

Lettre de Veille Scientifique n°2 7 février 2025

Dernières actualités

Getting Ahead of H5N1: Declare a Public Health Emergency, Expand Wastewater Testing, and Increase Vaccine Research and Availability—Sooner Rather Than Later ([RAND, 23/12/24](#))

Le virus de la polio retrouvé dans les eaux usées en Europe ([Medisite, 06/01/25](#))

Nouvel outil lancé pour suivre la propagation des maladies infectieuses à travers les eaux usées ([Ma Clinique, 29/01/25](#))

Launching the EU Wastewater Surveillance Dashboard ([European Commission, 29/01/25](#))

Tracking diseases from the sewer ([European Commission, 29/01/25](#))

Detections of poliovirus in sewage samples require enhanced routine and catch-up vaccination and increased surveillance ([ECDC, 30/01/25](#))

Dernières références bibliographiques

Epidémiologie des eaux usées :

Evaluation of Three Viral Capsid Integrity qPCR Methods for Wastewater-Based Viral Surveillance. *Food and Environmental Virology*, 17:1, 12. [Abstract >>](#)

A Perspective on Wastewater and Environmental Surveillance as a Public Health Tool for Low- and Middle-Income Countries. *Microorganisms*, 13:2, 238. [Abstract >>](#)

Can Wastewater Surveillance Enhance Genomic Tracking of Climate-Driven Pathogens? *Microorganisms*, 13:2, 294. [Abstract >>](#)

Evaluation of plasmid pBI143 for its optimal concentration methods, seasonal impact, and potential as a normalization parameter in wastewater-based epidemiology. *Science of The Total Environment*, 965, 178661. [Abstract >>](#)

SARS-CoV-2 :

Cryptic transmission of a SARS-CoV-2 variant detected by Wastewater surveillance in Panama. *Frontiers in Cellular and Infection Microbiology*, 14, 1467484. [Abstract >>](#)

Point-of-care diagnostics for SARS-CoV-2 wastewater-based epidemiology: a big leap toward miniaturization. *Environmental Science: Water Research & Technology*, 11:1, 10-28. [Abstract >>](#)

Freeze-drying as a novel concentrating method for wastewater detection of SARS-CoV-2. *medRxiv*, 2025.2001.2004.25319877. [Abstract >>](#)

A multi-city COVID-19 categorical forecasting model utilizing wastewater-based epidemiology. *Science of The Total Environment*, 960, 178172. [Abstract >>](#)

Co-occurrence of SARS-CoV-2 variants in rivers and sewage in India and Brazil. *Science of The Total Environment*, 958, 178089. [Abstract >>](#)

The influence of environmental factors on the detection and quantification of SARS-CoV-2 variants in dormitory wastewater at a primarily undergraduate institution. *Microbiology Spectrum*, in press, e02003-02024. [Abstract >>](#)

Development of Bayesian segmented Poisson regression model to forecast COVID-19 dynamics based on wastewater data: a case study in Nanning City, China. *BMC Public Health*, 25:1, 118. [Abstract >>](#)

Digitalizing sewage: The politics of producing, sharing, and operationalizing data from wastewater-based surveillance. *Environment and Planning C: Politics and Space*, in press. [Abstract >>](#)

Wastewater solids drive comparability of sampling methods for SARS-CoV-2 wastewater and environmental surveillance. *Journal of Environmental Chemical Engineering*, 13:1, 115374. [Abstract >>](#)

Environmental Dissemination of SARS-CoV-2: An Analysis Employing Crassphage and Next-Generation Sequencing Protocols. *Food and Environmental Virology*, 17:1, 13. [Abstract >>](#)

Localised wastewater SARS-CoV-2 levels linked to COVID-19 cases: A long-term multisite study in England. *Science of The Total Environment*, 962, 178455. [Abstract >>](#)

Unsupervised detection and fitness estimation of emerging SARS-CoV-2 variants. Application to wastewater samples (ANRS0160). *arXiv*, 2501.06548. [Abstract >>](#)

Wastewater Monitoring During the COVID-19 Pandemic in the Veneto Region, Italy: Longitudinal Observational Study. *JMIR Public Health Surveillance*, 11, e58862. [Abstract >>](#)

