

Lettre de Veille Scientifique n°3
31 mars 2025

Dernières actualités

Pathogen Fact Sheets ([Network of Wastewater-based Epidemiology, 01/25](#))

Thematic day on Wastewater and Surveillance in Denmark ([EU-WISH, 06/02/25](#))

WHO global framework to define and guide studies into the origins of emerging and re-emerging pathogens with epidemic and pandemic potential ([WHO, 11/02/25](#))

Waste surveillance at just 20 airports could spot the next pandemic ([New Scientist, 12/02/25](#))

Et si analyser les eaux usées des avions permettait d'éviter la prochaine pandémie ? ([Pourquoi Docteur, 14/02/25](#))

Virus de la poliomyélite détectés dans les eaux usées en Europe : Santé publique France reste en vigilance ([Santé publique France, 17/02/25](#))

EU Wastewater Observatory for Public Health – Monthly Bulletin ([EU Wastewater Observatory for Public Health, 28/02/25](#))

ODIN Wastewater Surveillance Project ([ODIN, 02/25](#))

Plusieurs cas de détection de poliovirus circulant dérivé d'une souche vaccinale de type 2 dans les eaux usées en Europe ([MesVaccins, 03/03/25](#))

Traces de poliomyélite dans les eaux usées en Europe, faut-il s'inquiéter en France ? ([Ma Santé, 03/03/25](#))

Bruxelles : un inquiétant variant de la rougeole détecté dans les eaux des égouts ([RTBF, 24/03/25](#))

Dernières références bibliographiques

Epidémiologie des eaux usées :

Kitajima, M. (2025). Biobanking: Possibilities for Wastewater-Based Epidemiology. *Biopreservation and Biobanking*. [Abstract >>](#)

McCarthy, D.K. (2025). Does wastewater surveillance have a role in vaccine-preventable disease control? Comparison of clinical and wastewater surveillance data for hepatitis A, E, measles, rubella and influenza viruses NICD, South Africa, 2021-2024. *International Journal of Infectious Diseases*, 152, 107380. [Abstract >>](#)

Cajas-Corrales, N. (2025). A case for global standardisation of genomics and wastewater-based epidemiology. *The Lancet Microbe*, in press. [Abstract >>](#)

Morfino, R. (2025). Establishing a European wastewater pathogen monitoring network employing aviation samples: a proof of concept. *Human Genomics*, 19:1, 24. [Abstract >>](#)

Schlosser, O. (2025). Defining alarm thresholds for the load of pathogenic viruses in wastewater for decision making: An application to three French cities. *International Journal of Hygiene and Environmental Health*, 266, 114563. [Abstract >>](#)

SARS-CoV-2 :

Tucker, S.G. (2025). COVID-19 Risk and Crisis Communication Challenges and Opportunities: Qualitative Insights from Rural Wastewater Surveillance Partners. *Disaster Medicine and Public Health Preparedness*, 19, e41. [Abstract >>](#)

Kagami, K. (2025). Association between confirmed COVID-19 cases at hospitals and SARS-CoV-2 levels in municipal wastewater during the pandemic and endemic phases. *Environment International*, 197, 109342. [Abstract >>](#)

Chen, X. (2025). An integrated framework for early detection and transmissibility assessment of emerging variants in wastewater. *medRxiv*, 2025.2002.2018.25322479. [Abstract >>](#)

Ban, M.J. (2025). Comparative assessment of sewer sampling methods for infectious disease surveillance: Insights from transport modeling and simulations of SARS-CoV-2 emissions. *Water Research*, in press. [Abstract >>](#)

Sathyanarayana Shivaprasad, H. (2025). Simplifying SARS-CoV-2 wastewater-based surveillance using an automated FDA EUA assay. *Microbiology Spectrum*, in press. [Abstract >>](#)

Jeon, M.K. (2024). Enhancing Wastewater Surveillance Through the Development of Novel Detection Assays for Variants of SARS-CoV-2 and Influenza Viruses. *University of Hawaii*. [Abstract >>](#)

