

## Lettre de Veille Scientifique n°11 24 octobre 2022

### Dernières actualités

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Scientists develop a rapid, highly sensitive method for detection of SARS-CoV-2 in wastewater ([News Medical Life Sciences, 29/09/22](#))

A rapid, highly sensitive method to measure SARS-CoV-2 in wastewater ([ScienceDaily, 29/09/22](#))

Analyse de risque liée aux variants émergents de SARS-CoV-2 MAJ au 05/10/2022 ([Santé Publique France, 05/10/22](#))

Can surveillance of SARS-CoV-2 be conducted through aircraft wastewater analysis? ([News Medical Life Sciences, 06/10/22](#))

### Autres virus d'intérêt :

Virus de la polio détectés dans les eaux usées en Angleterre et aux Etats-Unis : Santé publique France maintient sa vigilance ([Santé Publique France, 28/09/22](#))

Environmental surveillance detects poliovirus type 2 outbreaks in Israel ([News Medical Life Sciences, 19/09/22](#))

The role of wastewater surveillance for monitoring monkeypox ([News Medical Life Sciences, 10/10/22](#))

## Dernières références bibliographiques

Impact of sample clarification by size exclusion on virus detection and diversity in wastewater-based epidemiology. medRxiv, 2022.09.25.22280344. [Abstract >>](#)

Evaluation of variant calling algorithms for wastewater-based epidemiology using mixed populations of SARS-CoV-2 variants in synthetic and wastewater samples. medRxiv, 2022.06.06.22275866. [Abstract >>](#)

MicrobiomeCensus estimates human population sizes from wastewater samples based on inter-individual variability in gut microbiomes. PLoS Comput Biol 18(9): e1010472. [Abstract >>](#)

Detecting SARS-CoV-2 variants in wastewater and their correlation with circulating variants in the communities. Scientific Reports, 12, 16141. [Abstract >>](#)

Citywide wastewater SARS-CoV-2 levels strongly correlated with multiple disease surveillance indicators and outcomes over three COVID-19 waves. Science of The Total Environment, 855, 158967. [Abstract >>](#)

Delta SARS-CoV-2 variant is entirely substituted by the omicron variant during the fifth COVID-19 wave in Attica region. Science of The Total Environment, 856, Part 1, 159062. [Abstract >>](#)

SARS-CoV-2 Variability in Patients and Wastewaters—Potential Immuno-Modulation during the Shift from Delta to Omicron. Biomedicines 2022, 10(9), 2080. [Abstract >>](#)

Anthropogenic Sewage Water Circuit as Vector for SARS-CoV-2 Viral ARN Transport and Public Health Assessment, Monitoring and Forecasting—Sibiu Metropolitan Area (Transylvania/Romania) Study Case. Int. J. Environ. Res. Public Health 2022, 19(18), 11725. [Abstract >>](#)

Early identification of a COVID-19 outbreak detected by wastewater surveillance at a large homeless shelter in Toronto, Ontario. Canadian Journal of Public Health, in press. [Abstract >>](#)

Evaluating the transmission risk of SARS-CoV-2 from sewage pollution. Science of The Total Environment, in press. [Abstract >>](#)

One-Year Surveillance of SARS-CoV-2 Virus in Natural and Drinking Water. Pathogens 2022, 11(10), 1133. [Abstract >>](#)

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COPMAN: A novel high-throughput and highly sensitive method to detect viral nucleic acids including SARS-CoV-2 RNA in wastewater. *KatayamaScience of The Total Environment*, 856, Part 1, 158966. [Abstract >>](#)

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When Case Reporting Becomes Untenable: Can Sewer Networks Tell Us Where COVID-19 Transmission Occurs? *medRxiv*, 2022.09.29.22280508. [Abstract >>](#)

Community-Based SARS-CoV-2 Testing Using Saliva or Nasopharyngeal Swabs to Compare the Performance of Weekly COVID-19 Screening to Wastewater SARS-CoV-2 Signals. *ACS EST Water*, in press. [Abstract >>](#)

Environmental Microbial Surveillance: From Source Tracking in Watersheds to Pathogen Monitoring in Sewersheds. *Michigan State University ProQuest Dissertations Publishing*, 2022. 29261912. [Abstract >>](#)

Effectiveness of building-level sewage surveillance during both community-spread and sporadic-infection phases of SARS-CoV-2 in a university campus population. *FEMS Microbes*, in press. [Abstract >>](#)

Does normalization of SARS-CoV-2 concentrations by Pepper Mild Mottle Virus improve correlations and lead time between wastewater surveillance and clinical data in Alberta (Canada) comparing twelve SARS-CoV-2 normalization approaches. *Science of The Total Environment*, in press. [Abstract >>](#)

Advancing methods for wastewater disease surveillance of antibiotic resistance and SARS-CoV-2. *Rice University (Texas, US)*, 232 p. [Abstract >>](#)

Separating Signal from Noise in Wastewater Data: An Algorithm to Identify Community-Level COVID-19 Surges. *medRxiv*, 2022.09.19.22280095. [Abstract >>](#)

Wastewater surveillance of human influenza, metapneumovirus, parainfluenza, respiratory syncytial virus (RSV), rhinovirus, and seasonal coronaviruses during the COVID-19 pandemic. *medRxiv*, 2022.09.22.22280218. [Abstract >>](#)

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Wastewater-Based Surveillance Is an Effective Tool for Trending COVID-19 Prevalence in Communities: A Study of 10 Major Communities for 17 Months in Alberta. ACS EST Water, in press. [Abstract >>](#)

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Wastewater-Based Surveillance Is an Effective Tool for Trending COVID-19 Prevalence in Communities: A Study of 10 Major Communities for 17 Months in Alberta. ACS EST Water, in press. [Abstract >>](#)

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A 30-day follow-up study on the prevalence of SARS-CoV-2 genetic markers in wastewater from the residence of COVID-19 patient and comparison with clinical positivity. Science of The Total Environment, in press. [Abstract >>](#)

The feasibility of SARS-CoV-2 surveillance using wastewater and environmental sampling in Indonesia. PLOS ONE 17 (10), e0274793. [Abstract >>](#)

SARS-CoV-2 removal by mix matrix membrane: A novel application of artificial neural network based simulation in MATLAB for evaluating wastewater reuse risks. Chemosphere, in press. [Abstract >>](#)

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Persistence of endogenous RNA biomarkers of SARS-CoV-2 and PMMoV in raw wastewater: Impact of temperature and implications for wastewater-based epidemiology application. Science of The Total Environment, in press. [Abstract >>](#)

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The Catalan Surveillance Network of SARS-CoV-2 in Sewage: design, implementation, and performance. *Scientific Reports*, 12, 16704. [Abstract >>](#)

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Study of the sewage from a municipality in southern Minas Gerais, Brazil: correlation of physical and chemical variables, COVID-19 cases, and SARS-CoV-2 RNA concentration. *Engenharia Sanitária e Ambiental*, in press. [Abstract >>](#)

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## Autres virus d'intérêt :

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