения охраны материнства и детства, экологической безвредности предоставления медицинских услуг и УПП, и
- обсудить практические меры по укреплению систем WASH в медицинских учреждениях на уровне страны и на региональном уровне, включая проведение возможных мероприятий в рамках Протокола.

Предполагалось, что итогом совещания станет повышение у участвующих лиц, формирующих политику, уровня информированности и понимания важности WASH в медицинских учреждениях и подтверждение приверженности национальным обязательствам по улучшению положения дел путем осуществления мер по реализации ЦУР и Протокола. Совещание должно послужить основой для будущей деятельности в Регионе по решению проблем в данной области.

Программа совещания

Помимо заседания, посвященного открытию совещания, программа включала восемь тематических заседаний, которые проходили в течение двух дней.

- На первом заседании был рассмотрен вопрос о том, как в трех инструментах – Глобальном плане действий ВОЗ/ЮНИСЕФ, Оставской декларации и Протоколе – трактуется решение проблемы WASH в медицинских учреждениях.
- Второе заседание было посвящено имеющимся исследованиям, в том числе систематизированному обзору фактических данных по Региону и рассмотрению результатов опытной программы в Венгрии.
- На третьем заседании рассматривались вопросы охраны здоровья матерей и новорожденных, гигиены рук, УПП, обращения с отходами и сточными водами и экологической безвредности медицинских услуг.
- Четвертое заседание было проведено в формате круглого стола, в ходе которого заслушивались сообщения отдельных стран о положении дел и имеющихся трудностях.
- На пятом заседании рассматривались вопросы мониторинга на глобальном уровне и на уровне отдельных стран, инструмент мобильного мониторинга, пример из практики Казахстана по проведению опытного обследования и вопрос о том, как усилить мониторинг существующих условий.
- На шестом заседании участникам было представлено "Методическое пособие по улучшению водоснабжения и санитарии в медицинских учреждениях (WASH FIT)".
- На седьмом заседании были заслушаны примеры из практики Италии и Сербии и презентация на тему международного сотрудничества, а затем в формате круглого стола было проведено обсуждение планов и потребностей в поддержке в конкретных странах.
- На восьмом заседании были представлены выводы из проведенных на совещании дискуссий и рекомендации, касающиеся дальнейших действий.

Выводы

Обоснование необходимости принятия мер

Качественная медицинская помощь требует хорошего качества услуг WASH; неудовлетворительные услуги WASH приводят к неудовлетворительным результатам для здоровья и окружающей среды. Однако на сегодняшний день главное внимание в программах реализации планов и в научных исследованиях уделяется прежде всего странам с низким и средним уровнем доходов, не входящим в Европейский регион. Обеспечение соответствующих современным требованиям услуг WASH – это проблема общественного здравоохранения во всех странах, хотя для стран с высоким уровнем доходов проблемы и трудности носят несколько иной характер.

Диапазон проблем WASH в медицинских учреждениях

К основным проблемам, связанным с WASH, относятся следующие:

- наличие, физическая доступность и безопасность воды;
- наличие и физическая доступность санитарно-технических средств;
- безопасное удаление отходов и сточных вод, образующихся при оказании медицинской помощи;
- гигиена и ее роль в профилактике и контроле инфекций в учреждениях здравоохранения.

Чрезвычайно важно, чтобы системы здравоохранения уделяли внимание всем элементам WASH – водоснабжению, санитарии, гигиене и обращению с медицинскими отходами.

Система программных целей и принципов

Систему основных международных программных целей и принципов для стран в Европейском регионе, требующую принятия практических мер по обеспечению безопасных и устойчивых услуг WASH для всех и во всех учреждениях (таких как медицинские учреждения), образуют следующие документы:

- ЦУР 3, касающаяся здравоохранения, и ЦУР 6, касающаяся водоснабжения и санитарии;
- Глобальный план действий по обеспечению WASH в учреждениях здравоохранения;
- Оставская декларация по окружающей среде и охране здоровья;
- Протокол по проблемам воды и здоровья.

Определяющие факторы и отправные точки для принятия мер

Когда для этого есть возможность, важно обеспечивать согласование и интегрирование мер по улучшению WASH с существующими программами, включая инициативы, направленные на решение следующих проблем:

- всеобщий охват услугами здравоохранения;
- качество помощи;
- профилактика и контроль инфекций;
- охрана материнства и детства;
- УПП;
- экологическая безвредность систем здравоохранения;

- адаптация и устойчивость к негативным последствиям изменения климата.

Положение дел в странах Региона

- Хотя во всех странах, представленных на совещании, уже имеются некоторые стратегии и нормативные документы, касающиеся рассматриваемой проблемы, в большинстве стран существуют недоработки и пробелы и часто наблюдается непоследовательность в правоприменительной практике.
- Национальные программы, целью которых является обеспечение услуг WASH в медицинских учреждениях, встречаются редко. Вместо этого чаще всего можно наблюдать включение некоторых элементов WASH в медицинских учреждениях в общие программы и планы действий по обеспечению и улучшению WASH и в другие программы и планы действий, которые главным образом касаются модернизации учреждений, водоснабжения, санитарии и т.п.
- Имеются программы, направленные на решение проблем УПП или экологической безвредности в медицинских учреждениях, но в них редко присутствует раздел, касающийся WASH.
- Очень немногие страны имеют полное представление о положении дел в стране относительно WASH в медицинских учреждениях. Многие страны осуществляют определенный надзор в форме плановых и внеплановых проверок на общенациональном или территориальном уровне, особенно надзор за состоянием гигиены в стационарах, однако они не всегда собирают данные такого надзора на центральном уровне и не используют их для корректировки своих стратегий. На совещании была высказана озабоченность по поводу невысокого качества данных вследствие использования несогласованных показателей или неудовлетворительной методики.
- Контроль за состоянием WASH в медицинских учреждениях обычно осуществляет сектор здравоохранения, за исключением некоторых аспектов, таких как санитария и отведение сточных вод и инфраструктура водоснабжения. Ответственность распределена между центральными и местными органами власти, а в некоторых случаях возлагается только на местные действующие субъекты или на сами медицинские учреждения, когда там используются маломасштабные системы водоснабжения.
- Лишь немногие страны установили конкретные целевые показатели относительно WASH в медицинских учреждениях в рамках Протокола по проблемам воды и здоровья.

Укрепление систем мониторинга и оценки

Основные меры по созданию всесторонне продуманных программ мониторинга и оценки WASH в медицинских учреждениях на общенациональном уровне предполагают следующее:

- Создать опирающуюся на нормативную базу систему строгого и всестороннего надзора в форме плановых и внеплановых проверок, включая надзор за УПП и внутрибольничными инфекциями. Там, где возможно, согласовать национальные показатели с глобальными и ввести их в существующие системы надзора и проверок.
- Обратиться к ВОЗ с просьбой о помощи в формулировании определений показателей, особенно относящихся к уровням услуг повышенного качества, которые применимы к национальному контексту, и о помощи в повышении информированности об основных терминах и определениях.

- Включить основные показатели WASH в информационные системы здравоохранения и системы отчетности, а также в процессы лицензирования и аккредитации больниц.
- Провести на уровне страны систематизированный анализ существующих мероприятий и данных по надзору, включая мероприятия, проводимые на местах, и организовать на уровне страны централизованный сбор данных.
- Подготовить описание имеющихся инструментов мониторинга. Там, где это целесообразно, применять мобильные решения.
- Назначить национального координатора для надзора за мониторингом WASH и в положительно выраженной форме включить в круг ведения координатора вопросы WASH в медицинских учреждениях.

Информационно-пропагандистская работа

Участникам совещания было предложено проводить работу по пропаганде и отстаиванию интересов улучшения стратегий и практики в отношении WASH в медицинских учреждениях в своих странах. Для этого они могут предпринимать следующие действия:

- Устанавливать контакты с ключевыми лицами, принимающими решения и формирующими политику, и доводить до их сведения выгоды от разумной политики в отношении WASH и качественных услуг WASH в медицинских учреждениях.
- Стимулировать проведение оценок положения дел и обсуждать весь спектр возможных действий по включению WASH в национальные стратегии в области здравоохранения и другие соответствующие стратегии, нормативные документы и планы действий в таких областях, как охрана материнства и детства, качественная медицинская помощь, профилактика и контроль инфекций, УПП и экологическая безвредность систем здравоохранения.
- Образовать национальную рабочую группу по вопросам WASH в медицинских учреждениях с участием представителей всех ключевых заинтересованных сторон и секторов.
- Включить показатели состояния WASH в медицинских учреждениях в национальные процедуры оценки исходной ситуации, установления целевых показателей и отчетности в соответствии с Протоколом по проблемам воды и здоровья.
- Использовать данные для информирования населения, придания более высокой приоритетности мерам, касающимся WASH в медицинских учреждениях, в национальных планах и программах и отстаивания необходимости увеличения финансирования.
- Изучать возможности и добиваться выделения достаточных финансовых средств на осуществление стратегий и организацию надзора.

