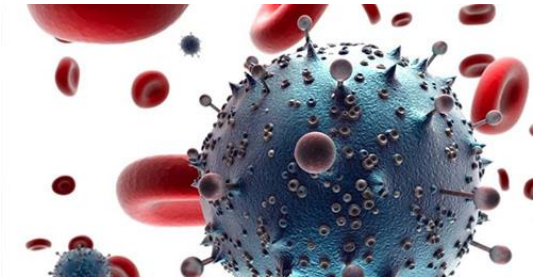
35ο ΠΑΝΕΛΛΗΝΙΟ ΣΥΝΕΔΡΙΟ AIDS

ΕΛΛΗΝΙΚΗ ΕΤΑΙΡΕΙΑ ΜΕΛΕΤΗΣ ΚΑΙ ΑΝΤΙΜΕΤΩΠΙΣΗΣ ΤΟΥ AIDS
HELLENIC SOCIETY FOR THE STUDY AND CONTROL OF AIDS

1-3/12 2023
Αθήνα, Ξενοδοχείο Royal Olympic

ΔΙΑΓΝΩΣΤΙΚΟΣ ΕΛΕΓΧΟΣ HIV ΚΑΙ ΠΡΩΙΜΗ ΔΙΑΓΝΩΣΗ



Αικατερίνη Μ. Ίσαρη
Βιολόγος, MSc
Δ/νση πρόληψης & επιδημιολογικής επιτήρησης
HIV/AIDS, ΣΜΝ & Ηπατιτίδων
ΕΟΔΥ

ΕΘΝΙΚΟΣ ΟΡΓΑΝΙΣΜΟΣ
ΔΗΜΟΣΙΑΣ ΥΓΕΙΑΣ

WHO AND HIV: 40-YEAR TIMELINE

1983/88

In 1983, the HIV virus was first isolated by Dr Françoise Barré-Sinoussi and Dr Luc Montagnier at the Institut Pasteur in Paris.

WHO celebrates the first World AIDS Day in 1988 acknowledging the key role of civil society in mobilizing a global response.

1990

WHO publishes the first guidelines on the clinical management of HIV infection with disease staging. World AIDS Day 1990 calls for a global focus on women and HIV, for their role and contributions in the global response, as patients and carers, and in prevention of mother-to-child transmission.

1991

The number of countries with national AIDS programmes rises from 7 to 130 within a year.

1994

WHO estimates 13–14 million people are living with HIV, with this figure projected to reach 30–40 million by 2000.

1996

Highly active antiretroviral therapy is first introduced changing the mood of the HIV response from despair to great hope.

WHO, together with 5 UN agencies, establishes the Joint United Nations Programme on AIDS (UNAIDS).

2002

Of the 28.5 million people living with HIV in Africa, only 35 000 are accessing HIV treatment.

WHO issues its first full guidelines on HIV treatment.

2003

WHO launches the global '3 by 5' initiative, to provide HIV treatment to 3 million people in developing countries by 2005.

2007

Only 10% of people with HIV knew of their diagnosis in 2005. WHO recommends a revolutionary step to offer provider-initiated HIV testing and counselling.

2014

The world is on track to achieve the Millennium Development Goal target to treat 15 million people with HIV by 2015.

2016

WHO launches historic guidelines recommending treatment for all people living with HIV, for both prevention and treatment outcomes.

Further innovations, including pre-exposure prophylaxis and self-testing are recommended.

2018

HIV testing reaches 75% of people with HIV and nearly 60% of people with HIV are receiving treatment. Despite successes, huge disparities still exist – many populations are being left behind, particularly key populations.

Half of the people living with HIV are not virally suppressed, and 1.8 million people are newly infected every year.

2021

WHO worked with partners to track the impact of the COVID-19 pandemic including understanding implications for people living with HIV and through tracking disruptions including in the provision of antiretroviral therapy services.

2022

Approximately 86% of people living with HIV knew their HIV status, 76% were receiving HIV treatment, and 71% were virally suppressed.

HIV services in some communities and context diverted in support of the multi-country mpox outbreak.

Strategies and approaches increasingly focus on integration, universal health coverage and primary health care.

