Prevention and reduction of water-related diseases

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Working Group on Water and Health
Geneva, 16-17 April 2024
Progress and achievements

Training materials on ‘water-related diseases’ and ‘risk-based surveillance of drinking water’ developed

- Two modules, case-studies for interactive exercises, and participant and moderator guides
- Available on WHO/Europe webpage

- Case studies and expert interviews, Knowledge tests
- Supported by the WHO Collaborating Center at the University of Surrey, Guildford – under revision
Progress and achievements

National training workshop on strengthening water-related disease surveillance and outbreak management in Ukraine (20–21 July 2023)

Aims:

• To review existing mechanisms for the surveillance, early-warning and management of outbreaks of WRID
• To increase knowledge and understanding of the main approaches and best practices for surveillance, early-warning and response to outbreaks of WRID
• To understand and discuss the added value of multi-pathogen surveillance in wastewater for public health protection

Participation:

• 40 participants of Ministry of Health, Public Health Center and regional Centers of Disease Control and Prevention
Progress and achievements

Environmental surveillance of wastewater

- Status of environmental surveillance for SARS-CoV-2 virus
  WHO Scientific Brief (August 2020) - Available

- WHO Interim Guidance – Environmental surveillance for SARS-CoV-2
to complement public health surveillance (September 2023) - Available

- Questions and answers: Wastewater surveillance of SARS-CoV-2 (2022) - Available

- Parties of the Protocol are involved in European and international initiatives:

Detailed update in the next presentation on ‘European and global initiatives on wastewater surveillance’
## Progress and achievements

### Legionella prevention and control

<table>
<thead>
<tr>
<th>Collation of evidence on Legionella</th>
<th>Expert meeting on Legionella prevention and control (30 Nov-2 Dec 2022)</th>
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<tbody>
<tr>
<td>• Burden of legionellosis in the pan-European region, including data mining from countries in EECCA</td>
<td>• Appraise the situation in the region</td>
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<td>• Survey of regulatory and surveillance frameworks on Legionella</td>
<td>• Discuss Legionella prevention and control in building systems, surveillance of legionellosis and promote exchange of good practices</td>
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<td>• Supported by Hungary, Belarus and the WHO Collaborating Center at the Bonn University</td>
<td>• Support setting targets and discuss priorities for action in countries and under the Protocol</td>
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<td>• Over 70 experts from 28 countries</td>
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<td>• Hosted by Hungary and organised jointly with Belarus, Norway, and the WHO/Europe secretariat</td>
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**Detailed update in the next presentation on ‘Work on Legionella in the region’**
Progress and achievements

Regional report on *Legionella*

• Overview of incidents and outbreaks of legionellosis in the pan-European Region - Available
• Status quo: regulatory framework, surveillance system capacities and gaps - Available
• Report of the expert meeting on prevention and control of legionellosis in the pan-European region – Available
• Overview of environmental prevalence of *Legionella* in the pan-European region – In progress

- Literature review on outbreaks and incidents
- Survey on regulation and guidance
- Country experiences and technical input
- Literature review on environmental prevalence
Progress and achievements

Main findings of the literature review

- Data sources: scientific literature, ECDC database, PWH national summary reports
- Outbreak reports published for two third of the EURO countries, limited information on the EECCA countries
- Two thirds of outbreaks linked to cooling towers or building water supply systems, (predominantly *Legionella pneumophila* sg 1)
- Wide variation in reported case numbers, outbreak sizes and length
- Legionellosis is a still underestimated public health issue in EURO
Progress and achievements

Main findings of the regulatory survey

- High response rate (44/53)
- Most countries have some regulation on *Legionella* control
- Regulatory requirements for domestic settings need improvement
- Many countries need to set and implement regulatory requirements for legionella risk assessment
- Legionellosis is reportable disease in 35 countries
- Limited information from Central Asia and Caucasus indicating a need for strengthening surveillance capacity
- Most countries report gaps in financing and human capacities for *Legionella* control, and limited awareness in the general public
Progress and achievements

Expert meeting on *Legionella* prevention

- Regional expert meeting on prevention and control of legionellosis (online, 30 November–2 December 2021)
- 70 experts from 28 countries
- Confirmed the relevance of legionellosis as a waterborne disease in the region
- Platform for the exchange of good practices and national experiences
- Defined priorities under the Protocol on this area

Meeting recommendations

- Strengthen national and local capacity for surveillance and outbreak management of legionellosis
- Improve regulatory frameworks and promote uptake of a risk-based management approach in buildings and other high-risk settings
- Establish and maintain surveillance and early warning systems, contingency plans and response capacities for water-related disease, and scale up Legionella control and prevention under the Protocol (Article 8)
Progress and achievements