Дальнейшие шаги: исполнение намеченного

- Участников совещания попросили помочь составить картину состояния WASH в медицинских учреждениях в Регионе и для этого собрать фактические данные в своих странах и прислать статьи, которые не вошли в проводимый в настоящее время систематизированный обзор фактических данных по всему Региону.

- Секретариат Европейского центра ВОЗ по окружающей среде и охране здоровья (ЕЦОСЗ) выразил готовность предоставлять помощь в работе на уровне стран в таких формах, как
 - оказание публичной поддержки, аргументированной общественными интересами, особенно региональному процессу реализации положений Протокола;
 - помощь в разработке и пересмотре национальных целевых показателей;
 - методическая помощь при проведении оценок и разработке показателей оценки;
 - помощь в проведении анализа положения дел в стране;
 - помощь в деле внедрения методики WASH FIT и других методических инструментов;
 - осуществление и поддержка мероприятий по укреплению кадрового потенциала;
 - содействие обмену информацией и повышению уровня знаний.

Introduction

This meeting was organized by the European Centre for Environment and Health (ECEH) of the WHO Regional Office for Europe. It took place on the United Nations Campus in Bonn, Germany, on 27–28 September 2017.

The two-day meeting was targeted at the national policymakers who attended, from 21 Member States in the European Region. The 49 participants also included temporary advisers from eight international organizations who shared their expertise on WASH in health care settings, as well as representatives from WHO headquarters and the Regional Office. See [Annex 1](#) for the full list of participants.

Opening session. Background, objectives and expected outcomes

Oliver Schmoll, Water and Climate Programme Manager, welcomed the delegates to Bonn on behalf of ECEH before providing an overview of the meeting background and objectives.

Equitable access to safe drinking-water and sanitation is a basic human right. Yet despite progress in the European Region, 60 million inhabitants still lack access to tap water and 36 million to basic sanitation facilities. Access varies considerably across the Region, with marked inequities between the rich and the indigent, between urban and rural dwellers, and between the general public and vulnerable populations. Every day, the Region sees 14 deaths from diarrhoeal disease due to poor WASH – the equivalent of the passengers on a dozen jumbo jets each year.

Several global and regional instruments provide invaluable frameworks for action on WASH in health care facilities. At the global level, two of the SDGs are critical to addressing the situation: SDG 3 on good health and well-being, and SDG 6 on clean water and sanitation, particularly SDGs 6.1 and 6.2 on ensuring universal access to these essential services. It is important to remember that providing universal access requires looking beyond household settings, for instance to schools, workplaces and health care facilities. In anticipation of the SDGs, WHO and UNICEF also developed a global action plan for WASH in health care facilities. This plan provides a useful worldwide framework for national efforts in this area.

One key regional policy framework is the Ostrava Declaration, which health and environment ministers from across the Region issued in June 2017. In adopting the Declaration, Member States have agreed to develop national environmental portfolios of action, and improving WASH in health settings has been suggested as a priority for countries to include in their portfolios. In addition, the Protocol on Water and Health, which was adopted in 1999, continues to be a highly relevant policy instrument, particularly with the recent inclusion of a priority addressing WASH in health care settings.

This meeting was organized to promote the progressive implementation of global and regional commitments to improve WASH services in health care settings and prioritize them on national policy agendas. It had several specific objectives with respect to WASH in health care facilities:

- to position such services as a priority in the context of the SDGs and the Protocol;
- to appraise the available evidence on them in the Region;

- to review the national situations, policies and best practices of countries represented at the meeting, including with respect to the disposal of wastewater;
- to introduce the global action plan on WASH in health care facilities and discuss ways to translate it into national action;
- to introduce a set of indicators for global monitoring and discuss linkages with national monitoring;
- to discuss the linkages between adequate WASH and health care service provision, particularly with regard to maternal and child health, the environmental sustainability of health services and AMR; and
- to discuss actions to strengthen WASH in health care facilities at the national and regional level, including possible activities under the Protocol.

The meeting was expected to increase the participating policymakers' awareness and understanding of the relevance of WASH in health care facilities, and to strengthen national commitments to improvement through the SDGs and the Protocol. The meeting will form the initial basis for future activities addressing the issue in the Region.

The session concluded with a round of participant introductions and the selection of three people to co-chair the meeting: Nana Gabriadze (Georgian Centre for Disease Control and Public Health), Márta Vargha (Hungarian Public Health Institute) and Ion Salaru (Moldovan Centre of Public Health). Alexander Reshetov and Viachaslau Pliutau served as Russian–English interpreters, and Misha Hoekstra as rapporteur.

See [Annex 2](#) for the meeting programme, which specifies the titles of presentations and the names of individual presenters.

Session 1. Global and regional framework for improving water, sanitation and hygiene (WASH) in health care facilities

The first thematic session described how three international instruments address WASH in health care facilities: the WHO/UNICEF global action plan, the Ostrava Declaration and the Protocol on Water and Health.

The SDGs provide a platform for **the global action plan on WASH in health care facilities**. The plan's vision is to ensure that by 2030, every health care setting will have reliable, safely managed WASH facilities and practices to satisfy staff and patient needs, with a particular emphasis on the needs of women, girls and children. The plan has four task teams, focusing on advocacy and policy, monitoring, evidence and research, and standards and facility improvements. Together, they are striving to embed WASH concerns in global, regional and national health initiatives and frameworks. To facilitate their efforts, all key documents relating to the plan have been translated into Russian.

Key areas of action in the plan include maternal and child health, AMR and infection prevention and control (see Session 3). More broadly, WASH services are also crucial in providing *quality* universal health coverage that will help address equity issues. Participants were encouraged to join [the learning pod on WASH and infection prevention and control](#) offered by the WHO Global Learning Laboratory for Quality Universal Health Coverage. WHO has conducted in-

depth assessments and catalytic change efforts in a few countries; it was suggested that it do so in a few countries of the European Region, too. At present, several international instruments can provide a strong basis for action, but what is needed is commitment and accountability. Countries are encouraged to be early adopters and embed WASH in their national health service strategies, such as the ones addressing maternal and child health or AMR. To implement WASH in health care facilities effectively, countries should have dedicated budget lines, monitoring with harmonized indicators, accountability mechanisms and incentives, and the engagement of both leaders and communities. Implementation will also benefit from broad advocacy efforts and partnerships among a variety of stakeholders, such as government bodies, businesses, nongovernmental organizations (NGOs) and patient groups.

Looking ahead, WHO will be promoting the importance of WASH in health care facilities, demonstrating proof of concept, developing innovative financing mechanisms and expanding the evidence base. To learn more, participants were urged to explore the WHO/UNICEF knowledge portal on WASH in health care facilities at washinhcf.org.

The second half of the session examined WASH in health care facilities as a priority of two European Region instruments: the Ostrava Declaration and the Protocol on Water and Health.

The 2017 **Ostrava Declaration** builds on the 2010 Parma Declaration, which identified four priority goals for the Region; the first of these goals was to ensure safe WASH in households, schools and health care facilities. The Ostrava Declaration called on Member States to ensure equitable, sustainable WASH for all and to use the Protocol to strengthen national actions to reach their WASH commitments. To help them achieve their Parma and Ostrava commitments, Member States are also supposed to develop national portfolios of actions by assessing their national situations, identifying priorities, setting targets and acting to achieve the set targets. The Ostrava Declaration established an accountability system with yearly progress evaluations, employing the same indicators used in SDG reporting. In addition, it specifies not only the development of national targets and action plans to ensure adequate WASH in health care facilities, but also making sure that AMR action plans address safe water and sanitation in such facilities and reduce untreated wastewater from hospital effluents.

The **Protocol** is a unique, legally binding agreement that links sustainable water management with the prevention, control and reduction of water-related diseases. To date, 26 of the 53 Member States in the Region are parties. The Protocol covers the entire water cycle and includes a commitment to providing safe drinking-water and sanitation for everyone. Parties are responsible for setting their own targets and reviewing their progress. WASH in institutional settings is a priority programme area of the Protocol, and two thirds of the suggested core target areas can be related specifically to WASH in health care facilities. The latest reporting template of the Protocol implementation also has a section on WASH in health care facilities, including the proportion of these facilities that provide basic WASH services and a national situation assessment. Current activities under the Protocol include a review of evidence on WASH in health care facilities of the Region (see Session 2); a pilot project to apply the Water and Sanitation for Health Facility Improvement Tool (WASH FIT), a risk-based tool to improve and maintain WASH services in such facilities (see [Session 6](#)); and the present meeting to encourage health sector leadership on this topic.