2023

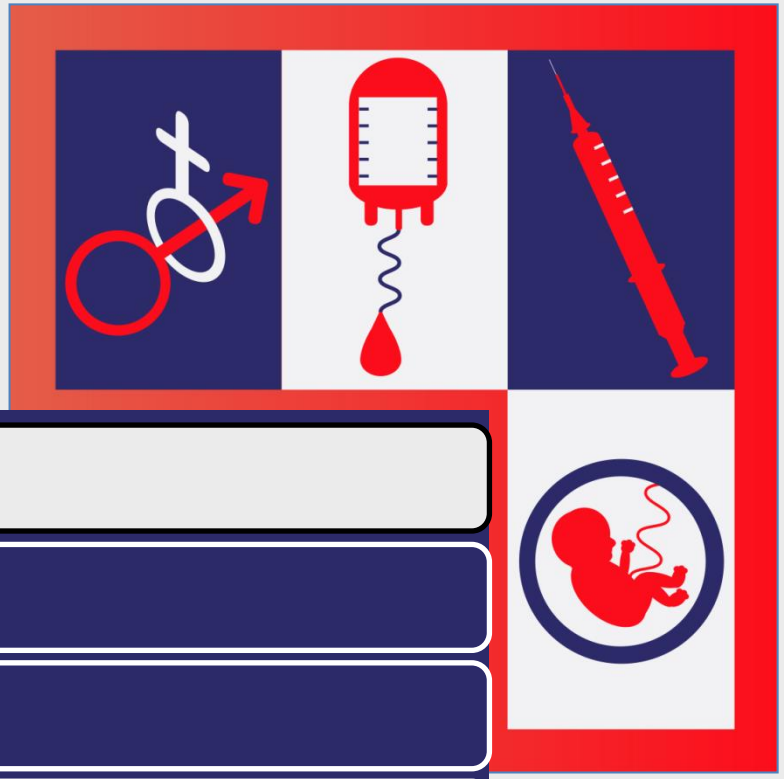
People living with HIV who achieve an undetectable level of virus by consistent use of antiretroviral therapy do not transmit HIV to their sexual partner(s).

At the end of 2022, 29.8 million of the 39 million people living with HIV were taking antiretroviral treatment (which means 76% of all people living with HIV) with almost three-quarters of them (71%) living with suppressed HIV.

ENDING AIDS BY 2030 IS ACHIEVABLE IF WE KEEP OUR EFFORTS STRONG.

https://www.who.int/news-room/spotlight/why-the-hiv-epidemic-is-not-over

Το HIV/AIDS **παραμένει** ένα από τα σημαντικά προβλήματα **Δημόσιας Υγείας**.



Η μεταδοση του ιού γίνεται με:

- Απροφύλακτη σεξουαλική επαφή
- χρήση μολυσμένων βελονών
- μέσω της μετάγγισης μολυσμένου αίματος

Επιπλέον:

- διαπερνά τον πλακούντα (κάθετη μετάδοση) και τον
- αιματοεγκεφαλικό φραγμό.
- μπορεί να μεταδοθεί στο νεογνό με τον θηλασμό

UNAIDS and other international organizations now call for a **95-95-95 strategy**, meaning:

95%

of infected persons know their status

95%

of those diagnosed receive treatment

95%

of people treated are virally suppressed to maintain U=U status

Source: UNAIDS. Understanding Fast-Track: Accelerating Action to End the AIDS Epidemic by 2030. http://www.unaids.org/sites/default/files/media_asset/201506_JC2743_Understanding_FastTrack_en.pdf. Published June 2015. Accessed November 12, 2021.

Zero discrimination

ΠΑΓΚΟΣΜΙΑ ΔΕΔΟΜΕΝΑ ΓΙΑ ΤΟΝ HIV

Summary of the global HIV epidemic, 2022

	People living with HIV	People acquiring HIV	People dying from HIV-related causes
Total	**39.0 million** [33.1–45.7 million]	**1.3 million** [1.0–1.7 million]	**630 000** [480 000–880 000]
Adults (15+ years)	**37.5 million** [31.8–43.6 million]	**1.2 million** [900 000–1.6 million]	**540 000** [410 000–770 000]
Women (15+ years)	20.0 million [16.9–23.4 million]	540 000 [400 000–740 000]	230 000 [170 000–340 000]
Men (15+ years)	17.4 million [14.7–20.4 million]	640 000 [490 000–850 000]	310 000 [230 000–440 000]
Children (<15 years)	**1.5 million** [1.2–2.1 million]	**130 000** [90 000–210 000]	**84 000** [56 000–120 000]

Source: UNAIDS/WHO estimates, 2023.

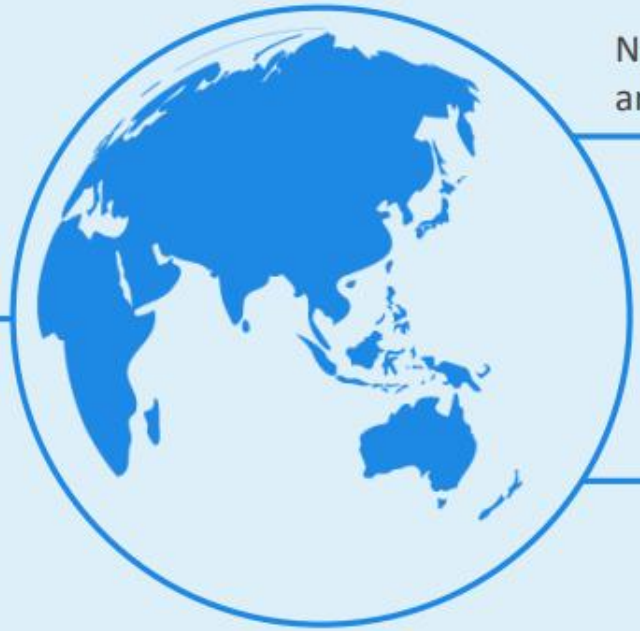
Global HIV epidemic – incidence and mortality since 2010

