

Publication

Cryptic transmission of SARS-CoV-2 in Washington state

JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

ID 4627410

Author(s) Bedford, Trevor; Greninger, Alexander L.; Roychoudhury, Pavitra; Starita, Lea M.; Famulare, Michael; Huang, Meei-Li; Nalla, Arun; Pepper, Gregory; Reinhardt, Adam; Xie, Hong; Shrestha, Lasata; Nguyen, Truong N.; Adler, Amanda; Brandstetter, Elisabeth; Cho, Shari; Giroux, Danielle; Han, Peter D.; Fay, Kirsten; Frazar, Chris D.; Ilcisin, Misja; Lacombe, Kirsten; Lee, Jover; Kiavand, Anahita; Richardson, Matthew; Sibley, Thomas R.; Truong, Melissa; Wolf, Caitlin R.; Nickerson, Deborah A.; Rieder, Mark J.; Englund, Janet A.; Seattle Flu Study Investigators,; Hadfield, James; Hodcroft, Emma B.; Huddleston, John; Moncla, Louise H.; Müller, Nicola F.; Neher, Richard A.; Deng, Xianding; Gu, Wei; Federman, Scot; Chiu, Charles; Duchin, Jeffrey S.; Gautam, Romesh; Melly, Geoff; Hiatt, Brian; Dykema, Philip; Lindquist, Scott; Queen, Krista; Tao, Ying; Uehara, Anna; Tong, Suxiang; MacCannell, Duncan; Armstrong, Gregory L.; Baird, Geoffrey S.; Chu, Helen Y.; Shendure, Jay; Jerome, Keith R.

Author(s) at UniBasel [Neher, Richard](#) ;

Year 2020

Title Cryptic transmission of SARS-CoV-2 in Washington state

Journal Science

Volume 370

Number 6516

Pages / Article-Number 571-575

Mesh terms Bayes Theorem; Betacoronavirus, genetics; COVID-19; Coronavirus Infections, epidemiology, transmission; Genome, Viral; Humans; Likelihood Functions; Pandemics; Phylogeny; Pneumonia, Viral, epidemiology, transmission; SARS-CoV-2; Washington, epidemiology

After its emergence in Wuhan, China, in late November or early December 2019, the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus rapidly spread globally. Genome sequencing of SARS-CoV-2 allows the reconstruction of its transmission history, although this is contingent on sampling. We analyzed 453 SARS-CoV-2 genomes collected between 20 February and 15 March 2020 from infected patients in Washington state in the United States. We find that most SARS-CoV-2 infections sampled during this time derive from a single introduction in late January or early February 2020, which subsequently spread locally before active community surveillance was implemented.

Publisher American Association for the Advancement of Science

ISSN/ISBN 0036-8075 ; 1095-9203

URL <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7810035/>

edoc-URL <https://edoc.unibas.ch/84944/>

Full Text on edoc No;

Digital Object Identifier DOI 10.1126/science.abc0523

PubMed ID <http://www.ncbi.nlm.nih.gov/pubmed/32913002>

Document type (ISI) Journal Article