



# Prevention and reduction of water-related diseases

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Working Group on Water and Health  
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#ProtocolWaterHealth

# 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

### Collation of evidence on Legionella

- Burden of legionellosis in the pan-European region, including data mining from countries in EECCA
- Survey of regulatory and surveillance frameworks on Legionella
- Supported by Hungary, Belarus and the WHO Collaborating Center at the Bonn University

### Expert meeting on Legionella prevention and control (30 Nov-2 Dec 2022)

- Appraise the situation in the region
- Discuss Legionella prevention and control in building systems, surveillance of legionellosis and promote exchange of good practices
- Support setting targets and discuss priorities for action in countries and under the Protocol
- Over 70 experts from 28 countries
- Hosted by Hungary and organised jointly with Belarus, Norway, and the WHO/Europe secretariat

**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

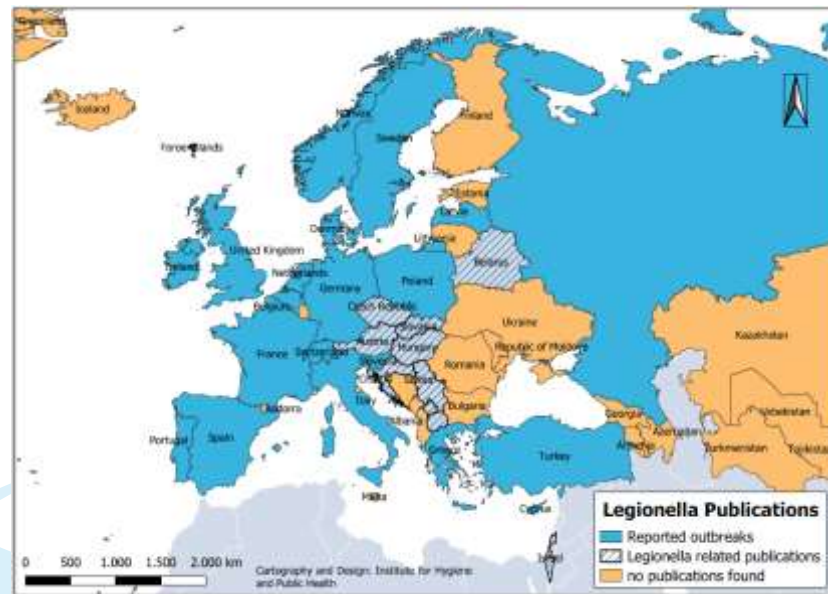
Country  
experiences and  
technical input