Wagner, J.P.S. (2025). Epidemiological monitoring of sewage sludge and wastewater from an upflow anaerobic sludge blanket reactor using SARS-CoV-2 as a model. *Water Science and Technology*, 91:4, 333-343. [Abstract >>](#)

Azzellino, A. (2025). Evaluating Interlaboratory Variability in Wastewater-Based COVID-19 Surveillance. *Microorganisms*, 13:3, 526. [Abstract >>](#)

Barber, C.A. (2024). Analyzing SARS-CoV-2 Wastewater Surveillance Data for Public Health Impact in Southern Nevada. *University of Nevada, Las Vegas*. [Abstract >>](#)

Kevill, J.L. (2025). Comparative impact of sunlight and salinity on human pathogenic virus survival in river, estuarine, and marine water microcosms. *Water Research*, in press. [Abstract >>](#)

Van Onselen, D.R. (2025). Normalization of wastewater-based epidemiology data for pathogen surveillance: a case study of campus-wide SARS-CoV-2 surveillance at a South African university. *International Journal of Infectious Diseases*, 152, 107384. [Abstract >>](#)

Maposa, M.S. (2025). Establishment of a wastewater-based surveillance network to support infectious disease surveillance in South Africa. *International Journal of Infectious Diseases*, 152, 107381. [Abstract >>](#)

Dhlamini, M.G. (2025). A two-year wastewater-based surveillance of SARS-CoV-2 trends within the Tshwane region, South Africa. *International Journal of Infectious Diseases*, 152, 107481. [Abstract >>](#)

Silveira, R. (2025). Wastewater-based epidemiology of SARS-CoV-2 and the development of early warning system: challenges and lessons learned after two years of weekly surveillance in the Brazilian Federal District. *Total Environment Microbiology*, in press. [Abstract >>](#)

Teixeira, T.d.J. (2025). Wastewater Monitoring of SARS-CoV-2 in Small Cities Reveals Ongoing COVID-19 Transmission During and After the Pandemic. *Preprints*, 202502.2197.v1. [Abstract >>](#)

- Jex, A. (2025).** Multi-tiered strategy for large-scale wastewater detection of SARS-CoV-2 in low-case settings provides confidence for public health actions. *Journal of Water and Health*, 23:2, 89-99. [Abstract >>](#)
- Olsen Martinez, A. (2025).** Air, surface, and wastewater surveillance of SARS-CoV-2; a multimodal evaluation of COVID-19 detection in a built environment. *Journal of Exposure Science & Environmental Epidemiology*, in press. [Abstract >>](#)
- Beaver, A. (2024).** Optimization of Molecular Buoys in the Isolation and Amplification of SARS-CoV-2 RNA in Wastewater. *Texas State University*. [Abstract >>](#)
- Rashid, S.A. (2025).** Behind the bars: Wastewater-based surveillance of SARS-CoV-2, and its variants in prison wastewater. *Heliyon*, 11:6. [Abstract >>](#)
- Pappu, A.R. (2025).** Tracking COVID-19 trends in communities with low population by wastewater-based surveillance. *Science of The Total Environment*, 970, 179007. [Abstract >>](#)
- Park Geun, W. (2025).** Comparative analysis of environmental persistence of SARS-CoV-2 variants and seasonal coronaviruses. *Applied and Environmental Microbiology*, in press. [Abstract >>](#)
- Barber, C.A. (2025).** Operationalizing SARS-CoV-2 Wastewater Monitoring to Assess Traveler Health in Las Vegas, Nevada, USA. *IJID Regions*, in press, 100619. [Abstract >>](#)
- Costa, S.M. (2025).** Dynamics of SARS-CoV-2 Mutations in Wastewater Provide Insights into the Circulation of Virus Variants in the Population. *Preprints*, 2025031381. [Abstract >>](#)
- Sachse, S. (2025).** From Entry to Outbreak in a High School Setting: Clinical and Wastewater Surveillance of a Rare SARS-CoV-2 Variant. *Viruses*, 17:4, 477. [Abstract >>](#)
- Yang, W. (2025).** The use of wastewater surveillance to estimate SARS-CoV-2 fecal viral shedding pattern and identify time periods with intensified transmission. *BMC Public Health*, 25:1, 1108. [Abstract >>](#)
- Lawal, O.U. (2025).** Evaluation of sampling methods for genomic surveillance of SARS-CoV-2 variants in aircraft wastewater samples. *Research Square*, 25 Mar, 2025. [Abstract >>](#)

