Réseau Microbiologie des matrices résiduaires urbaines et santé

anses

Dernières actualités

Analyse de risque liée aux variants émergents de SARS-CoV-2 MAJ au 13/11/2023 (Santé Publique France, 13/11/23)

Covid-19 : ce nouvel indicateur à suivre de très près (Capital, 09/10/23)

Covid-19, grippe, bronchiolite : les eaux usées vont être surveillées pour détecter les virus (Pourquoi Docteur ? 06/10/23)

Les eaux usées vont être surveillées afin de détecter les virus du Covid-19, de la grippe et de la bronchiolite (franceinfo: 05/10/23)

A lapse in COVID wastewater detection is worrying scientists about distorted data (salon, 19/10/23)

COVID-19 : Une nouvelle augmentation des contaminations révélée par les eaux usées (franceinfo: 04/11/23)

Surveillance and genotyping of SARS-CoV-2 in sewage water by Cas12a-facilitated portable plasmonic biosensor (Phys.org, 30/10/23)

Réseau Microbiologie des matrices résiduaires urbaines et santé

Dernières références bibliographiques

Virological characteristics of the SARS-CoV-2 BA.2.86 variant. bioRxiv, 2023.2011.2002.565304. Abstract >>

Wastewater sequencing reveals community and variant dynamics of the collective human virome. Nature Communications, 14:1, 6878. Abstract >>

Surveillance of COVID-19 and influenza A(H1N1) prevalence in China via medicine-based wastewater biomarkers. Water Research, 247, 120783. Abstract >>

SARS-CoV-2 genomic surveillance in wastewater as a model for monitoring evolution of endemic viruses. Nature Communications, 14:1, 6325. Abstract >>

Tracing the new SARS-CoV-2 variant BA.2.86 in the community through wastewater surveillance in Bangkok, Thailand. The Lancet Infectious Diseases, 23:11, e464-e466. Abstract >>

Estimating COVID-19 cases on a university campus based on Wastewater Surveillance using machine learning regression models. Science of The Total Environment, 906, 167709. Abstract >>

An interpretable time series machine learning method for varying forecast and nowcast lengths in wastewater-based epidemiology. MethodsX, 11, 102382. Abstract >>

Predictive power of wastewater for nowcasting infectious disease transmission: A retrospective case study of five sewershed areas in Louisville, Kentucky. Environmental Research, 240, 117395. Abstract >>

Systematic SARS-CoV-2 S Gene Sequencing in Wastewater Samples Enables Early Lineage Detection and Uncovers Rare Mutations in Portugal. medRxiv, 2023.2010.2030.23297774. Abstract >>

Wastewater Tiling Amplicon Sequencing Reveals Longitudinal Dynamics of SARS-CoV-2 Variants Prevalence in the Community. medRxiv, 2023.2010.2030.23297759. Abstract >>

Utility of wastewater genomic surveillance compared to clinical surveillance to track the spread of the SARS-CoV-2 Omicron variant across England. Water Research, in press. Abstract >>

Integrating wastewater and randomised prevalence survey data for national COVID surveillance. Research Square, 24 Oct, 2023. Abstract >>

Persistence of SARS-CoV-2 and its surrogate, bacteriophage Phi6, on surfaces and in water. Applied and Environmental Microbiology, in press. Abstract >>

Sequencing of SARS-CoV-2 RNA Fragments in Wastewater Detects the Spread of New Variants during Major Events. Microorganisms, 11:11. Abstract >>

Online trend estimation and detection of trend deviations in sub-sewershed time series of SARS-CoV-2 RNA measured in wastewater. medRxiv, 2023.2010.2026.23297635. Abstract >>

Surveillance and Stability of SARS-CoV-2 Wastewater Samples in Minnesota. MedRxiv, October 15, 2023. Abstract >>

Development of highly sensitive one-step reverse transcription-quantitative PCR for SARS-CoV-2 detection in wastewater. Science of The Total Environment, in press. Abstract >>

Zooming in to the neighborhood level: A year-long wastewater-based epidemiology monitoring campaign for COVID-19 in small intraurban catchments. Science of The Total Environment, 907, 167811. Abstract >>

Perceptions and responses to COVID-19 through wastewater surveillance information and online search behavior: A randomized controlled trial. medRxiv, 2023.2010.2020.23297297. Abstract >>

SARS-CoV-2 Variants BQ.1 and XBB.1.5 in Wastewater of Aircraft Flying from China to Denmark, 2023. Emerging Infectious Disease journal, 29:12. Abstract >>

Estimated transmission dynamics of SARS-CoV-2 variants from wastewater are robust to differential shedding. medRxiv, 2023.2010.2025.23297539. Abstract >>

Environmental surveillance for COVID-19 using SARS-CoV-2 RNA concentration in wastewater–a study in District East, Karachi, Pakistan. The Lancet Regional Health-Southeast Asia, in press. Abstract >>

Wastewater monitoring of a community COVID-19 outbreak in a Spanish municipality. Journal of Environmental Exposure Assessment, 2:4, 16. Abstract >>

Regional reemergence of a SARS-CoV-2 Delta lineage amid an Omicron wave detected by wastewater sequencing. Scientific Reports, 13:1, 17870. Abstract >>

Optimal Selection of Sampling Points for Detecting SARS-CoV-2 RNA in Sewer System Using NSGA-II Algorithm. Water, 15:23, 4076. Abstract >>

Early detection of the emerging SARS-CoV-2 BA.2.86 lineage through integrated genomic surveillance of wastewater and COVID-19 cases in Sweden, weeks 31 to 38 2023. Eurosurveillance, 28:46, 2300595. Abstract >>