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

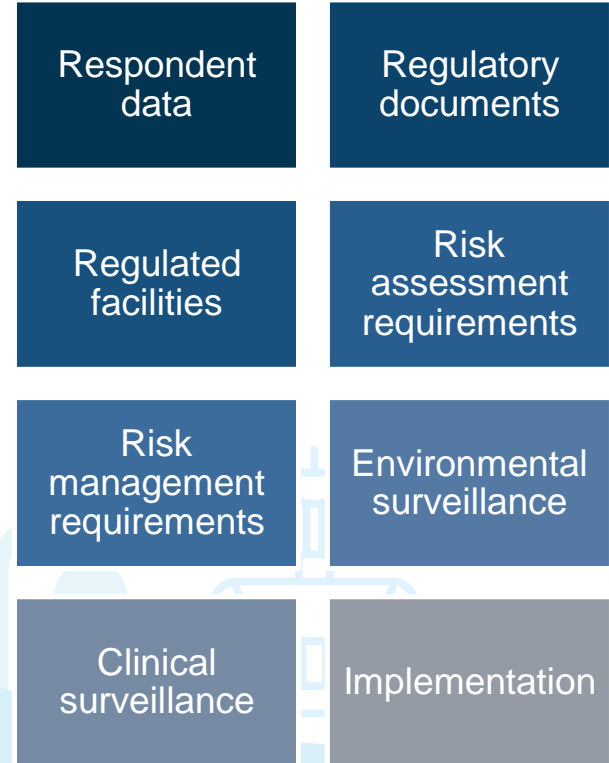


# Progress and achievements

## 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

## Survey elements





# 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

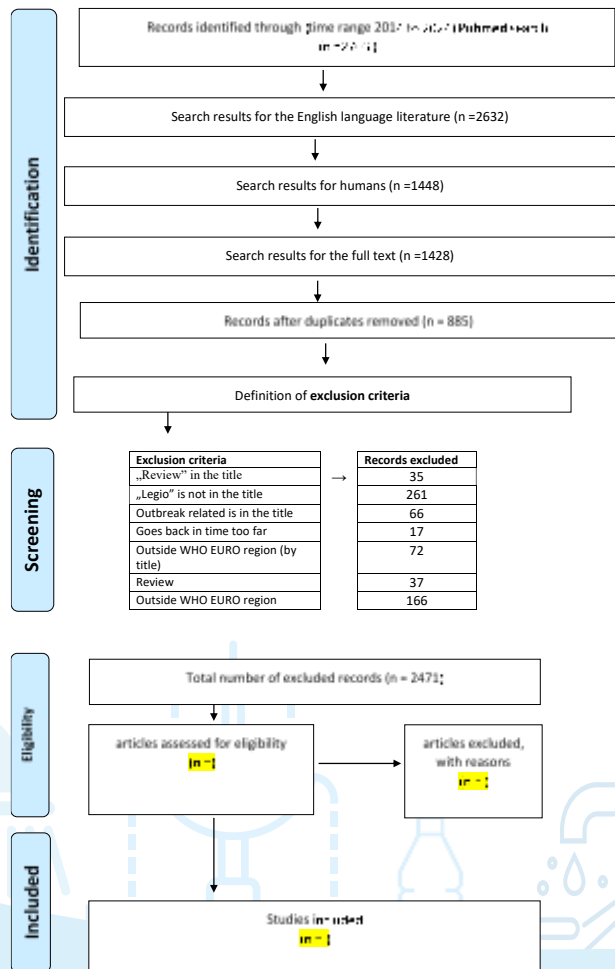
## Meeting recommendations

- 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:

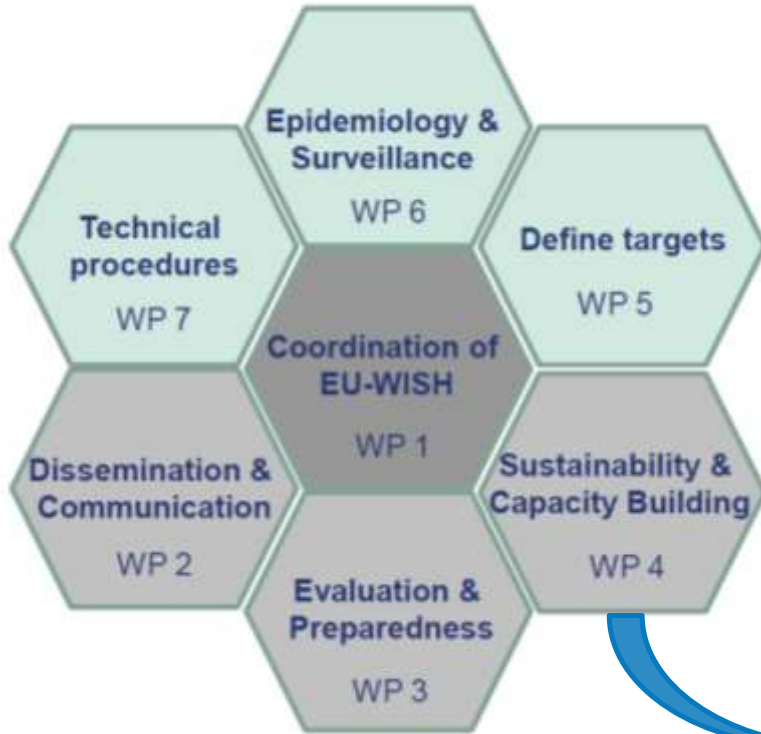
- Support the participating countries to enhance, extend and consolidate wastewater surveillance for public health and build preparedness for serious cross border health threats
- Collaboration and sharing to avoid duplication of efforts, ensure synergies and enhance coordination of wastewater surveillance

EU-WISH is co-funded by the European Union (Grant Agreement No 101140460).



