

Web Alert

SARS-CoV-2: Environment and spread

An annotated selection of World Wide Web sites relevant to the topics in environmental microbiology

Genomic epidemiology tracking SARS-CoV-2

<https://cen.acs.org/biological-chemistry/genomics/genomic-epidemiology-tracking-spread-COVID/98/i17>

This article focuses on the genomic epidemiology of SARS-CoV-2 with a particular focus on an April publication in the *Proceedings of the National Academy of Sciences* that was controversial because of assumptions made in relating sequences to one another.

Geographical dynamics of SARS-CoV-2

<https://www.biorxiv.org/content/10.1101/2020.04.07.030759v1.full.pdf>

This pre-print that has yet to be peer-reviewed describes the authors' methodology for obtaining informative subtype markers from SARS-CoV-2 global genomic sequences.

COVID-19 tracking tests

<https://www.360dx.com/coronavirus-test-tracker-launched-covid-19-tests>

This page lists a large number of commercially-available SARS-CoV-2 assay test kits that can be used to track the virus in patients or the environment.

Sewage and tracking of coronavirus RNA

<https://www.nature.com/articles/d41586-020-00973-x>

Wastewater analysis has been conducted in the Netherlands, Sweden and the United States to track

SARS-CoV-2 that is thought to be excreted in feces and/or urine of infected humans.

Coronavirus found in Paris sewage

<https://www.sciencemag.org/news/2020/04/coronavirus-found-paris-sewage-points-early-warning-system>

The quantitative level of SARS-CoV-2 viral RNA was tracked in Paris sewage for one month and shown to correspond to the level of illness outbreaks in the same region.

Genomic epidemiology of SARS-CoV-2

<https://www.gisaid.org/epiflu-applications/next-hcov-19-app/>

This site contains 5228 genome sequences from SARS-CoV-2 samples obtained between December 2019 and May 2020.

Environment and COVID-19 transmission

<https://news.stanford.edu/2020/03/26/understanding-spread-covid-19/>

This webpage hosts an article and an interview asking key questions relating to the spread of the SARS-CoV-2 virus in the environment.

Built environment considerations in COVID-19 transmission

<https://msystems.asm.org/content/msys/5/2/e00245-20.full.pdf>

This paper synthesizes knowledge about SARS-CoV-2 and built environments to better guide decision makers on how to mitigate risks of virus transmission in buildings.

Human pathogens and a warmer earth

<https://www.scientificamerican.com/article/how-a-warming-climate-could-affect-the-spread-of-diseases-similar-to-covid-19/>

This article deals with the broader issue of climate change and its impacts on infectious disease spread that have relevance to understanding pandemics and epidemics.

COVID-19 environmental data center

<https://www.climacell.co/coronavirus-resource-center/>

This site provides a large number of links to articles on SARS-CoV-2 and COVID-19 disease to be found in the scientific and popular press.

COVID-19 epidemiology

<https://www.cidrap.umn.edu/covid-19/epidemiology>

This site provides a very comprehensive set of links on SARS-CoV-2 and COVID-19 and the information is constantly updated.

COVID-19 epidemiology and virology

<https://www.uptodate.com/contents/coronavirus-disease-2019-covid-19-epidemiology-virology-clinical-features-diagnosis-and-prevention#H4014462337>

This site contains comprehensive information on COVID-19 epidemiology, largely related to clinical issues.

COVID-19 mobility reports

<https://www.google.com/covid19/mobility/>

This site compiles the known virus infectivity at different types of sites such as workplaces, public spaces, grocery stores, and other locations as a function of date.

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