In the subsequent discussion, it was observed that the reporting burden on countries is rather heavy, in particular because not all data are readily available. ECEH can help provide methodological support. In addition, if a country wishes to conduct a national survey of WASH

in health care facilities, there are some simple indicators that can be readily incorporated into existing health system monitoring. Collaboration among different stakeholders would be an advantage as well.

Session 2. Evidence on WASH in health care facilities of the European Region

The second session was devoted to existing research on WASH in health care – a systematic review of evidence from the Region, and the results of a pilot programme in Hungary.

The systematic review seeks to characterize the status of WASH not only in terms of coverage, but also infection prevention and control, health and downstream environmental outcomes, and management practices associated with WASH in health systems of the Region. It considers both peer-reviewed and grey literature in English. The review team has identified 94 qualifying studies. While they found 24 from the United Kingdom and 12 from France, there were only seven studies from eastern Europe and central Asia, in part due to the language limitation. The vast majority of the studies (72) looked only at hospital settings.

Some topical areas have been found to be much more popular than others. The four papers that touched on WASH coverage looked only at hand hygiene. The 15 studies on health outcomes all reported on nosocomial outbreaks, especially with respect to AMR. Of the 24 studies of environmental outcomes, 15 dealt with hospital water and wastewater systems, with a notable focus on pathogens in wastewater. Most of the five studies on health worker management examined nurses and infection prevention. Another 21 papers either assessed national programmes or guidelines (11) or calculated the monetary cost and disease burden of outbreaks.

The review team has uncovered several intriguing findings. For instance, ultrasound equipment and mobile phones can serve as fomites; standard wastewater treatment of hospital effluent does not prevent antimicrobial-resistant organisms from entering municipal water systems; good hand hygiene is the most effective method of preventing nosocomial infections; and disease outbreaks in hospitals are often department-specific. Taken together, the studies reinforce the importance of adequate WASH infrastructure and practices in preventing the spread of disease, both within health care facilities and between these facilities and the external environment.

A major shortcoming of the review was the lack of access to literature in Russian and other national languages. The team will continue to add studies to their database, so country participants were requested to identify additional evidence and urged to contact the team with relevant information for inclusion, especially from underrepresented areas and other languages.

The session then turned to a specific case study, of a **Hungarian pilot programme** for monitoring WASH in health care facilities conducted by the National Institute of Environmental Health. Existing monitoring consists of an annual site visit by a county public health authority and an annual report on hand hygiene; the site visit does not focus particularly on WASH, and the data are not aggregated nationally. The pilot surveyed 27 hospitals, at least one in each county, on topics including ventilation, water systems, *Legionella* risk management and waste management, although not sanitation or wastewater. Most of the hospitals used a public water supply; only about 40% tested water quality annually, despite a new requirement to do so. About

40% had lead in their plumbing systems, and another 40% did not know if they did. Less than 60% had a waste management plan, and almost 30% dumped their infectious waste.

The results led to the preparation of a guide to how Hungarian hospital operations can prevent nosocomial infections and address environmental health risks. The guide targets hospital administrators, health care providers, hygienists and public health authorities. The national public health institute now plans to expand the guide and survey all hospitals. Sanitation is the responsibility of another sector, but it will be incorporated in a future edition. Handwashing infrastructure in health care facilities is also assessed yearly under a separate programme within the hand hygiene framework.

In the ensuing discussion, participants acknowledged challenges in monitoring and follow-up activities due to a dispersion of responsibilities among various levels of national and local authorities. After a quick round of feedback, 10 of the 22 participating countries reported conducting systematic surveys or monitoring in place: Armenia, Azerbaijan, Croatia, Italy, Hungary, Northern Macedonia, the Republic of Moldova, Serbia, Sweden and Tajikistan. A concern was expressed about the validity of these data in some countries due to missing or unaligned indicator definitions.

Session 3. Cross-cutting aspects of safe WASH in health care facilities

This session covered several key issues relating to WASH in health care settings: the contribution of good WASH to maternal and newborn health, the importance of hand hygiene, the role of WASH in addressing AMR, the management of waste and of wastewater, and environmentally sustainable health systems.

The connection between WASH and maternal and newborn health was first established in the 18th century. Maternal and neonatal mortality have both declined steadily in the Region during the past 25 years. However, these indicators vary considerably among and within countries. In 2014 the average maternal mortality ratio in developed countries was 5 deaths per 100 000 live births, in contrast to 17 per 100 000 in low- and middle-income countries. Better integration of WASH into the health sector would accelerate progress even more. Monitoring of maternal and newborn health efforts should incorporate WASH indicators; WHO has developed several such tools for health care facilities. They include a quality assessment and improvement tool for the hospital care of mothers and newborns and a quality assessment tool for the outpatient antenatal and postpartum care of mothers and newborns, both of which are used in many European Union (EU) and central Asian countries. Besides assessment, there also need to be national standards, guidelines and training. Standards for improving maternal and newborn health should include concrete requirements relating to WASH in health care facilities. In 2016, WHO published [*Standards for improving quality of maternal and newborn care in health facilities, which*](#) addresses WASH under item 8. WASH is particularly important to ensure clean births and the prevention of health care-associated infections. Compliance remains a major issue when it comes to handwashing, especially when a health care worker is changing nappies or comes into direct contact with respiratory secretions or skin. Global and national efforts to reduce maternal and neonatal mortality and morbidity should address safe WASH services as a prerequisite for ensuring the quality, effectiveness, and use of health care services.

Health care-associated infections contribute to at least 135 000 deaths a year in the EU alone – and good **hand hygiene** is the most effective intervention to prevent them. There is substantial evidence that hand antisepsis reduces the transmission of health care-associated pathogens and the incidence of infections. Hands can acquire pathogens from contact with normal intact skin, where more than 100 organisms are present per square centimetre, or from touching a surface that a patient has been in contact with. That means that handwashing is important after not only so-called dirty activities (such as respiratory-tract care or groin contact) but also after so-called clean activities (such as taking a pulse or touching a shoulder). Duration of patient-care activity is strongly associated with the intensity of bacterial contamination on a health care worker's hands. The purpose of handwashing is to remove dirt and organic material as well as microbial contamination acquired by contact with patients or the environment. Effective handwashing requires clean water, 60 seconds of rubbing liquid soap on all hand surfaces, thorough rinsing and thorough drying with single-use towels. In most situations, WHO recommends hand disinfection with an alcohol-based rub instead, despite its greater cost, potential for skin irritation and gaps in effectiveness. WHO has published simple instructions on how health care facilities can produce their own hand rubs on-site ([*Guide to local production: WHO-recommended handrub formulations*](#)).

Despite numerous educational campaigns, many health care workers remain non-compliant. The reasons vary but include ease and comfort, time constraints due to high workloads, and inconvenience. Risk factors for poor compliance include activities with high risk of infection transmission, the use of gloves (which can provide a misleading sense of hygiene), employment in an intensive care unit and procedures requiring the frequent washing or disinfection of hands. Participants suggested addressing the issue by instituting audits, reducing time pressure on staff, encouraging patients to promote hand hygiene and making the risks clearer.

When a pathogen develops **AMR**, standard treatments become ineffective and the pathogen becomes more virulent, leading to increased morbidity and mortality. Every year in the EU, antibiotic resistance alone results in an estimated 25 000 deaths, 2.5 million hospital days and €1.5 billion in extra health care costs and lost productivity. To minimize the development of AMR in health care settings and prevent transmission of pathogens, both resistant and non-resistant, good hand hygiene and enhanced environmental cleaning are crucial. Effective infection prevention and control also requires clean water, proper sewage and proper treatment of wastewater and infectious waste. That is why it is vitally important to incorporate WASH principles into AMR efforts.

It is also why one of the five main goals of the global action plan on AMR is to reduce the incidence of infection through effective sanitation, hygiene and infection prevention measures. Within the Region, the European Commission just launched the European Joint Action on Antimicrobial Resistance and Healthcare-Associated Infections, which will run for three years; like the global action plan, it will focus on national action plans and policies. Lamentably, few of the national plans currently include any actions on WASH. While there is a clean hand component included in AMR plans in Armenia and Kazakhstan, for instance, representatives from several other countries said there was no coordination between WASH and AMR efforts, and only minimal awareness of the role of WASH in combating AMR. Participants were therefore urged to reach out to the AMR policymakers in their countries and work to incorporate WASH principles into AMR efforts.