Simple SARS-CoV-2 concentration methods for wastewater surveillance in low resource settings. Science of The Total Environment, in press. Abstract >>

Estimating the Covid-19 Prevalence from Wastewater. Research Square, 20 Nov, 2023. Abstract >>

Chapter 8 - Impact of COVID-19 on water quality and emerging unconventional detection method from water bodies. Water, The Environment, and the Sustainable Development Goals, 179-207. Abstract >>

Crykey: Rapid Identification of SARS-CoV-2 Cryptic Mutations in Wastewater. medRxiv, 2023.2006.2016.23291524. Abstract >>

Wastewater surveillance pilot at US military installations: a cost model analysis. medRxiv, 2023.2011.2014.23298310. Abstract >>

Presence of SARS-CoV-2 virus in wastewater in the Kingdom of Bahrain during the COVID-19 pandemic. Influenza and Other Respiratory Viruses, 17:11, e13194. Abstract >>

Evaluating Various Composite Sampling Modes for Detecting Pathogenic SARS-CoV-2 Virus in Raw Sewage. Frontiers in Microbiology, 14, 1305967. Abstract >>

Evaluation of colorimetric RT-LAMP for screening of SARS-CoV-2 in untreated wastewater. Science of The Total Environment, 907, 167964. Abstract >>

Early detection and surveillance of the SARS-CoV-2 variant BA. 2.86—worldwide, July–October 2023. MMWR. Morbidity and Mortality Weekly Report, 72:43, 1162-1167. Abstract >>

Policy impact evaluation: A potential use case for longitudinal monitoring of viruses in wastewater at small geographic scales. medRxiv, 2023.2010.2025.23297556. Abstract >>

Projections of wastewater as an indicator of COVID-19 cases in corrections facilities: a modelling study. medRxiv, 2023.2010.2031.23296864. Abstract >>

Reis, A.C. (2023). Systematic SARS-CoV-2 S Gene Sequencing in Wastewater Samples Enables Early Lineage Detection and Uncovers Rare Mutations in Portugal. medRxiv, 2023.2010.2030.23297774. Abstract >>

Wastewater Tiling Amplicon Sequencing Reveals Longitudinal Dynamics of SARS-CoV-2 Variants Prevalence in the Community. medRxiv, 2023.2010.2030.23297759. Abstract >>

The Epidemiological Principle of Sewage is the Prevention and Control of the New Coronavirus. Education, Science, Technology, Innovation and Life, 7:3. Abstract >>

Fucoidan-based antibody-free magnetic nanoparticle for on-site detection of waterborne SARS-CoV-2. Science of The Total Environment, in press. Abstract >>

Use of passive samplers for the capture of SARS-CoV-2 and other viruses from wastewater. Bangor University (UK), 136 p. Fulltext >>

Explainable Machine Learning Models for Predicting COVID-19 Cases in Catalonia Based on Wastewater Monitoring Data. Artificial Intelligence Research and Development, 262-266. Abstract >>

Omicron and Delta variant prevalence detection and identification during the fourth COVID-19 wave in Mexico using Wastewater-Based Epidemiology. IJID Regions, in press. Abstract >>

An integrated data analysis and machine learning approach to track and monitor SARS-CoV-2 in wastewater treatment plants. International Journal of Environmental Science and Technology, in press. Abstract >>

Quantitative SARS-CoV-2 exposure assessment for workers in wastewater treatment plants using Monte-Carlo simulation. Water Research, in press. Abstract >>

Wastewater management and COVID-19 outbreak: a review article. Sustainable Water Resources Management, 9:6, 175. Abstract >>

Detection of SARS-CoV-2 RNA in wastewater from dormitory buildings in a university campus: comparison with individual testing results. Water Science and Technology, in press. Abstract >>

Building-Scale Wastewater-Based Epidemiology for SARS-CoV-2 Surveillance at Nursing Homes in A Coruña, Spain. Environments, 10:11, 189. Abstract >>

Autres pathogènes d'intérêt :

Assessment and Implementation of Analytical Approaches for Wastewater-Based Epidemiology of Infectious Diseases. University of Florida. Abstract >>

Longitudinal wastewater surveillance of four key pathogens during an unprecedented large-scale COVID-19 outbreak in China facilitated a novel strategy for addressing public health priorities - a proof of concept study. Water Research, in press. Abstract >>

Wastewater surveillance facilitates climate change–resilient pathogen monitoring. Science Translational Medicine, 15:718, eadi7831. Abstract >>

Addressing the challenges of establishing quality wastewater or non-sewered sanitation-based surveillance, including laboratory and epidemiological considerations, in Malawi. BMJ Global Health, 8:11, e013307. Abstract >>

The Emergence and Widespread Circulation of Enteric Viruses Throughout the COVID-19 Pandemic: A Wastewater-Based Evidence. Food and Environmental Virology, in press. Abstract >>

Surveillance of COVID-19 and influenza A(H1N1) prevalence in China via medicine-based wastewater biomarkers. Water Research, 247, 120783. Abstract >>

Environmental Persistence and Disinfection of Lassa Virus. Emerging Infectious Disease journal, 29:11, 2285. Abstract >>

The detection of Japanese Encephalitis Virus in municipal wastewater during an acute disease outbreak. Journal of Applied Microbiology, in press. Abstract >>

Wastewater-based surveillance for tracing the circulation of Dengue and Chikungunya viruses. medRxiv, 2023.2010.2030.23297765. Abstract >>