

## ISSUE BRIEF

# The Role of HIV Self-Testing in *Ending the HIV Epidemic*

Ensuring that everyone gets tested for HIV is a critical first step to end the epidemic and is a core strategy of the federal [Ending the HIV Epidemic in the United States initiative](#). HIV testing serves as a pathway to prevention and care services for all people. Any HIV test result should lead to engagement in high-quality health care for people who could benefit from HIV prevention or treatment. For people with undiagnosed HIV, testing enables them to rapidly begin HIV treatment to protect their health, prevent further transmission of the virus, and access testing and treatment for sexually transmitted infections (STIs). For people who do not have HIV, testing creates an opportunity to be connected to powerful HIV prevention services, including pre-exposure prophylaxis (PrEP) and STI services. In 2020, HIV testing decreased noticeably across the country as the COVID-19 pandemic made it more difficult to access traditional, in-person testing services. HIV self-testing programs offer an innovative way to bridge gaps in access to HIV testing and ensure that HIV testing is simple and more accessible for all.

## 1. THE BENEFITS OF HIV SELF-TESTING

CDC recommends that everyone between the ages of 13 and 64 get tested for HIV at least once as part of routine medical care, and that some groups at increased risk of HIV transmission be tested more frequently. But a 2019 CDC analysis of national survey data found that most Americans (61%) had never been tested for HIV, and less than 30% of people in the United States most at risk of acquiring HIV had been tested in the year prior to the survey.<sup>1</sup>



### Research shows that HIV self-testing is an effective, convenient, and accurate way to diagnose HIV infection.

CDC's recent *Evaluation of Rapid HIV Self-testing Among Men who have Sex with Men Project (eSTAMP)* study found that more than twice as many gay and bisexual men who were mailed free self-tests learned they had HIV compared with men who were only provided web-based access to HIV prevention information and resources. Nearly half of men with newly diagnosed HIV had not been tested in the past year. The eSTAMP study also found that self-testing increased the uptake of HIV testing; enabled more frequent testing; and resulted in people seeking care or additional testing after obtaining a positive result. Additionally, the study found that providing free self-tests increased awareness of HIV infection not just among the men who received the tests, but also among their social networks.<sup>2</sup>

Studies have shown that many people find self-testing both acceptable and, in some cases, preferable to in-person testing, and that it is feasible for people to correctly administer rapid self-tests and accurately interpret the results.<sup>3,4,5</sup> Studies also show that self-testing can be particularly effective in reaching gay and bisexual men and people who never or rarely access HIV testing services.<sup>6,7</sup> Self-testing is both cost-effective and cost-saving to implement. A modelling study based on CDC's eSTAMP trial estimated that implementing a comparable HIV self-testing program would save nearly \$1.6 million in lifetime HIV treatment costs.<sup>8</sup>

Self-testing also addresses many barriers to in-person HIV testing, including COVID-19-related service disruptions and individual concerns about seeking in-person care during the pandemic. By increasing privacy, confidentiality, and anonymity, self-testing can eliminate the HIV-related stigma and discrimination that may prevent people from seeking in-person HIV testing.<sup>9,10,11,12</sup> It can also be easier and more convenient for people who are unable to get tested in person by their healthcare provider, such as people who live far from HIV testing services. Self-testing reduces the amount of time it takes to get tested, enables people to test at home or other private location at any time of day, and eliminates potential transportation and geographic barriers.<sup>13,14,15</sup>



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## 2. CDC'S FOCUS: MAKING HIV SELF-TESTING SIMPLE, ACCESSIBLE, AND ROUTINE

To ensure that HIV self-testing services are available to all who could benefit from them, CDC conducts a range of activities to support and expand the implementation of self-testing:

### Funding Partners to Deliver HIV Self-Testing Services

Through CDC's major funding programs, the agency provides resources for its health department and CBO partners to develop, implement, and refine HIV self-testing programs.

**Integrated HIV prevention and surveillance for health departments:** CDC's flagship HIV prevention funding program enables all state, territorial, and local health departments to strengthen current HIV testing services or create new ones, including self-testing programs.

**Ending the HIV Epidemic in the U.S. implementation:** Through the *Ending the HIV Epidemic in the U.S.* initiative, CDC awarded funding to health departments in 57 jurisdictions to scale up and promote rapid self-test distribution programs in healthcare and non-healthcare settings. This effort includes providing HIV self-tests that clients can take away for themselves or distribute to others.