Autres pathogènes d'intérêt :

Chettleburgh, C. (2025). Seasonality of enteric viruses and correlation of hepatitis a virus in wastewater with clinical cases. *Science of The Total Environment*, 967, 178862. [Abstract >>](#)

Shrestha, S. (2025). Evaluation of the Enterovirus serotype monitoring approach for wastewater surveillance of hand foot and mouth disease using secondary epidemiological surveillance data. *Science of The Total Environment*, 969, 178896. [Abstract >>](#)

Malla, B. (2025). Optimization of a 6-plex Crystal Digital PCR® assay and its application to simultaneous surveillance of enteric and respiratory viruses in wastewater. *Science of The Total Environment*, 970, 178939. [Abstract >>](#)

Huseynov, S. (2025). Notes from the Field: Detection of Vaccine-Derived Poliovirus Type 2 in Wastewater—Five European Countries, September–December 2024. *MMWR. Morbidity and Mortality Weekly Report*, 74, 122-124. [Abstract >>](#)

Omatola, C.A. (2025). Monkeypox Virus Occurrence in Wastewater Environment and Its Correlation with Incidence Cases of Mpox: A Systematic Review and Meta-Analytic Study. *Viruses*, 17:3, 308. [Abstract >>](#)

Omatola, C.A. (2025). Monkeypox Virus Occurrence in Wastewater Environment and Its Correlation with Incidence Cases of Mpox: A Systematic Review and Meta-Analytic Study. *Viruses*, 17:3, 308. [Abstract >>](#)

Fretschner, T. (2025). Comparative assessment of combined concentration and extraction methods for Influenza A and B virus detection in wastewater. *medRxiv*, 2025.2002.2021.25322585. [Abstract >>](#)

Braunfeld, J.B. (2025). Notes from the Field: Genomic and Wastewater Surveillance Data to Guide a Hepatitis A Outbreak Response—Los Angeles County, March 2024–June 2024. *MMWR. Morbidity and Mortality Weekly Report*, 74. [Abstract >>](#)

Nguyen Thanh, L. (2025). Hydrological and physicochemical parameters associated with SARS-CoV-2 and pepper mild mottle virus wastewater concentrations for a large-combined sewer system. *Journal of Water and Health*, in press. [Abstract >>](#)

Falender, R. (2025). Avian Influenza A (H5) Subtype in Wastewater—Oregon, September 15, 2021–July 11, 2024. *MMWR. Morbidity and Mortality Weekly Report*, 74, 102-106. [Abstract >>](#)

Yelnik, A. (2024). Myélites aiguës flasques à entérovirus ; des poliovirus aux entérovirus D68 et A71 ; épidémies et circulation dans les eaux usées. *Bulletin de l'Académie Nationale de Médecine*, 208:9, 1309-1316. [Abstract >>](#)

Mercier, É. (2025). Cost-effectiveness of wastewater and environmental monitoring of respiratory syncytial virus to guide universal infant immunoprophylaxis in Canada. *Journal of Medical Economics*, 28:1, 354-362. [Abstract >>](#)

Wang, Y. (2025). Aptamer-based biosensors for wastewater surveillance of influenza virus, SARS-CoV-2, and norovirus: A comprehensive review. *Water Research*, in press. [Abstract >>](#)