Both **waste management and wastewater management** are critical for health care facilities. Poor management of these operational by-products results in increased mortality and morbidity,

as well as long-term monetary costs to a society. It makes sense for health care facilities to address health care waste together with WASH. More than half of the world's population is at risk from occupational, environmental or public health threats from improperly treated medical waste. Infection prevention and control programmes should include the management of health care waste; WHO is now incorporating it into all of its water and sanitation programmes. Since 2004, WHO has advocated phasing out incineration of health care waste, since non-incineration options such as autoclaving create less pollution and have a smaller carbon footprint. Unregulated and uncontrolled burning is an issue in many parts of the Region, with severe consequences for the health of the population due to the release of dangerous air pollutants. To provide a basic level of service for managing its waste, a health care facility should segregate its waste into at least three bins and treat, disposing of sharps and infectious waste safely.

Hospital wastewater has been identified as a point source for resistant bacteria in several studies, and wastewater analysis is being explored as a potential tool for the surveillance of resistant pathogens. Some countries are looking at removing pharmaceuticals from manufacturing effluent; since studies show the presence of resistant microorganisms in areas near pharmaceutical producers, it would be worth doing the same for pathogens. In considering whether it is better to remove pharmaceuticals from wastewater in a health care facility or in a local treatment plant, it is worth examining levels of pharmaceutical consumption outside the facility. Other contaminants to address include heavy metals, cleaning products, organic halogens and free chlorine.

WASH is inextricably linked to **environmentally sustainable health systems**. On the one hand, health systems contribute to environmental degradation by consuming natural resources and polluting; on the other, they are vulnerable to the effects of such degradation, including climate change. The Ostrava Declaration calls for environmentally sustainable health systems – systems that minimize their negative environmental impacts, strengthen their positive effects on the environment and improve their resilience to environmental change. Such systems have not only environmental benefits, but also financial benefits (from using energy and resources more efficiently), health benefits (from reducing pollution and controlling pathogens), access benefits (from promoting telehealth) and workforce benefits (from providing better and safer workplaces). They are also better prepared for extreme weather events. Key strategies include using appropriate technology, managing chemical use, emphasizing local providers, utilizing renewable energy, employing energy-efficient building design, reducing water use and waste streams, recycling waste, instituting low-carbon procurement policies and planning for extreme weather events. Both WHO and the World Bank have issued useful publications on environmentally sustainable health systems, while the [Global Green and Healthy Hospitals](#) network provides case studies and offers an online platform that hospitals can use to track their efforts to reduce their environmental footprint.

In the ensuing discussion, participants acknowledged that there are areas where environmental sustainability conflicts with health goals; for instance, effective infection control and prevention requires a large number of disposable items, and the goal of reducing carbon emissions conflicts with the imperatives of *Legionella* control, which requires high water temperatures. Nonetheless, it was suggested that efforts be made to avoid such solutions where possible and to align health protection plans with environmental protection ones. Health actors should not hesitate to engage with industry and academia and challenge it to innovate more. In the end, the health sector needs to hold itself accountable for its impact on the environment. There is clearly much to be done, though a few countries have begun. According to a quick survey of participants, environmentally sustainable health systems are being developed at the national level in Sweden; energy efficiency

initiatives and projects are underway in Armenia, Croatia and Northern Macedonia; a national action plan on green public procurement has been prepared in Italy; and green health services and/or health care waste management is being addressed as part of other national programmes in the Republic of Moldova, the Russian Federation and Serbia.

Session 4. Review of country situations

The fourth session consisted of a roundtable based on short country reports that participants prepared beforehand. These reports provide a nuanced picture of how individual countries of the Region are addressing WASH in health care settings, and a useful complement to the evidence review presented in Session 2.

In **Albania**, the council of ministers has established criteria for WASH, health care waste and wastewater treatment in health care facilities; there are also by-laws on health care waste. There are no dedicated programmes for WASH or environmental sustainability, though the health ministry does undertake some WASH activities. Water operators are joint-stock companies owned by the government; they supply health care facilities with water, sanitation and wastewater treatment services. The facilities are responsible for managing their own health care waste. There has been no national survey of WASH in health care settings, just a report on two pilot programmes. The state inspectorate conducts routine sanitary inspections using a checklist for health care facilities.

Armenia has national standards addressing health care facility construction, water supplies and wastewater systems, as well as the management of health care waste. It has no dedicated programmes for WASH in health care settings. To date, there are two relevant national programmes: one on the modernization of health care facilities, including a component dedicated to water and sanitation systems, and one on improvement of general water and sanitation services in rural areas, which will have an indirect but positive effect on health care facilities. In 2016 the government awarded one company to be in charge of WASH services for all health care facilities. The country has a pilot programme that supplies facilities with solar battery power, and it is introducing regulations to reduce the production of hazardous waste. Health care facilities report to either national or provincial agencies, though construction is approved by the facilities' own managers. The sanitary health inspectorate conducts monitoring and surveillance using water and sanitation checklists, although not very regularly.

In **Azerbaijan**, the health ministry has adopted sanitary-epidemiological regulations addressing health care facility construction, rehabilitation and operation, including requirements for hot and cold water supplies, medical waste and hygiene. The national programme on poverty reduction and sustainable development envisages improving health care facilities by equipping them with state-of-the-art water and sanitation equipment, and more than 500 facilities have been upgraded so far. Azerbaijan also has a strategic plan for environment sustainability in health care facilities that covers 2014–2020, as well a strategic economic roadmap that stipulates improving their water and sanitation services. The national water operator plans, finances and oversees the construction and repair of all water and sanitation infrastructure. The central epidemiology and hygiene authority, which operates at both the national and the regional level, conducts epidemiological and sanitary surveillance in connection with the SDGs, including monitoring

water quality and morbidity outcomes due to water-related diseases. Based on these data, the central authority performs integrated control of water supplies and issues summary reports.

In **Belarus**, sanitation and hygiene are overseen by a department of the health protection ministry. The law on epidemiological well-being has hygienic and epidemiological requirements, including ones for water supplies and the management of medical waste. The sanitary regulations apply to all economic entities. Hospitals can have their own water supplies if justified, but outpatient clinics cannot. The sanitary regulations dictate the management and disposal of waste; violators can be fined or, in the case of outpatient clinics, refused an operating permit. The department mentioned above works closely with the environmental ministry on water and medical waste issues. Separate provisions deal with the disinfection of hospital wastewater. The department operates as an external supervisory body, although health facilities oversee infection control and do their own laboratory testing.

Bosnia and Herzegovina addresses WASH in health care facilities through a variety of laws and regulations. While there is no national plan for WASH services in these facilities, they are covered by other plans and strategies, for instance the Federation of Bosnia and Herzegovina's strategy on water management or its waste management plan, which also covers health care waste. Nor are there any targeted national programmes for the environmental sustainability of health care facilities, although there are some individual projects underway, such as the development of the country's first energy-independent medical building. Responsibility for water supply and quality is shared by the ministries of health, agriculture and forestry, environment, and food safety. The national institute of statistics publishes annual reports on the environment; although they did not disaggregate data for health care facilities before, starting in 2017 there will be separate data on waste in these facilities, including data on medical waste. There is no nationwide surveillance of WASH in health care facilities, but the public health institutes for the country's two autonomous regions publish annual analyses online of lead levels in these facilities.

The **Croatian** government is finalizing two relevant national standards for health care facilities, on cleaning and on laundry operations. There are also various ordinances on waste and wastewater in these facilities, as well as sanitary and construction standards for different kinds of health care facilities. The Ministry of Health runs several relevant programmes, notably a national infection control programme that addresses, among other things, the improvement of WASH in health care facilities. The country also has some energy-efficiency projects that chiefly target new health care construction. The Ministry assigns most responsibilities for WASH in health care facilities to various national, regional and local agencies. National overviews include analyses of wastewater and of haemodialysis water. At present, surveillance of WASH in health care facilities is irregular, but routine national surveillance is expected to start after implementation of the new national standards.

In **Georgia**, the national framework of licensing standards and technical regulations for inpatient and outpatient health care facilities includes WASH requirements. The health minister has also issued a decree on nosocomial infections and national guidelines for infection control in medical institutions. There are no targeted national programmes for improving WASH or environmental sustainability in health care facilities. WASH responsibilities are shared among national and regional authorities. Health facilities oversee their activities and regulate safety issues themselves, subject to private law and to licensing and disease-notification regimes. The health department and the national centre for disease control have been assessing infection control in inpatient facilities since 2016; 68 have been assessed to date, with the rest to be assessed by the

end of 2018. While there is no routine surveillance, the national AMR plan currently under development will aim to increase targeted surveillance.

