

Hepatitis C Dried Blood Spot Testing In New York State

The New York State Department of Health Wadsworth Center Laboratory has developed a method for detecting hepatitis C virus from dried blood spot specimens. This dried blood spot test was developed by modifying a standard hepatitis C ribonucleic acid test approved by the U.S. Food and Drug Administration. The hepatitis C dried blood spot test can be used to confirm a current hepatitis C infection. Dried blood spot samples are often collected at the same visit as a hepatitis C rapid antibody test. However, unlike the hepatitis C rapid antibody test, dried blood spot is not a point-of-care test and must be sent to the Wadsworth Center Laboratory for analysis.

At this time, New York State is using dried blood spot for qualitative, hepatitis C ribonucleic acid diagnostic testing (i.e. confirmatory) and not for quantitative hepatitis C ribonucleic acid testing (i.e. viral load). The dried blood spot test can detect hepatitis C virus if a person's viral load is at least 250 IU/mL. In comparison, the standard hepatitis C ribonucleic acid test can detect hepatitis C virus if a person's viral load is at least 4 IU/mL. Therefore, the dried blood spot test is less sensitive than the standard method, but its sensitivity is sufficient to confirm current hepatitis C infection.

What is a dried blood spot?

A dried blood spot is collected by fingerstick and is an alternative to venipuncture for collecting blood. After performing a fingerstick, drops of blood are placed on a specialized collection card and then air dried before shipping to the laboratory for analysis.

What are the benefits of hepatitis C dried blood spot testing?

- Dried blood spot can be collected wherever the client is, such as a substance use disorder treatment program, homeless shelter, syringe service program, and other community-based organizations. Dried blood spot can facilitate access to hepatitis C diagnostic testing in rural and remote areas.
- Non-clinical staff, including peers, can easily be trained to collect dried blood spot specimens.
- A dried blood spot does not require venipuncture, which is helpful for clients with poor venous access.
- It's easy to store and transport dried blood spot and, once dried, they are stable at room temperature for up to 15 days.
- Dried blood spot can be collected at the same visit as the rapid hepatitis C antibody test.
- The use of dried blood spot for laboratory testing is well received by clients.

Can a dried blood spot be collected without performing the hepatitis C antibody screening first?

Wadsworth Laboratory allows for a dried blood spot to be collected without performing the rapid hepatitis C antibody test first for high-risk clients who meet any of the following conditions:

- Previously documented hepatitis C antibody reactive test in the medical record;
- Receives services at a Syringe Services Program;
- Current injection drug use;
- Receives treatment in an opioid use disorder treatment program, or is prescribed medication for opioid use disorder;
- Previously diagnosed or treated for hepatitis C infection.

A provider may still conduct the rapid antibody test prior to collecting a dried blood spot and should consider each client's needs. Providing a negative rapid test may relieve client anxiety and a preliminary positive result may increase the likelihood that the client will return for the dried blood spot test result.

What happens to the dried blood spot card after specimen collection?

Dried blood spot cards are dried, packaged and mailed to the Wadsworth Center's Bloodborne Viruses Laboratory at **120 New Scotland Avenue, Albany, NY 12208**.

How are dried blood spot test results provided back to the testing site?

Test results are retrieved electronically by the facility using the secure web-based New York State Health Commerce System. After the dried blood spot is received at Wadsworth, results are usually available within 4-6 business days.

How much does dried blood spot testing cost?

Dried blood spot training, testing supplies, and laboratory analysis are provided free to approved submitters by the New York State Department of Health.

Where can I get more information about hepatitis C dried blood spot testing, including training?

Contact the Bureau of Hepatitis Health Care and Epidemiology. Call **518-486-6806** or email hepatabc@health.ny.gov.