Regional report on Legionella

- Search terms: Legionella AND environmental surveillance/monitoring/prevalence/hot water/spa pool/cooling tower
- 2014-2024
- English full text
- Exclusion criteria: review, not Legionella-related, outbreak related, clinical surveillance, outside WHO European Region, no full available in English
European and global initiatives on wastewater surveillance
Joint Action “Wastewater Integrated Surveillance for Public Health in Europe”

- Launched by EC HERA with a budget of 15M Euro
- 26 participating EU/EEA countries
- Period: November 2023 - October 2026

Main objectives:

- Support the participating countries to enhance, extend and consolidate wastewater surveillance for public health and build preparedness for serious cross border health threats
- Collaboration and sharing to avoid duplication of efforts, ensure synergies and enhance coordination of wastewater surveillance
European and global initiatives on wastewater surveillance
Joint Action “Wastewater Integrated Surveillance for Public Health in Europe”

Alignment with Protocol activities on capacity building in wastewater surveillance
European and global initiatives on wastewater surveillance
Global consortium for wastewater and environmental surveillance (WES) for public health

GLOWACON
- Led and launched by EC HERA in March 2024
- Collaborative and inter-sectorial network of over 300 global partners, including EC HERA, WHO, US CDC and Bill & Melinda Gates Foundation
- Aim is to stimulate collaboration and innovation in the field of WES

Training and Capacity Building
- Led by Public Health Agency Canada, Turkish Water Institute, Institute Pasteur of Tunis and Dakar
- Build members’ capacities and organize specialized training activities for the exchange of best practices among researchers, implementers and policymakers with the aim to support public health impact assessment and decision-making

Alignment with Protocol activities on capacity building in wastewater surveillance
European and global initiatives on wastewater surveillance
Protocol/EHP Partnership for Wastewater Surveillance of Infectious Diseases and Antimicrobial Resistance

EHP partnerships

• New mechanism under the European Environment and Health Process
• Aims to foster national and international implementation of the Budapest Declaration
• Flexible mechanism for implementation, offering platform for sharing best practices, knowledge transfer and peer-to-peer support.

Proposal for Protocol/EHP Partnership for WWS

• Expressed interest: BEL, DNK, FIN, GRC, HUN, LUX, NLD, TUR, EU-JRC
• Lead country tbc
• Building synergies with other initiatives
• Seeking approval of the WGWH
• Open to countries to join

Better understanding of the potential use of WWS in public health in the Region
Platform for sharing experiences
Support countries in decision-making on infectious disease and AMR trends
Delivery of in-country capacity building

Alignment with Protocol
Joint initiative
Linkage to PA2 and PA5
Agenda item 16
Plans for future work in this area

Objectives

Support Parties and other States in implementing article 8 of the Protocol, specifically in:

a) improving, maintaining and sustaining surveillance and early warning systems of water-related disease, preparedness and contingency planning, and response to outbreaks and water quality incidents;

b) building national capacities for risk-based surveillance of drinking water supply and quality;

c) improving environmental surveillance of SARS-CoV-2 and other disease agents of concern in wastewater as an integral part of public health surveillance.

* Based on the draft programme of work for 2023-2025
### Plans for future work in this area

#### Surveillance and outbreak management of water-related diseases

- **a)** Up to three subregional and/or in-country capacity-building activities
- **b)** Evidence review on Legionella control and prevention for the pan-European region
- **c)** Up to three national and/or subregional capacity-building events on prevention and control of Legionella

#### Risk-based surveillance of drinking water supply and quality

- **a)** Up to three subregional and/or national capacity-building and networking activities
- **b)** Support countries in setting national regulations and standards for drinking-water quality and application of risk-based approaches in surveillance

#### Environmental surveillance of wastewater

- **a)** Expert meeting on wastewater surveillance of SARS-CoV-2
- **b)** Support countries in setting up environmental surveillance programmes for SARS-CoV-2 and other disease agents
- **c)** Training module on the basics of wastewater surveillance

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*Challenges: Delay on some planned activities under PA2 may occur due to limited capacity at the WHO Secretariat*
Plans for future work in this area

Recent developments in EU Directive 2020/2184 on the quality of water intended for human consumption will support scaling up implementation of a risk-based approach in drinking-water service provision.

Upcoming event on (subregional) “Meeting on risk-based drinking-water surveillance in Nordic-Baltic countries” (Tallinn, 24 – 26 April 2024)

- In cooperation with the Nordic-Baltic Network
- Estonia, Finland, Iceland Latvia, Lithuania and Norway participating

Preparations for capacity building on Legionella surveillance and outbreak response (Lithuania)
Thank you for your attention!