**Comprehensive HIV prevention with CBOs:** Beginning in 2021, CDC is providing resources to 96 CBO grantees to implement comprehensive HIV prevention programs, including self-testing and efforts focused on recruitment, follow-up, and linkage to care. This funding will also support integrated STI screening through mail-in self-tests.

**HIV self-testing for young gay and bisexual men and young transgender people of color:** CDC currently funds 30 CBOs to implement comprehensive HIV prevention programs that include the use of HIV self-testing to reach young gay and bisexual men of color and young transgender people of color.

### Conducting and Amplifying HIV Self-Testing Research

CDC works with its partners to conduct research to improve and refine the delivery of HIV self-testing and implementation of self-testing programs. This work focuses on better understanding how self-testing can help increase HIV testing uptake, improve HIV diagnosis, and help connect people who could benefit most to HIV prevention and treatment services. Additional studies and programs sponsored or led by CDC include:

**The eSTAMP study<sup>16</sup>:** CDC's national, randomized clinical trial evaluated the benefits of mailing free HIV self-tests to gay and bisexual men. Providing free HIV self-tests identified people with undiagnosed HIV and increased awareness of HIV among the men who participated in the trial, as well as among members of their social networks.

## Two Types of Tests: Know the Difference

To ensure HIV self-testing programs are as effective as possible, it is important to understand the difference between the two types of tests that allow a person to test at home or in a private location, the benefits of each, and when each is appropriate to use.

A **rapid HIV self-test** is done entirely at home, or in a private location, using an oral swab and can produce results within 20 minutes. Rapid self-test kits can be purchased at pharmacies and online and may be available free or at low cost from health departments and community-based organizations (CBOs).

A **mail-in test** includes a specimen collection kit that contains supplies to collect dried blood from a fingerstick at home or other private location. The sample is then sent to a lab for testing and the results are provided by a healthcare provider. Mail-in tests can be ordered online. Healthcare providers can also order mail-in tests for their patients.



## 2. CDC'S FOCUS — continued

**The iSTAMP (Implementation of Rapid HIV Self-Testing Among Men who have Sex with Men Project) study**<sup>17</sup>: this clinical trial aims to assess the effectiveness of providing rapid self-tests and a comprehensive mobile HIV prevention app to Black/African American, Hispanic/Latino, other gay and bisexual men, and transgender women. It also aims to assess the most cost-effective ways to recruit men and transgender women for HIV testing. The study, for which follow-up for all participants was completed in February 2022, will also examine the impact of these interventions on PrEP uptake, STI testing, and engagement in HIV prevention and social services.

**Together-TakeMeHome HIV self-testing pilot program**: CDC launched its first-ever direct-to-consumer internet-based distribution program, *TogetherTakeMeHome*, to provide 100,000 free HIV test kits to anyone who requested one with a focus on Black/African American and Hispanic/Latino gay and bisexual men, transgender women, and Black/African American cisgender women. This large-scale distribution of HIV self-tests was implemented from February 4, 2021, through October 11, 2021, with a goal of distributing 100,000 HIV tests within 18 months. The program distributed the FDA-approved OraQuick in-Home HIV Self-Test through an online ordering portal built upon the existing TakeMeHome site from Building Healthy Online Communities (BHOC). CDC also supported the distribution program by designing and launching a marketing campaign that expanded the efforts already being implemented by its [Let's Stop HIV Together](#) campaign. The lessons learned from this program will inform CDC's future self-testing strategies.

### Providing Guidance on HIV Self-Testing

CDC develops public health guidance for its grantees and partners to ensure they can make well-informed decisions on how best to advance HIV prevention programs and services, including self-testing.

**Real-time guidance**: In the early months of the COVID-19 pandemic, CDC published “Dear Colleague Letters” with guidance<sup>18</sup> for health departments, CBOs, and other partners on how to supplement their HIV prevention efforts by

expanding their support for HIV self-testing services, especially where face-to-face testing services were disrupted. This guidance ensured that people could continue to be tested for HIV in compliance with stay-at-home orders and social distancing practices. This guidance also included information to help health departments use HIV self-testing services to support people on PrEP.

**Clinical guidelines development**: In addition to its [March 2016 guidelines](#) for providers on implementing HIV testing in nonclinical settings, which includes recommendations on HIV self-testing, CDC is currently developing expanded clinical guidelines on HIV self-testing.

### Convening Partners and Sharing Best Practices

To expand the knowledge base and improve the implementation of HIV self-testing, CDC works in collaboration with its partners to share best practices for self-testing programs. Through funding provided by CDC, NASTAD recently convened a [four-part webinar series](#), *Self-Testing Strategies for HIV Testing and PrEP Access*, to provide technical assistance for organizations planning to or currently implementing HIV self-testing programs. The webinars highlight models and innovations from health departments already implementing HIV self-testing programs.