In **Hungary**, ministerial decrees set out WASH infrastructure requirements, waste management, environmental monitoring and risk management for *Legionella* in health care facilities. While the country has no targeted programmes, it has utilized European structural funds to improve WASH services, increase energy efficiency, use more renewable energy and save water in health care settings. The National Health Care Provider Centre, a state body, owns and operates most health facilities. A pilot survey of the largest facilities was conducted in 2016, focusing on water and waste management; hospital self-assessments of hand hygiene are gathered every year. County public health offices are responsible for routine surveillance and visit most sites annually, though WASH services are not their main focus. (See also the Hungarian case study in Session 2.)

Italy has national regulations on drinking-water quality, standards for health care facilities, and a consensus charter that recommends ways to use legislation to improve water quality in health care settings (see Session 7). A ministerial decree addresses health care waste management, and the health ministry has established criteria for the surveillance of health care-associated infections and has finalized a national plan to combat AMR. The national guidelines on legionellosis specifically address health care facilities. There is a national plan on green public procurement. Regional and local authorities are responsible for WASH oversight in health care settings, but there is no routine national surveillance.

In **Kazakhstan**, a health protection code includes sanitary regulations for the handling of medical waste. Health facility water supplies are inspected twice a year, including laboratory testing of water quality by the regional health protection committee, which forwards results to the national epidemiological centre. In turn, the centre issues summary reports, analyses problems and proposes solutions for the health protection committee to implement. Although Kazakhstan does not have any targeted programmes for improving WASH in health care facilities, it just carried out a survey of conditions in health care facilities in two regions and established draft targets for providing safe drinking-water and wastewater treatment in all health care settings by 2020. The survey found that sanitation was the biggest challenge; see Session 5 for more of its findings.

In 2016, **Kyrgyzstan** approved a national 10-year strategy for water supply and sewerage, and health care facilities formed an integral part. It also adopted rules for health care waste management. There is no separate programme for improving WASH in health care settings. The health ministry developed a health care management strategy to improve environmental sustainability, but the strategy does not address improving the diversion of wastewater or reducing waste generation. Financing is provided by the Health Protection Ministry and the health insurance fund. Sanitary–epidemiological supervisory bodies monitor compliance with the national water and sanitation regulations once or twice a year and impose fines for non-compliance. Kyrgyzstan faces challenges in providing water and sanitation systems in small towns, which affect also health care facilities.

The **Lithuanian** Ministry of Health regulations set out hygiene standards for health care settings, including standards for drinking-water, hygiene and disinfection, wastewater management and medical waste. There is a national plan for infection prevention, but the WASH requirements are incomplete, and there are no targeted WASH programmes. Medical waste is also addressed in the national waste management plan. While routine inspections are specified in national action plans, they are not always carried out in practice. The frequency of inspections is based on the

results of the most recent inspection – every three years in low-risk facilities and once a year in high-risk facilities. The country does not have comprehensive surveillance at present, but the National Public Health Centre is developing WASH indicators to be integrated into national monitoring. WASH is the responsibility of the ministries of health, labour and social protection, while the ecological inspectorate oversees the treatment of wastewater. The ministry's hygiene institute oversees surveillance, guideline development and training for nosocomial infections. Reporting of nosocomial infection incidence is mandatory. All facilities obtain their water from deep protected underground sources. The facilities are connected to sewerage networks, and wastewater is treated at the municipal level in 90% of the facilities, in accordance with the regulations. Handwashing sinks are present in treatment wards of 98% of inspected hospitals, and hand hygiene is adequate in 93%, while medical waste is properly handled in 99% of all inspected facilities.

In **Montenegro**, a communicable disease law and a waste management law cover the main areas of WASH in health care facilities. The Ministry of Health prepared a national plan on the management of health care waste in 2016–2020; the plan requires facilities to prepare their own waste management plans. There are no targeted national programmes for WASH in health care facilities; instead, the facilities establish their own hygiene protocols and develop health care waste management plans and monitoring plans to control nosocomial infections. The national health inspector ensures that the relevant laws and regulations related to health care are observed. There are no requirements for routine surveillance or a national overview of WASH conditions in health facilities.

In **Northern Macedonia**, several laws and manuals address the handling of health care waste, including the management of cytotoxic waste. The rulebook for health institutions sets out basic requirements for new health care buildings, including water and sanitation. The water law also has a provision on water supplies in health care facilities. Public communal enterprises in each municipality are responsible for providing safe drinking-water and sewerage. All health facilities have access to continuous supplies of safe drinking-water, which is monitored by the Institute of Public Health and regional public health centres. Hygiene is the responsibility of the individual health facility, and it is monitored by the state sanitary and health inspectorate. A 2015 hygiene action plan has led to better hygiene in facilities. A hospital safety index survey also covers WASH. In 2015–2016, a survey was conducted of water and sanitation in health care facilities serving half of the population. All hospitals have been renovated to be more environmentally sustainable.

In the **Republic of Moldova**, the primary instrument for addressing WASH in health care facilities is the Sanitary Regulation on Hygiene in Medical Institutions. The national waste management strategy addresses medical waste; there is also a national guide to surveillance and control of nosocomial infections. The national programme to implement Protocol targets in 2016–2025 specifies that all medical facilities provide access to safe water and sanitation by 2020. A draft strategy on adapting the health sector to climate change in 2017–2022 addresses medical waste management, energy efficiency, resilience, water use and wastewater treatment. The Ministry of Health, Labour and Social Protection is responsible for WASH in 11 national facilities; otherwise, responsibility lies with local public administrators and the facilities themselves. The territorial public health centres conduct routine annual inspections of facilities and report the results to the national centre for public health. Currently, data on WASH are incomplete, though data on medical waste are available, and there is a high rate of microbial non-compliance for drinking-water. A national survey of WASH in health care facilities is planned to be conducted in 2018.

In the **Russian Federation**, a group of sanitary–epidemiological regulations for medical entities covers all areas of WASH except for medical waste and the hygiene requirements for endoscopic procedures, both of which are covered by separate regulations. There are no targeted national programmes for improving WASH or environmental sustainability in health care facilities, though there are WASH components embedded in different subnational programmes and the health sector development programme. Responsibility for various aspects of water and sanitation in health care facilities is divided among a large number of federal, regional and local bodies, as well as individual service suppliers and health care facilities; the primary responsibility lies with the federal service for protection and well-being. This agency publishes annual reports, including a review of health care facilities that includes data on water quality and water supplies. Routine inspections of these institutions are conducted at least once every three years, and unannounced inspections are carried out in response to epidemiological indications and complaints.

Serbia uses a variety of laws and by-laws to regulate different aspects of WASH in health care facilities such as health care waste management and pharmaceuticals. The Protocol has been used to set up a multisectoral working group to set national targets and embark on an ambitious programme of improvement (see Session 7). Another programme monitors the management of infection control in public facilities. Local government bodies oversee the provision of drinking-water and sanitation services, while the sanitary inspectorate and the network of public health institutes undertake surveillance of WASH and report annually on the results for all types of health facilities. The public health institutes conduct routine WASH monitoring as part of the national communicable disease programme, including site inspections and water testing. The surveillance indicators have been updated based on indicators from the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP).

Sweden has adopted a health care service act and an infection control act. In addition, the Patient Safety Act requires all health providers to have a patient safety management system; national hygiene regulations for health care include provisions for hand hygiene. The municipalities supply water. Clean Hands Save Lives is a national programme focusing on hand hygiene in health settings. While there are no national programmes to improve the environmental sustainability of health facilities, all 21 county councils work on this area in addressing health care waste management and sustainable procurement. Responsibility for most WASH services lies with the counties and municipalities, which are autonomous, though the National Board of Health and Welfare and the Public Health Agency provide guidance and oversight. There is no national overview of WASH in Swedish health facilities. The national association of local authorities is initiating annual surveys of nosocomial infections (which affected 9% of patients in 2017) and of hand hygiene compliance. Other national surveys cover infectious diseases and antibiotic resistance.

Tajikistan has no national regulations targeting WASH specifically for health care facilities, though it has general laws and sanitary norms covering water, sanitation and epidemiology. In addition, there are sanitary rules on health care waste management that date from 2009. There are no national WASH programmes specifically for health facilities either, though the national development strategy addresses WASH. Tajikistan follows the Protocol, though it is not a formal party to it, and it has programmes for improving water supplies and sanitation, and these programmes indirectly affect health care facilities.

Ukraine has national regulations governing medical waste and water; for perinatal centres there are additional regulations for water, sanitation and wastewater. A national drinking-water

programme focuses on improving water supplies for medical institutions, especially rural ones. There are no targeted programmes on environmental sustainability in health care facilities. Most WASH services in medical institutions are provided and maintained by outside service providers, some governmental and some private. Surveys of WASH conditions in health facilities are conducted irregularly; the last one found that a quarter of the facilities were not connected to a central water supply, and a quarter were not connected to the municipal sewerage network. The national food safety body oversees the compliance of suppliers and medical institutions with sanitary laws, while health ministry laboratory centres routinely monitor WASH in these institutions.

