# SARS-CoV-2 Surveillance employing Sewers - EU Umbrella Study @ UN World Water Quality Alliance

• Created by Wanjiku Njuguna on Jul 21, 2020





# 2<sup>nd</sup> TOWN HALL MEETING / UN-WWQA PART 2 MEETING

Wednesday 22<sup>nd</sup> of July 2020

#### 10.30 - 12.00 EU Umbrella Study | 12:30 - 14.00 UN World Water Quality Alliance (CEST Time Zone)

Wastewater has emerged as a reliable indicator of the presence of the SARS-CoV-2 virus in the population, while being itself not a source of infection. The ability to detect RNA fragments of SARS-CoV-2 in wastewater is increasingly and independently being reported from research groups in nearly all EU Member States and beyond. Thus Australia, Canada, Turkey and other countries have successfully deployed sewers sentinels to compliment ongoing health surveillance programs

The reasons are obvious. This is a first opportunity to reliably surveil the presence of the virus in the population in a better and more harmonized way without direct testing of individual persons. Of particular note are studies which have detected the virus in wastewater before clinical cases are reported, indicating that the approach offers potential to form part of an early warning community public health surveillance system. This is a significant leap forward to a "life with the virus" ensuring preparedness and readiness in fighting its re-emergence.

#### The EU Umbrella Study

The European Commission has created a pan-European Umbrella Study to better understand the limitations and challenges of this approach. This includes the development of a roadmap for a systemic rollout of complementing ongoing national and regional surveillances in a unique approach. Upon suggestion from the Dutch Water Research Institute (KWR) and the Rheinisch-Westfälische Technische Hochschule (RWTH) and supported by EurEau and Water Europe, the European Commission's Joint Research Centre and the Directorate-General Environment with involvement of the Directorate-General Health and Food Safety set up a spontaneous research alliance and organised a study engaging directly with some 90 waste water treatment plants in Europe. The umbrella currently spreads out to 17 countries (Austria, Belgium, Bulgaria, Croatia, Cyprus, Estonia, Germany, Greece, Ireland, Italy, Latvia, Malta, Poland, Romania, Slovakia, Spain and Sweden), which decided to create an overlap with the EU study. Another 9 countries (Czech Republic, Denmark, Finland, France, Hungary, Israel, Luxembourg, Portugal, Slovenia) will join the second round of the Umbrella Study, scheduled for August 2020. While first results indicate the viability of the approach, they are currently being critically reviewed to develop a consensus on the use of generated datasets. In an inclusive and open approach critical topics and limitations are reviewed jointly with private and public entities which joined the initiative: CEDEX- Centro de Estudios y Experimentación de Obras Públicas (CEDEX), Eurecat – Technology Centre of Catalonia (Spain), the Helmholtz Centre for Environmental Research, NIREAS – The International Water Research Center, NORMAN Network, SUEZ, University of Thessaly and National Technical University of Athens (Greece) and the University of Exeter (UK) to name, but a few.

#### Defining the "Use Case"

#### EU Umbrella Study @ UN World Water Quality Alliance

#### UN World Water Quality Alliance: Sharing findings to assist hotspot areas, linking the environmental dimension

World Water Quality Alliance a global Community of Practice across all societal actors convened by UNEP as well as the World Health Organization WHO have offered their convening power to assist, in the forthcoming weeks and months, the knowledge transfer to the international community with a special aim to provide assistance to the current hotspot areas. This includes for example to expand the continuous information update to regions and partners.

Following a successful first event, this second Virtual Town Hall Event aims at informing the Community of Practice as well as to organize an initial step to explore global rollout options along a new understanding between health and environment. Corner stone in here is to collectively define the criteria for "use cases" in different regions and settings. The event is organized into two session, in order to allow an as large as possible community to join:

## Part I (CEST Time Zone)

#### 10.30 - 12.00 EU Umbrella Study (Chaired Session by EU/WHO Regional Office)

- An update on the findings for the EU Umbrella Study (10 Min)
- Insights into European National and Regional exercises (5 min each, max 8 cases)
- Insight into Methodologies and harmonisation (10 min)
- Uptake and rollouts in the Mediterranean and Europe (10 min plus discussion 20 min)

### 12:30 - 14.00 UN World Water Quality Alliance (Chaired session by UNEP/WHO/WWQA)

- Use Cases Australia/New Zealand, Canada, US, Japan (tbc)
- Requirements for African use cases (tbc)
- Requirements for Asian use cases (tbc)
  Requirements for Latin American use cases (tbc)
- The view of the World Bank (tbc)
- The view of Stakeholders e.g. World Water Quality Assessment, Regional Economic Commissions (tbc)
- Next actions (10 min)

# To join us for the meeting please CLICK HERE.

For more information on this, please contact the Joint Research Centre at JRC-WATERLAB@ec.europa.eu or UNEP at wanjiku.njuguna@un.org .



World Water Quality Alliance