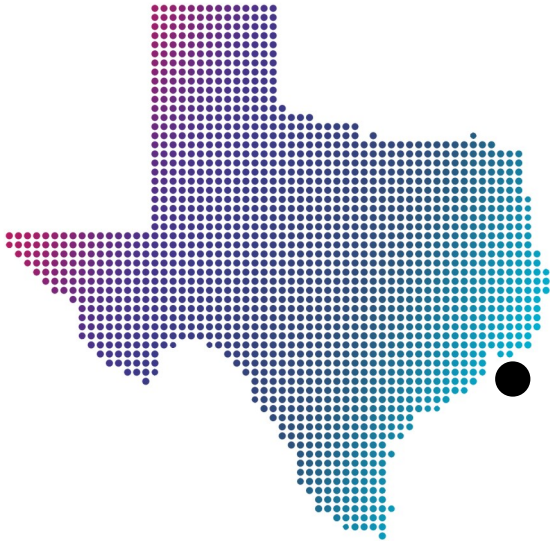


Advanced Molecular Detection

National investment to advance genomic sequencing capacity

Mountain Region



Houston

Total Local Investment¹: \$11,097,585*

CDC's Advanced Molecular Detection (AMD) program builds and integrates laboratory, bioinformatics, and epidemiology technologies across CDC and nationwide. Since 2014, AMD has received support from Congress through an annual appropriation of \$30 million—which was raised to \$35 million in 2022—to implement these technologies in public health programs. Through investments in AMD technologies, CDC is improving both public health outcomes and preparedness in dozens of areas including foodborne disease, influenza, antibiotic resistance, hepatitis, pneumonia, and meningitis.

With funding from the American Rescue Plan Act of 2021, the AMD program has developed a multi-year plan to expand its support to state, local, and territorial public health laboratories with more staff and resources to collect specimens for COVID-19 testing, sequence them to identify and track SARS-CoV-2 variants, and share data, now and future years. The investment above includes supplemental funding for facility construction and renovation needs.

Workforce Development

Houston is part of the Mountain region. The Advanced Molecular Detection program established seven Workforce Development Regions across the country. Each region has an AMD training lead and a bioinformatics lead. This provides a network of customized AMD support which helps develop skills and provides training assistance to public health labs across the country

Through the Mountain region's training resources, Houston receives lab support on data analysis and how to interface with IT departments. They also receive both pathogen-specific training and cross-cutting instruction to help staff develop the critical skills necessary to extract, analyze, and interpret sequencing data.

* Investment total above are not included in the [Texas](#) total. Houston receives direct financial support through the ELC Cooperative Agreement.

¹ Funding to public health departments includes support from the American Rescue Plan of 2021 and AMD annual appropriations. Awards to university and research partners were funded through appropriations supporting the COVID-19 response.



www.cdc.gov/amd



November 10, 2022

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University and Research Partners in Houston

These awards are intended to fill knowledge gaps and promote innovation in the U.S. response to the COVID-19 pandemic. Funding awards are determined through a competitive selection process based on scientific needs and available funds.

University of Texas School of Public Health at Houston and Houston Health Department (Collaboration with the University of Georgia)

"Molecular epidemiology and transmission dynamics of SARS-CoV-2 in Houston, TX"

This project will develop a genome sequencing and molecular epidemiology pipeline for SARS-CoV-2 samples collected in Houston, TX, the fourth largest city in the US. It will develop computational approaches for integrating community-based surveillance and contact tracing with phylogenetic and epidemic network analysis to identify transmission clusters.

