

AMD Projects

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Innovate • Transform • Protect

CDC's Advanced Molecular Detection (AMD) initiative fosters scientific innovation to transform public health and protect people from disease threats.

AMD Projects: Painting a Fuller Picture of a Hidden Epidemic

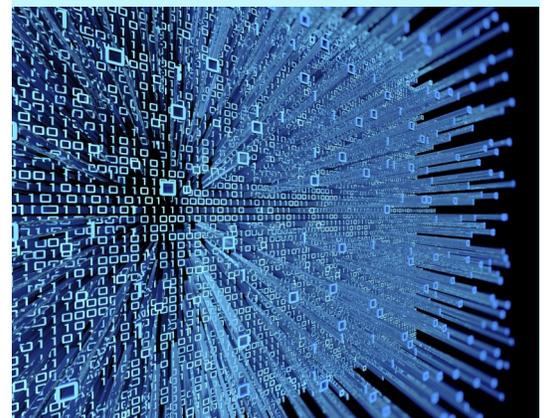
Using AMD Technology to Uncover Viral Hepatitis Data

Over 4 million Americans are living with chronic hepatitis and most do not know they are infected. How do you understand an epidemic when so much of it is hidden from view? Hepatitis researchers are looking to new technology for answers.

The most common types of viral hepatitis are hepatitis A, hepatitis B, and hepatitis C. Each type has different risk factors and transmission routes. Because many infections are not reported, making associations between cases that are reported is essential to understanding the current epidemic and to inform public health practice.

Advanced molecular detection (AMD) is helping CDC scientists make connections across large volumes of data like never before. It not only allows them to learn more from a single sample, it enables them to link unique sample data with clinical and epidemiological information that provides important context. The ability to combine detailed genetic information from samples, with information about risk groups, health status, and geographic location, gives scientists the ability to look across outbreaks to discover previously unrecognized associations.

CDC expects that the improved capacity to store data from multiple sources will provide a more comprehensive and accurate picture of viral hepatitis. With AMD technology and improved data integration, scientists are painting a much fuller picture that greatly increases the public health system's ability to respond to an epidemic that has been largely out of view.



AMD methods help CDC scientists make connections between large volumes of data from biological samples, clinical findings, and epidemiological information to paint a fuller picture of hepatitis outbreaks.