Session 5. Monitoring of WASH in health care facilities

This session included presentations on global and national monitoring, a mobile monitoring tool that addresses the needs of vulnerable groups, and a case study from Kazakhstan, as well as a brainstorming exercise on how to strengthen the monitoring of WASH in health care settings.

Global and national monitoring of WASH in health care facilities made a major leap forward in 2015 with the launch of the [global action plan](#) (see Session 1) and the 2030 Agenda for Sustainable Development, as well as the publication of [the first survey report on the international landscape](#). JMP is preparing an updated report for next year, but so far it only includes four countries from the European Region, with older subnational data; the JMP would very much like to draw on the country information prepared for this meeting. Health management information systems ought to cover WASH, and there are some excellent model questions that they can incorporate, but these systems have provided little data to date. Existing facility assessment tools that cover WASH tend to be long; WHO's Service Availability and Readiness Assessment (SARA), for instance, has about 800 questions. (See also Session 6 for a detailed description of WASH FIT, an assessment tool designed to improve WASH in individual health care settings.) There remains much work to do in promoting data collection, harmonization of indicators and disaggregation of data. JMP has developed four ladders for surveying health care facilities, for drinking-water, sanitation, handwashing and waste management, respectively. It has defined global core indicators for the basic service level of each ladder and is developing an additional one for cleaning. WHO has also drafted core indicators for WASH and infection prevention and control in delivery rooms, since the birthing environment is a major public health concern; globally, severe bacterial infections are responsible for as much as 23% of newborn mortality. The Protocol provides an excellent opportunity to gain experience with defining and monitoring advanced service levels, as well as helping countries establish national monitoring systems, baselines and targets. While global and regional monitoring can provide guidance and inspiration for national monitoring, establishing good national systems should be countries' first priority.

Participants heard next about a **mobile monitoring tool** designed by Terres des Hommes and the Swiss Federal Institute of Aquatic Science and Technology (EAWAG) specifically for use in humanitarian and development settings. The [Facility Evaluation Tool for WASH in Health](#) (FACET WIH) is a brief assessment and monitoring app that runs on Android phones and tablets. Presently available in English and French, the tool is based on field testing in six African and Asian countries. It allows questions to be added, changed and translated into local languages. The mobile platform also enables the use of constraints and hints to limit mistakes, while a dashboard feature allows realtime visualization of data for an entire country. Experience from

Burkina Faso has underscored the importance of training users, defining terms clearly and adapting questions to local conditions. FACET WIH is an open-source tool that will soon be available for free. It can be previewed at tinyurl.com/FACET-WIH.

The session then turned to a case study: **a pilot assessment in Kazakhstan** that utilized the JMP core and expanded indicators for WASH in health care facilities. The assessment was conducted in July and August 2017, so only the preliminary results were available for the meeting. It covered the state and management of WASH services in 52 representative facilities, both rural and urban, and consisted of a survey, spot-check visits, structured interviews and water quality testing. Despite being conducted during a harsh time of year, with high temperatures and low precipitation, it found that 90% of the facilities had continuous access to water on their premises. Their biggest challenge proved to be sanitation; 46% had unimproved services and 2% no sanitation services at all, with particularly poor accommodation of women and people with mobility issues. Hygiene was fairly good, though in half the facilities there was no hand hygiene by the toilets. Approximately 70% segregated their waste, though often not safely, and two thirds of rural facilities practised open burning. Accurate data was difficult to obtain on the disposal and treatment of waste and soiled linen. The greatest challenge in the assessment proved to be the need to provide intensive training for the surveyors. The results will be used to prioritize future WASH initiatives and to develop a monitoring tool.

At the close of the session, participants broke into four groups to brainstorm on **ways to strengthen the monitoring of WASH in health care settings**, particularly through the integration of core indicators into national information systems and the forging of stronger links between national and global monitoring. Their key suggestions are outlined below.

- Establish a legislative or regulatory basis for integrating core WASH indicators into national health care information systems and other relevant information systems covering the private and public health sectors.
- Set up a working group with representatives from the different authorities and types of facilities to assess existing data; to harmonize reporting forms with core indicators, regional standards (such as the ECDC's) and national requirements; and to ensure the data is incorporated in national information systems and raise awareness of key terms and definitions at the national level.
- Incorporate the JMP suggested core indicators into national hospital accreditation and licensing processes.
- Appoint a national coordinator to oversee WASH monitoring and explicitly include WASH in health care settings in the coordinator's remit.
- Harmonize and streamline monitoring efforts which are often carried out piecemeal by a variety of bodies. Universal health care might provide a good basis for such harmonization.
- Consult with experts from WHO and elsewhere and exchange experiences with other countries, for example on surveillance training programmes and the development of indicators for advanced WASH service levels.
- Develop national checklists for facilities to submit to health authorities on a routine basis, to provide clear reporting guidelines and to ensure that the data are collated at the country level.
- Ensure that such monitoring is addressed in a national action plan, including assignment of responsibilities, a timeline and financial resources.

- Utilize existing international reporting systems where possible, such as the reporting under the Protocol, JMP and the United Nations Water (UN-Water) initiative called the UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS).
- Decide how to use WASH data and whether to make the data publicly accessible, with appropriate technical and financial support.
- Cultivate political support for monitoring improvements, for instance by preparing a policy brief for decision- and policymakers.
- Develop a regional inventory of existing tools and indicators, which would also strengthen linkages to various national action plans (such as the national AMR plan).
- Collate case studies from various countries in the Region on common issues, including the country reports prepared for this meeting.
- Promote the setting of appropriate national targets and progress-reporting under the Protocol.

Session 6. An instrument for implementing WASH in health care facilities

The sixth session provided an introduction to WASH FIT.

While many other tools exist, **WASH FIT** was recently developed by WHO and UNICEF to provide health systems with a risk-based management approach to improve their WASH services – and it will be released in Russian very shortly. It is based on WHO’s [*Essential environmental standards in health care*](#) and inspired by the water safety plan (WSP) and quality improvement models. It engages the leaders of individual facilities as well as leaders at the higher levels of a health system from the very beginning in order to promote long-term improvement. WASH FIT comprises four domains – the three components of WASH plus management, which covers leadership, staffing and problem-solving. It also draws on material from the fields of infection prevention and control, maternal and newborn care, and emergency preparedness. A self-assessment tool, WASH FIT uses an iterative, integrated approach that should be linked to health-based objectives such as meeting particular standards or being accredited. The process consists of a cycle of five steps:

1. assemble and train a WASH FIT team;
2. conduct a self-assessment;
3. identify areas for improvement and prioritize them according to level of risk and difficulty of addressing;
4. develop and implement an improvement plan; and
5. evaluate the plan and adjust as appropriate.

The assessment covers facility infrastructure, behaviours, knowledge and management. Lessons from early adopters include the importance of embedding the assessment in health improvement efforts; obtaining the support of senior staff and national policymakers; linking training to policy and financing mechanisms; using peer exchanges, competitions and audits to support improvements; and establishing a dedicated WASH budget. To date, WASH FIT has been implemented in at least 15 countries. Although it is not being used there yet, there are plans to adapt it specifically for the European Region, and countries were invited to express interest in

applying the tool. As a start, participants were urged to download the tool and learning app from washfit.org and to weigh adoption.

Session 7. Strengthening regional and national policy frameworks and actions for WASH in health care facilities

The last thematic session began with two case studies that examined how Italy developed a charter to reduce the risks related to using water in health care, and how Serbia is using the Protocol on Water and Health to improve WASH in health care settings. Following a presentation on how international cooperation can facilitate such improvement, participants engaged in a roundtable discussion of the plans and support needs they have for their own countries.

The health care system in **Italy** is organized regionally. In 2016, following a national convention of relevant stakeholders, a group of experts drew up the [Vieste Charter on Water Safety in Healthcare Facilities](#). Recognizing that water safety is a primary determinant of patient and staff health in health care facilities, the Charter focuses on preventing and managing the risks due to the structure and layout of plumbing systems as well as to the particular vulnerability of the users. It seeks to promote a culture of preventing and controlling the risks associated with water utilization in health care settings, to implement and improve the hygienic management of water and to reduce health care-associated infections. Of particular concern are the risks due to the complexity of large-scale plumbing systems, to the variety of water sources used to supply water for different purposes with differing quality requirements, and to the heightened susceptibility of facility users, particularly immunocompromised individuals. To analyse and minimize these risks, the Charter urges the use of WSPs for supplies and plumbing systems, assessment of risks associated with health care practices, and implementation of appropriate regulations. Additional recommendations include using approved treatment methods and materials for water systems, ensuring the professional installation and maintenance of these systems, the participation of both health care professionals and technical operators in risk assessment, the training of everyone whose actions affect water safety, the active involvement of a facility infection committee, the implementation of preventive measures from the national centre for disease prevention and control, awareness-raising activities, relevant research and development and the adoption of policies to promote environmental sustainability.