Wastewater-Based Epidemiological Surveillance in France: The SUM'EAU Network. *Microorganisms*, 13:2, 281. [Abstract >>](#)

The Impact of Viral Concentration Method on Quantification and Long Amplicon Nanopore Sequencing of SARS-CoV-2 and Noroviruses in Wastewater. *Microorganisms*, 13:2, 229. [Abstract >>](#)

Wastewater Surveillance for SARS-CoV-2 in Northern Italy: An Evaluation of Three Different Gene Targets. *Microorganisms*, 13:2, 236. [Abstract >>](#)

Estimating the two consecutive epidemic waves of SARS-CoV-2 Omicron in Shenzhen, China from November 2022 to July 2023: a modeling study based on multi-source surveillance and mobility data. *Advances in Continuous and Discrete Models*, 2025:1, 5. [Abstract >>](#)

Wastewater for Public Health: Timely, sensitive, and reliable SARS-CoV-2 Omicron variant monitoring in California. *Environmental Science: Water Research & Technology*, in press. [Abstract >>](#)

Hyperplex PCR enables highly multiplexed analysis of point mutations in wastewater: Long-term SARS-CoV-2 variant surveillance in Sweden as a case study. *Water Research*, 274, 123154. [Abstract >>](#)

Unsupervised detection of novel SARS-CoV-2 mutations and lineages in wastewater samples using long-read sequencing. *BMC Genomics*, 26:1, 87. [Abstract >>](#)

P-1954. Wastewater-Based Surveillance More Accurately Describes Disease Burden Of COVID-19 In Communities with Less Than 60,000 Inhabitants – An Ontario-Wide Study. *Open Forum Infectious Diseases*, 12:Supplement_1. [Abstract >>](#)

P-1953. Youden's Index Ensures the Accuracy of Wastewater-based Surveillance of SARS-CoV-2 Variants by Allele-Specific RT-qPCR or Genomic Sequencing. *Open Forum Infectious Diseases*, 12:Supplement_1. [Abstract >>](#)

Autres pathogènes d'intérêt :

A cost-benefit analysis of using wastewater monitoring to guide typhoid vaccine campaigns. *Research Square*, 08 Jan, 2025. [Abstract >>](#)

Respiratory virus infection dynamics and genomic surveillance to detect seasonal influenza subtypes in wastewater: a longitudinal study in Bengaluru, India. *medRxiv*, 2025.2001.2013.25320458. [Abstract >>](#)

Pilot Study Utilizing Wastewater-Based Epidemiology to Determine Presence of Gram-Negative Enterobacterial Targets in Southwest Virginia Sewersheds. *Open Forum Infectious Diseases*, 12:Supplement_1. [Abstract >>](#)

Respiratory Virus Season Surveillance in the United States Using Wastewater Metrics, 2023–2024. *ACS ES&T Water*, in press. [Abstract >>](#)

Eight Years of Norovirus Surveillance in Urban Wastewater: Insights from Next-Generation. *Viruses*, 17:1, 130. [Abstract >>](#)

An Evaluation of the Seasonality of Enteric Viruses in Wastewater. *University of Guelph*. [Abstract >>](#)

Detection of circulating vaccine-derived poliovirus type 2 (cVDPV2) in wastewater samples: a wake-up call, Finland, Germany, Poland, Spain, the United Kingdom, 2024. *Eurosurveillance*, 30:3, 2500037. [Abstract >>](#)

Detection of human noroviruses in sewage by next generation sequencing in Shandong Province, 2019–2021. *Virology Journal*, 22:1, 18. [Abstract >>](#)

Mpox and wastewater surveillance: tracing the spread of a viral outbreak through environmental monitoring. *The Scientific Basis of Mpox (Monkeypox)*, 245-265. [Abstract >>](#)

Wastewater-Based Surveillance of Respiratory Syncytial Virus Reveals a Temporal Disconnect in Disease Trajectory across an Active International Land Border. *Environment & Health*. [Abstract >>](#)

STEP_WISE: Spatiotemporal Epidemiology of Primary Waterborne Infections—Cryptosporidium and VTEC. *EPA Research Report*, 474, 71 p. [Abstract >>](#)

Culture-Dependent and -Independent Wastewater Surveillance for Multiple Pathogenic Yeasts. *Journal of Fungi*, 11:2, 86. [Abstract >>](#)

