

AMD Projects

Innovate • Transform • Protect

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

AMD Projects: Detecting Hepatitis C

Using advanced molecular techniques for rapid identification of hepatitis C outbreaks

How do you spot an outbreak when a disease doesn't cause symptoms? This is the tough question facing Hepatitis C virus researchers.

Even though 2 to 3 million Americans and another 170 million people worldwide are infected with the virus, about 80% have no symptoms. That makes it hard to detect hepatitis C outbreaks. And without detection, the disease continues to spread.

Scientists at CDC are working hard on solutions to this problem. They have created a new way to find out if different patients are infected with the same strain of the hepatitis C virus. Using innovative experimental and analytical methods involving next generation sequencing, more accurate assays, and rapid data analysis, CDC's newly developed lab tests have the advantage of being faster, cheaper, and more accurate than ever before.

These new tools also help to link cases of hepatitis C together so that public health workers can quickly pinpoint where the infection first started and put a stop to the outbreak.

This new system will speed up the detection of hepatitis C virus outbreaks and help public health professionals quickly and more simply control them—a great example of how cutting edge technology is helping to protect our nation's health!



Hepatitis C virus is the most common chronic bloodborne infection in the United States. It causes liver disease that can lead to serious, lifelong illness.