Participants then turned their attention to **Serbia** and how it has been using the Protocol to drive national improvements in WASH in health care settings. The country ratified the Protocol in 2013 and immediately established a multisectoral working group, which now includes 17 members from six ministries as well as relevant agencies, local government and a labour union. The group established national priorities and set 35 targets in 14 areas using a baseline survey, the priorities of the Protocol programme of work, and existing national legislation and strategies. The Protocol process resulted in effective multisectoral collaboration, informed policy action and major improvements in water and sanitation. Routine monitoring of sanitary conditions is conducted in a wide range of health care facilities with the overall aim of reducing health care-associated infections. Challenges have included shortcomings in monitoring methodology, poor data quality and uneven implementation and coverage. As a result of the process, the Serbian government embarked on an ambitious programme in 2016 to renovate health care facilities, including their water and sanitation facilities; to date, 150 facilities have been upgraded. In

In addition, surveillance methodology has been improved, the JMP service ladders are being used for monitoring WASH in health care settings, and a study of wastewater disposal and waste recycling has been carried out to identify areas for improvement. The working group is now starting to update their baseline analysis, revise Protocol targets, define advanced levels of WASH services, increase coverage in rural health care facilities, introduce WSPs and raise awareness of AMR and how WASH affects quality of care. The involvement of dedicated people and strong leadership from the health and environment ministries have helped overcome the difficulties of multisectoral collaboration, while the tangible achievements have proved inspiring for further work.

Health care facilities are a powerful setting for advocating policy measures that will prevent diseases and protect health. Safe WASH in health care settings is a highly effective tool for disease prevention, and **international cooperation** has been critical in promoting it. The Swiss Agency for Development and Cooperation (SDC) works for fostering action for sustainable development with countries also addressing safe WASH in health care facilities. To facilitate such cooperation, it is important to promote scientific evidence that can provide a basis for policy action within countries. Despite the contributions of WASH to public health and environmental sustainability, however, many policy- and decision-makers still need convincing, and the pharmaceutical industry has not made it a priority. While the evidence base has grown, there is still a need for better data and analysis, and it is probable that the disease burden due to poor WASH in health facilities of the Region is significantly underestimated. In addition, scientific and technical descriptions of the health benefits of better WASH services have to be translated into simpler language so that the political and economic benefits become clearer. Such advocacy efforts are key to convincing politicians to provide health care systems with the funding needed for safe WASH services. It is especially worth referencing the human right to safe water and sanitation, a right that is being incorporated into more and more national constitutions. More also needs to be done to understand and publicize the correlation between poverty and the lack of sustainable access to WASH services. It is important to gather robust data, collate examples of good practices, communicate positive messages and lobby to prioritize the issue on national agendas.

Harmonization of national, regional and global indicators for health care settings is critical in overcoming the gaps between perception and reality. The global monitoring framework provides countries with guidance and vision, while helping put WASH issues higher on the global geopolitical agenda and attracting more resources. Harmonization of indicators makes it possible to see global trends and make international comparisons, which in turn encourages countries to commit themselves to improvement. While some policymakers might say that it is not rocket science, to provide a country's health facilities with safe, sustainable WASH services is a more complex undertaking – with all its ethical, financial, regulatory, technical and behavioural considerations – than sending three people to Mars.

The session concluded with a **roundtable discussion of participant plans and support needs** to strengthen national efforts and policy frameworks in order to improve WASH in health care facilities. In particular, they were asked what sorts of support they would find helpful from ECEH.

In **Albania**, WASH needs to be incorporated into the national strategy for the health sector and into implementation plans, including provisions for conducting monitoring and surveillance with harmonized indicators. Support for pilot projects, workshops and translating materials into Albanian would be especially welcome. For **Azerbaijan**, the first priority will be getting the

draft targets and indicators for water and health developed under the framework of the Protocol approved by actors in the appropriate sectors. Seminars on methodological guidelines would be invaluable. In **Bosnia and Herzegovina**, the institutes of public health will reach out and try to involve the Ministry of Health. They also plan to carry out a pilot assessment to collect basic data, and then to define national WASH targets for health care facilities.

In **Croatia**, interministerial coordination and pilot projects will be key in moving forward. It would be useful if WHO could help keep the momentum going among the relevant ministers by providing some recognition of the importance of the hard work being done on the issue in the country now. **Georgia** first needs to establish a working group to prepare a national environmental and public health profile and agree on the best way forward. The National Environment and Health Programme (NEHAP) is currently being approved, including activities related to WASH in health care facilities. The Georgian representatives thought that a European Region group addressing how to establish or improve national reporting would be invaluable and would provide an excellent networking opportunity among countries and international organizations. They also suggested collating information from countries on ongoing activities on WASH in health care facilities, for instance through a questionnaire. Better guidance on hazardous substances, including newer disinfectants and biocides, would also be a great help, as would support in establishing baseline data. **Kazakhstan** is looking forward to receiving the results and analysis from the WHO pilot assessment of their country, which has helped to focus attention on its vulnerable regions (see Session 5). They will be working out a mechanism to implement the report recommendation, and hope to follow up with a nationwide assessment.

Kyrgyzstan would like to make a large-scale survey of WASH in their health care facilities, ideally with WHO help in identifying a few core indicators to incorporate into existing surveys. They could also use assistance in exploring alternative financing mechanisms, as refurbishing facilities is expensive. It would be useful in discussions with the health ministry to have examples of other countries' experiences with such mechanisms. One suggestion is to designate in each country's institute of public health a WHO focal point for WASH in health care settings. **Montenegro** has not yet ratified the Protocol; it would be beneficial if WHO could send a reminder letter to the Ministry of Health. Once the Protocol is ratified, WHO assistance will be needed to help set targets and choose indicators. An effort will be made to add WASH elements to the sanitary rulebook being developed on nosocomial infections and to future action plans on health protection and patient safety. It would make sense for the Ministry to organize some pilot projects, and it also needs to systematize its data collection and identify a platform to share data.

The **Republic of Moldova** has set targets, but it does not have enough actions relating to WASH in health care facilities; it is now preparing an assessment of current conditions. In particular, it needs to encourage health care workers to improve WASH and establish mandatory standard operating procedures for them. The country's representative suggested that the Region create a WASH award for one of its Member States in order to promote good practice in the field, akin to the World Water Day award. The **Russian Federation** will be helping WHO to gather together publications in Russian that relate to WASH in health care settings as a contribution to the ongoing review of evidence from the Region. **Tajikistan** plans to assess the WASH baseline in health care settings and requested WHO support in a pilot application of WASH FIT. They will also analyse communicable diseases and maternal and infant mortality over the past decade and monitor WASH conditions in rural facilities. Ideally, the WASH activities of all health facilities and health and environmental agencies will be coordinated, and an overall picture of the situation will be presented to decision-makers and the general public.

In addition, **Health Care Without Harm Europe** committed to consulting with WHO and preparing a webinar on WASH in health care settings to educate its staff and members, using a good country case if possible. They would like to incorporate the issue in their current work, for instance on AMR, and find the sweet spot in existing linkages. They invited participants to propose projects that the coalition can collaborate on with countries and tap the resources of its NGO community. While most of their work has been in the EU, they recognize that it is in central and eastern Europe where their efforts could make a real difference.

A number of broader points were also made during the discussion, such as the advantages of moving from a control perspective to an emphasis on cooperating with and helping health care facilities improve their WASH services, with particular attention to hand hygiene. It was noted that surveys can be important tools for advocacy and raising awareness of challenges and priorities. Advocacy to obtain political support is critical, and all the participants were urged to consider such advocacy as a professional obligation. Political cross-linkages should be established with highly relevant health programmes, such as those dealing with quality of care, infection prevention and control, AMR and maternal and child health. While the meeting focused on the risks of poor WASH, it is also essential to emphasize the benefits of good WASH – and to do a better job of documenting them. In that connection, WHO headquarters is preparing a document on solutions and strategies that it will publish in 2018. Finally, with respect to financing, participants were challenged to seek funding in less obvious places, such as climate change funds.

Session 8. Conclusions and recommendations for follow-up

For the closing session, the meeting organizers and chairs developed a preliminary list of conclusions and a set of follow-up actions from the sessions of the preceding two days.