CDC also provides technical assistance to its funded grantees through its Capacity Building Assistance program. Through this program, the New York City Department of Health and Mental Hygiene convened a [webinar](#) on its Home HIV Test Giveaway program, which provides detailed information to other health departments and CBOs that want to establish similar programs.<sup>19</sup> Also through this program, Denver Prevention Training Center and Washington University in St. Louis developed a [summary report](#) outlining best practices for self-test program protocols that also provides lessons learned from health departments and CBOs that implemented self-testing programs during the COVID-19 pandemic.<sup>20</sup> CDC includes national and local self-testing options on [gettested.cdc.gov](#) and disseminates this information through the National Prevention Information Network (NPIN) testing locator tools.

### 3. THE PATH FORWARD

The COVID-19 pandemic has shown how critical HIV self-testing services are to sustaining momentum to end the HIV epidemic. State and local health departments and CBOs have quickly shifted gears to ensure continuity of testing services through innovative engagement strategies and strategic partnerships. They are learning lessons that can advance HIV prevention efforts and improve access to services even after in-person services return to pre-pandemic levels.

**Collaboration and action by diverse partners can help sustain and build on this important progress in HIV testing, treatment, and prevention:**

**Federal health agencies** can collaborate and coordinate across agencies to promote HIV self-testing along with telehealth services and can leverage platforms and infrastructure used during the COVID-19 pandemic for the HIV response. They can also conduct research to advance the implementation of self-testing and self-testing technologies.



**State<sup>a</sup> and local health departments** can expand HIV testing services to include the use of HIV self-test kits; connect clients who have used self-tests to prevention and treatment services; raise awareness about HIV self-testing; and train providers and organizations on how and when to use self-test kits.

**Community-based organizations** can continue to deliver HIV self-testing services and work with health departments and other partners to promote and expand the use of self-testing. They can also engage with communities disproportionately affected by HIV to encourage self-testing and follow up with clients who have used self-tests to link them to prevention and treatment services.

**Healthcare providers** can adopt CDC's HIV testing recommendations; order HIV self-tests for their patients, as appropriate; and connect clients who use rapid self-tests to prevention and treatment services.

**Elected and community leaders** can speak boldly about the importance of HIV testing, including self-testing, as the first step for both prevention and treatment and can work with their communities to reduce HIV-related stigma.

**Everyone** can take steps to protect their health, including getting tested for HIV and accessing and staying engaged in care so they stay healthy and prevent further transmission.

<sup>a</sup> Kentucky prohibits the sale, delivery, holding, offering, and advertising of all HIV self-testing kits.

### SPOTLIGHT: Local HIV Self-Testing Programs



**There are many ways to expand HIV self-testing programs. Organizations around the country are thinking creatively about partner engagement and marketing strategies. Examples include:**

Through CDC's flagship funding program for health departments, the **Virginia Department of Health** has launched a program to increase self-testing uptake among people who cannot or are reluctant to get tested in healthcare settings. The health department advertises the self-tests on its website, social media, and dating apps and mails them to eligible clients who request one. They also supply self-test kits to CBOs for further distribution. The program has successfully reached clients that have never been tested or have not been tested in the previous year and has reported impressive linkage to care outcomes: 88% of people who tested positive through the program were linked to care within 30 days.

Another innovative collaboration to advance HIV self-testing is the **TakeMeHome program**, developed by Building Healthy Online Communities (BHOC) in partnership with NASTAD and Emory University.<sup>21</sup> The program offers rapid self-tests at no cost to people in participating jurisdictions and advertises the self-tests through dating apps. The program began as a pilot in March 2020; results suggest that it has successfully reached people who could benefit most from HIV care services, such as gay and bisexual men, and a high proportion of people who had not previously tested for HIV. Seventeen state health departments currently participate in the *TakeMeHome* program.

**Legacy Community Health**, a federally qualified health center in Houston, Texas, launched a self-testing program during the COVID-19 pandemic to provide access to HIV testing services outside of a clinic. Clinic counselors hold a telehealth screening for self-test eligibility and schedule virtual follow-up appointments for clients to take the self-test with a counselor on video who can provide immediate counseling and linkage to confirmatory testing and HIV care or PrEP, depending on the test result. This program has enabled Legacy Community Health to continue to provide critical HIV prevention and treatment services at pre-pandemic levels.

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