# 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



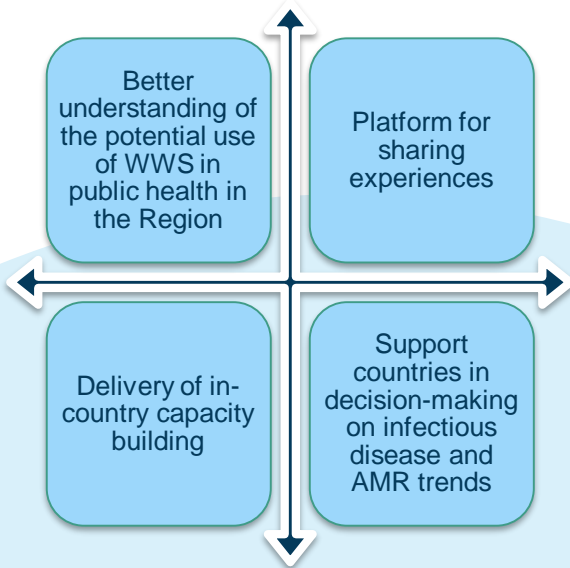
**Alignment with Protocol**  
activities on capacity building  
in wastewater surveillance

# 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

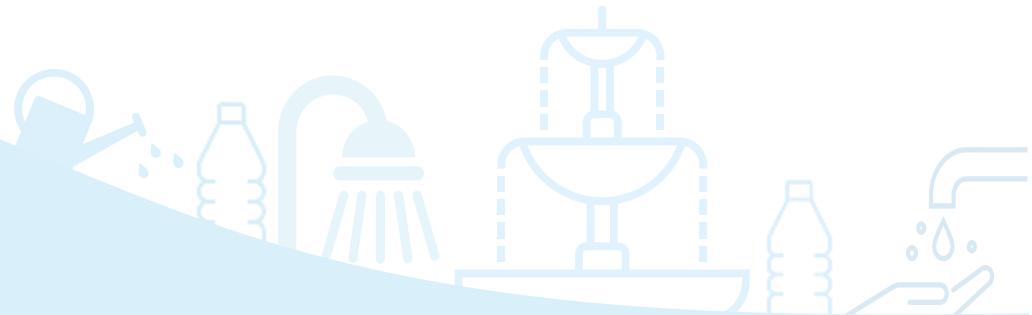


**Alignment with Protocol**

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 ●

\* Challenges: Delay on some planned activities under PA2 may occur due to limited capacity at the WHO Secretariat

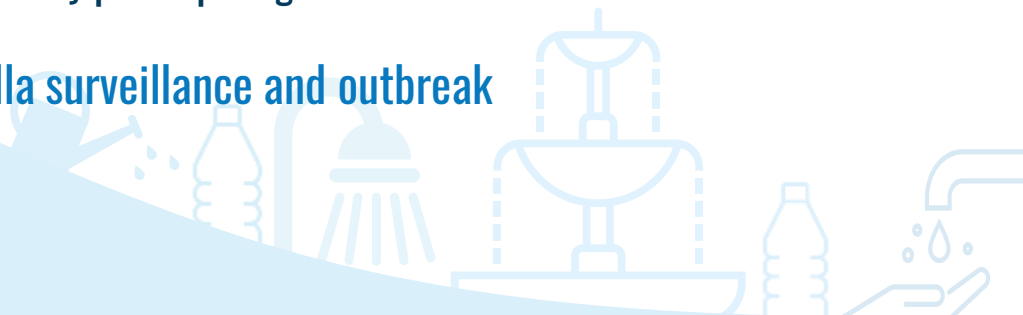
# Plans for future work in this area

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!