Conclusions

Rationale

Quality health care requires good WASH services; poor WASH services lead to poor health and environmental outcomes. The focus of implementation programs and research to date has been largely on low- and middle-income countries outside the European Region, however. Adequate WASH is a public health challenge for all countries, though the issues and challenges tend to be different for high-income countries.

Scope of WASH issues in health care facilities

Major areas of WASH concern include:

- water availability, accessibility and safety
- sanitation availability and accessibility
- safe disposal of health care waste and wastewater
- hygiene and its role in infection prevention and control in health settings.

It is essential for health systems to address all dimensions of WASH: water, sanitation, hygiene and health-care waste management.

Policy frameworks

The key international policy frameworks for countries in the European Region that call for action to ensure safe and sustainable WASH for all and for all settings (such as health care facilities) include the following:

- SDG 3 on health and SDG 6 on water and sanitation
- the global action plan on WASH in health care facilities
- the Ostrava Declaration on Environment and Health
- the Protocol on Water and Health.

Drivers and entry points for action

It is important to align and integrate WASH efforts with existing programmes where possible, including initiatives devoted to the following issues:

- universal health care
- quality of care
- infection prevention and control
- maternal and child health
- AMR
- environmentally sustainable health systems
- climate change adaptation and resilience.

The situation in countries of the Region

- While all participating countries already have some relevant policies and regulations in place, most of them have gaps, and enforcement is often uneven.
- National programmes targeting the implementation of WASH in health care facilities are rare. Instead, some dimensions of WASH in health care tend to be an integral part of general WASH programmes and action plans, and of other programmes and action plans that mainly address facility renovation, water supply, sanitation, etc.
- There are programmes targeted at health care facilities with respect to AMR or environmental sustainability, but they rarely include a WASH component.
- Very few countries have a full picture of the national situation of WASH in their health care facilities. Many countries conduct some routine and ad hoc surveillance at the national or the subnational level, especially of hospital hygiene, though they do not always collect surveillance data centrally or use it for policy improvements. Concerns were raised on the quality of data due to the use of non-harmonized indicators or poor methodology.
- WASH in health care facilities is generally overseen by the health sector, with some exceptions for sanitation and wastewater and for water infrastructure. Responsibility is spread among national and local authorities, in some cases being left only to local actors or to the individual facilities themselves when small water systems are in use.
- Few countries have established specific targets on WASH in health care facilities within the framework of the Protocol on Water and Health.

Strengthening monitoring and assessment

Key actions in developing robust national monitoring and assessment programmes for WASH in health care facilities include the following.

- Establish robust routine and ad hoc surveillance, supported by a regulatory framework, including surveillance of AMR and nosocomial infections. Where possible, align national indicators with global ones and integrate them into existing surveillance and inspection schemes.
- Request WHO support in formulating definitions of indicators, especially for advanced service levels that apply to the national context, and in helping raise awareness of key terms and definitions.
- Incorporate core WASH indicators in health information and reporting systems as well as in hospital licensing and accreditation processes.
- Conduct a systematic national analysis of existing surveillance efforts and data, including local efforts, and establish the centralized collection of data at the national level.
- Prepare an inventory of existing monitoring tools. Utilize mobile solutions where practicable.
- Appoint a national coordinator to oversee WASH monitoring, and explicitly include WASH in health care settings in the coordinator's remit.

Advocacy

Participants were challenged to be advocates and ambassadors for better WASH policies and practices in their countries' health care settings. Actions they can take include the following:

- Seek out key decision- and policymakers and communicate the benefits of good WASH policy and services in health care settings.
- Stimulate situation assessments and discuss the range of policy options for integrating WASH into national health and other relevant strategies, regulations and action plans in areas such as maternal and child health, quality health care, infection prevention and control, AMR and the environmental sustainability of health systems.
- Set up a national working group on WASH in health care settings with representatives from all key stakeholders and relevant sectors.
- Incorporate WASH indicators for health care facilities in national baselining, target-setting and reporting under the Protocol on Water and Health.
- Make use of data to inform the public, to prioritize actions on WASH in health care facilities on national agendas and to advocate for increased funding.
- Explore opportunities for and advocate for the allocation of adequate financial support for the implementation of policies and surveillance.

Next steps: follow-up

- Participants were asked to help generate a regional picture of WASH in health care settings through national evidence collection, including by supplying articles that are missing from the ongoing systematic review of regional evidence.
- The secretariat of ECEH committed to help country-level efforts in several ways:
 - political advocacy, especially for the regional process under the Protocol

- help in the drafting and revision of national targets
- methodological support for assessments and indicator development
- support for national situation analyses
- assistance in adopting WASH FIT and other tools
- provision of and support for capacity-building
- facilitation of information exchange and learning.

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Annex 2. Meeting programme

Wednesday, 27 September 2017

08:30–09:15 Registration of participants

09:15–09:50 Welcome and opening (*Elizabet Paunovic*)

Introduction to the meeting: background, objectives and expected outcomes
(*Oliver Schmoll*)

Election of meeting officers and introduction of participants

09:50–10:50 **Session 1: Global and regional framework for improving water, sanitation and hygiene (WASH) in health care facilities**

WHO/UNICEF global action plan on WASH in health care facilities: priorities, actions and impacts (*Maggie Montgomery*)

WASH in health care facilities as priority under the Ostrava Declaration on Environment and Health and the Protocol on Water and Health (*Enkhtsetseg Shinee*)

Question and answers

10:50–11:20 Morning break

11:20–12:15 **Session 2: Evidence on WASH in health care facilities in the WHO European Region**

WASH in health care facilities in the WHO European Region: findings of a systematic evidence review (*Mats Leifels, Lydia Abebe*)

Case study: results and outcomes of the pilot monitoring programme of WASH in health care facilities in Hungary (*Marta Vargha*)

Question and answers

12:15–13:00 **Session 3: Cross-cutting aspects of safe WASH in health care facilities**

The role of adequate WASH for the protection of maternal and newborn health: risks, evidence and measures (*Mavjuda Babamuradova*)

The role of hand hygiene for quality health care (*Thomas Kistemann*)

Questions and answers

13:00–14:15 Lunch break

14:15–15:30 **Session 3 (continued)**

The link between WASH in health care facilities and antimicrobial resistance
(*Heike Schmitt*)

Reducing the risk of antimicrobial resistance by improving WASH (*Anja Leetz*)

The role of adequate WASH in environmentally sustainable and quality health care services (*Sonia Roschnik*)

Adequate management of waste and wastewater and its implications (*Anja Leetz*)

Question and answers

15:30–16:00 Afternoon break

16:00–17:30 **Session 4: Review of country situations**

Roundtable with country statements

Question and answers

Thursday, 28 September 2017

09:00–09:30 **Session 4 (continued)**

Roundtable with country statements

Question and answers

09:30–10:45 **Session 5: Monitoring of WASH in health care facilities**

Global monitoring of WASH in health care facilities and links with national monitoring (*Rick Johnston*)

Experience on monitoring tools of WASH in health care facilities: addressing the needs of vulnerable groups (*Samuel Renggli*)

Case study: pilot assessment on WASH in health care facilities in Kazakhstan considering the WHO/UNICEF core and expanded SDG indicators
(*Saltanat Yegeubayeva, Valentina Grossi*)

Questions and answers

10:45–11:15 Morning break

11:15–12:30 **Session 5 (continued)**

Group work on the linkages between national and global monitoring, and on the needs for strengthening national surveillance of WASH in health care facilities

Presentation of group work outputs to the plenary

12:30–13:45 Lunch break

13:45–14:15 **Session 6: Instruments for implementing WASH in health care facilities**

Implementing standards for WASH in health care facilities: the water and sanitation for health facility improvement tool (WASH FIT) (*Maggie Montgomery*)

Questions and answers

14:15–15:15 **Session 7: Strengthening regional and national policy frameworks and actions for WASH in health care facilities**

Case study: strengthening national legislation to reduce the risks linked to the use of water in health care: the way forward in Italy (*Luca Lucentini*)

Case study: towards implementing WASH in health care facilities in the context of the Protocol on Water and Health: the case of Serbia (*Nataša Đurašinovic*)

International cooperation on strengthening WASH for universal quality health care (*Johan Gély*)

Question and answers

15:15–15:45 Afternoon break

15:45–16:45 **Session 7 (continued)**

Moderated roundtable discussion on key challenges and enablers as well as country actions for translating global priorities for WASH in health care facilities to the national agenda (*see information note EUPCR1611921/3.3/64555/7*)

16:45–17:00 **Session 8: Concluding session**

Draft conclusions of the meeting and recommendations for follow-up actions

17:00 Closing

The WHO Regional Office for Europe

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