

December 2014 • Physicians

HCV and HIV

New testing approaches can save lives

Infection with HCV or HIV can lead to serious health issues that can last many years. This is why the Centers for Disease Control and Prevention (CDC) has announced changes in testing recommendations for both viruses. These changes will lead to earlier detection of infections. Earlier detection of HCV infection can lead to life-saving treatment. Earlier detection of both viruses can reduce the risk of transmitting infection to others.

In 2012, the CDC decided that testing only people at known risk for HCV infection was not enough. They announced that all baby boomers should be tested once for HCV. They believe this will help prevent a major increase in liver disease and deaths as baby boomers age.¹

And in 2014, the CDC announced a new approach to HIV testing. This approach uses a “fourth-generation” test.² This test will allow detection of the virus before antibodies are produced.² Infected people are most contagious in this acute (early) stage of infection.

HCV

Why all baby boomers should be tested for HCV

About 3 million Americans are infected with HCV.³ Most of them are baby boomers (ie, people born between 1945 and 1965).³ Baby boomers are 5 times more likely to be living with the virus.³ Many were infected decades ago, and most don't know they have it. An HCV test is the only way to identify people with silent infections.

The longer people are infected with HCV, the more likely they are to die from complications. Deaths have been on the rise for over a decade. As baby boomers continue to age, this trend will likely get worse unless something is done to stop it.

Getting tested can help people learn whether they are infected. If they are, they can start getting life-saving treatment. New treatments can cure more than 75% of infections.⁴ The CDC estimates that expanded testing and treatment for infected people would save more than 120,000 lives.¹



HIV and HCV Coinfection

- Of people with HIV in the United States, about 25% are coinfecting with HCV.⁵
- About 80% of people with HIV who inject drugs also have HCV.⁵
- HIV coinfection more than triples the risk for liver-related death from HCV.⁵
- Anyone living with HIV should be tested for HCV.

Why do baby boomers have high rates of HCV infection?

We don't completely understand why baby boomers have high rates of HCV infection. However, we know that 2 important reasons are:

- Some got infected from a blood transfusion; this was before 1992 when widespread screening of the blood supply began.
- Others became infected from injecting drugs, even if done only once decades ago.

More about new treatments for HCV

Several new drugs for treating HCV infection have been approved in the last several years. More are expected to be approved in the future. These drugs act by inhibiting a specific step in the life cycle of the virus. This makes them more specific in their action than the older therapies. They are also more effective than older therapies. Recommended treatment regimens that do not include interferon are now available. This is a major advance because interferon must be injected, and it has many side effects.

HIV

The CDC's new HIV testing recommendation

The CDC's new approach for HIV diagnosis is shown in the figure below. It starts with an assay that combines an HIV antibody test with a p24 antigen test.² They call it a fourth-generation test. Addition of the p24 antigen test means that HIV infection can be detected up to 20 days earlier.^{6,7}

A positive result means HIV infection is likely to be present. Positive results are confirmed in a second test. The second test also differentiates HIV-1 from HIV-2 infection. If the second test doesn't confirm the first one, an HIV-1 RNA test is recommended.

Additional Information:

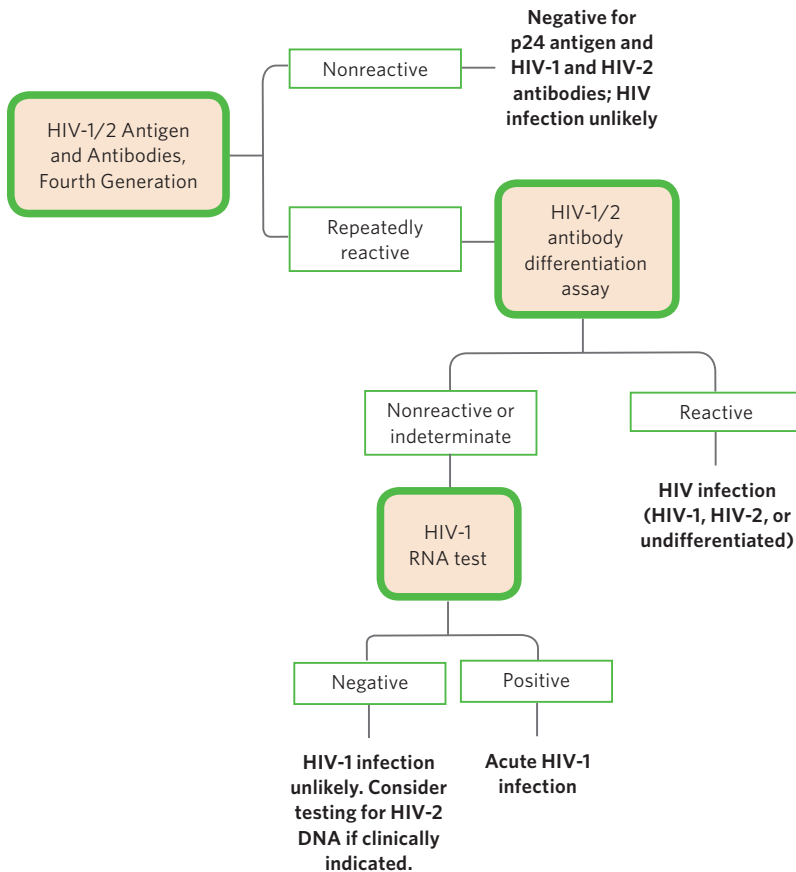
You can find more information about selection, use, and interpretation of hepatitis and HIV tests at the Quest Diagnostics online Test Center at **QuestDiagnostics.com/testcenter/TestCenterHome.action**

You can find more information about HCV infection at these websites:

- Centers for Disease Control and Prevention: <http://www.cdc.gov/hepatitis/>
- World Health Organization: <http://www.who.int/topics/hepatitis/en/>

You can find more information about HIV infection at these websites:

- Centers for Disease Control and Prevention: <http://www.cdc.gov/hiv/>
- National Institutes of Health. AIDS info. <http://aidsinfo.nih.gov/>
- World Health Organization: http://www.who.int/topics/hiv_aids/en/



Value of the new HIV testing algorithm

The fourth-generation combination test improves the detection of acute HIV infection.² The infection is often spread during this stage. That's because viral loads in the blood and sexual secretions are high. And people usually don't know they are infected at this stage. If HIV is diagnosed in this early phase, treatment can be started right away. This can result in a lower viral load and decreased risk of transmission. In addition, once people know they are infected, they can be more careful about protecting their sex partner.

The second test is important because some drugs used to treat HIV-1 don't work for HIV-2. So knowing the HIV strain can help a doctor choose the best treatment for the patient.

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