

TRACKING COVID-19 VARIANTS ACT

Introduced by Senator Tammy Baldwin, Representatives Ami Bera, MD, and Scott Peters

Endorsed by: American Society for Microbiology, University of California Health

The U.S. has now identified three new and highly contagious variants of SARS-CoV-2.¹ New variants will continue to emerge as this virus changes. The best way to identify, survey, and understand these emerging variants is through genetic surveillance. National sequence-based surveillance, with systematic sampling of viruses from state and local public health laboratories, provides a picture of circulating viruses, patterns in transmission and introduction, and context for investigations and mitigation efforts for improved control of COVID-19.²

The U.S. is currently conducting sequence-based surveillance of approximately 0.3 percent of cases, lagging far behind other nations.³ It is critical that the U.S. dramatically scale up its efforts to survey at least 15 percent of cases to better grasp new and emerging variants, understand their origins, and develop mitigation strategies. SARS-CoV-2 has changed, and will continue to change as more Americans are vaccinated. A robust, national sequence-based surveillance program is vital for protecting public health and combatting the next phase of the COVID-19 pandemic, while preparing for emerging threats.

The Tracking COVID-19 Variants Act would provide \$2 billion in funding for the Centers for Disease Control and Prevention (CDC) to:

- Support CDC's **Advanced Molecular Detection (AMD) Initiative**, which is currently supporting the integration of genomics and genomic epidemiology, including the establishment of national sequence-based surveillance conducted as part of the public-private partnership **SPHERES (Sequencing for Public Health Emergency Response, Epidemiology, and Surveillance)**.⁴
- **Require CDC to immediately issue national guidance** supporting scientific collaboration around viral sequencing as a key strategy to our nation's COVID-19 response, including guidance related to the sharing of specimens obtained from patients, and the appropriate use of viral sequence data derived from these specimens.
- **Provide technical assistance and guidance and award grants or cooperative agreements** to State, local, Tribal, or territorial public health departments to increase their capacity to conduct genetic sequencing of the SARS-CoV-2 virus. Funding may also be used to carry out activities to enhance the informatics capabilities of the current public health workforce and to expand the numbers of qualified public health informaticians available.

The bill also **expands the existing data linkage program at the National Center for Health Statistics** to allow for the temporary linkage of data across multiple sources, including genomic data, clinical data, and epidemiological data for the purposes of public health research. Establishing the demonstration program at a statistical agency ensures that all data is protected by the Confidential Information

¹ <https://www.statnews.com/2021/01/28/south-carolina-first-cases-of-south-africa-variant/>

² <https://www.cdc.gov/budget/documents/covid-19/Paycheck-Protection-Program-Health-Care-Enhancement-Act-Fact-Sheet.pdf>

³ <https://www.nbcnews.com/health/health-news/u-k-variant-spreads-u-s-scientists-warn-country-isn-n1253467>

⁴ <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/spheres.html>

Protection and Statistical Efficiency Act (CIPSEA), a strong privacy law that Congress last reauthorized in a near-unanimous vote in 2019. The program carries out recommendations from several reports, including: the [National Strategy for the COVID-19 Response and Pandemic Preparedness](#) (e.g., Goal 3); President Biden’s recent “[Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking](#),” and several recommendations from *Genomic Epidemiology Data Infrastructure Needs for SARS-CoV-2: Modernizing Pandemic Response Strategies*, a report published by the National Academies of Science in July 2020.

An additional \$10 million is authorized for this program.

The U.S. should be a world leader in efforts to combat pandemics through sequence-based surveillance. To assert our leadership and take on the next phase of the COVID-19, we must dramatically scale up our current efforts and provide the necessary financial support.