Pipeline for SARS-CoV-2 Genomic Surveillance

In the United States, CDC tracks emerging variants through genomic surveillance using a multilayered approach.

Specimen receipt and initial processing

Specimen preparation and sequencing

Sequence data generation and collection

Sequence data submission to public repository

Public Repositories

Bioinformatic analysis of genomic sequence data

Published data is made available for analysis to scientists around the world through public repositories. Scientists at CDC conduct detailed analyses of the sequence data to identify variants and actively monitor their proportions to evaluate potential impacts on critical SARS-CoV-2 countermeasures, including vaccines, therapeutics, and diagnostics.