2022

Globally

39.0 million

People living with HIV



– 38%

New HIV infections annually compared with 2010

– 51%

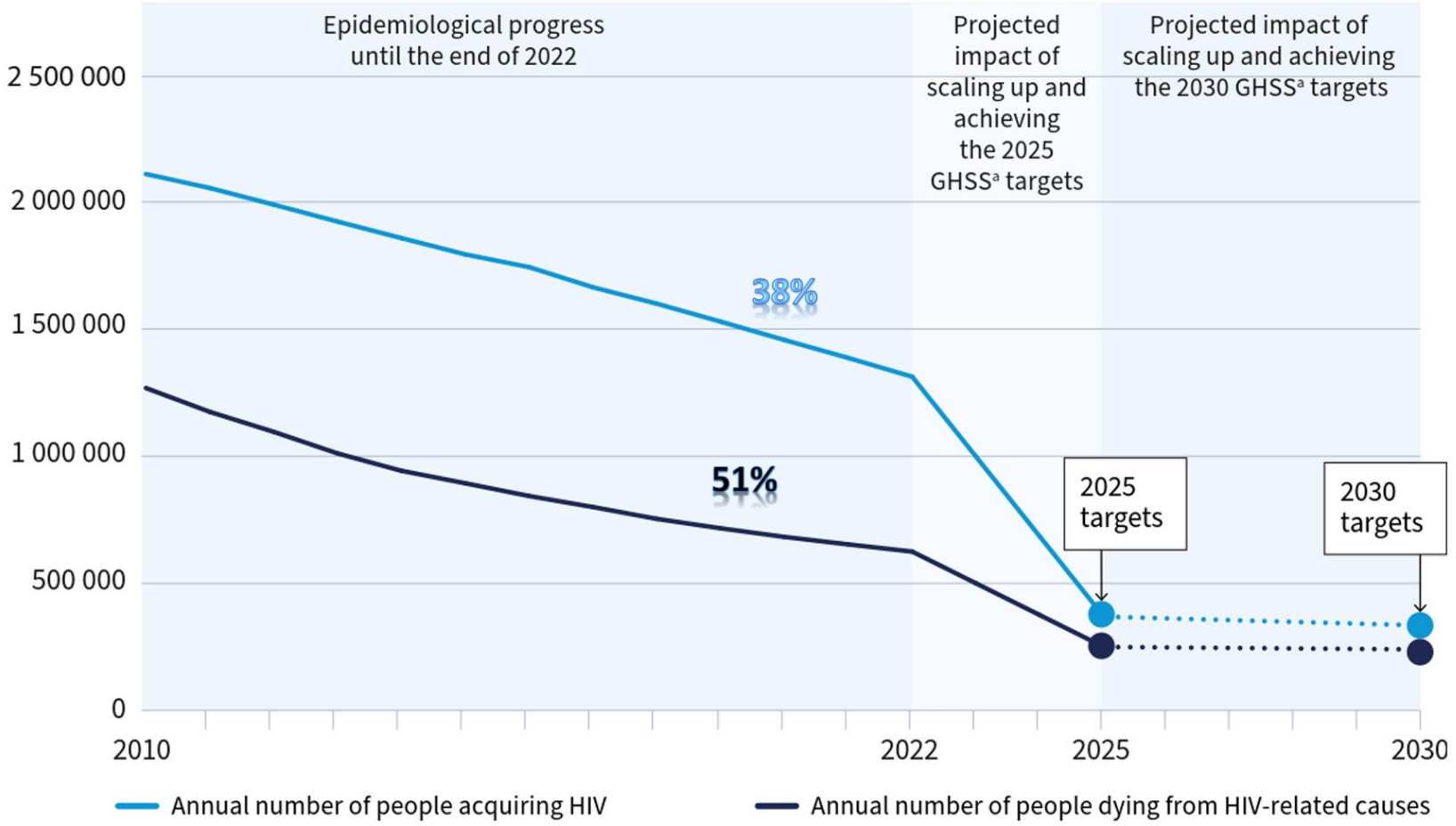
HIV-related deaths annually compared with 2010

World Health Organization

Source: UNAIDS/WHO estimates

Updated: July 2023

Global trends in people acquiring HIV and people dying from HIV-related causes, 2010–2022 and projections to 2030

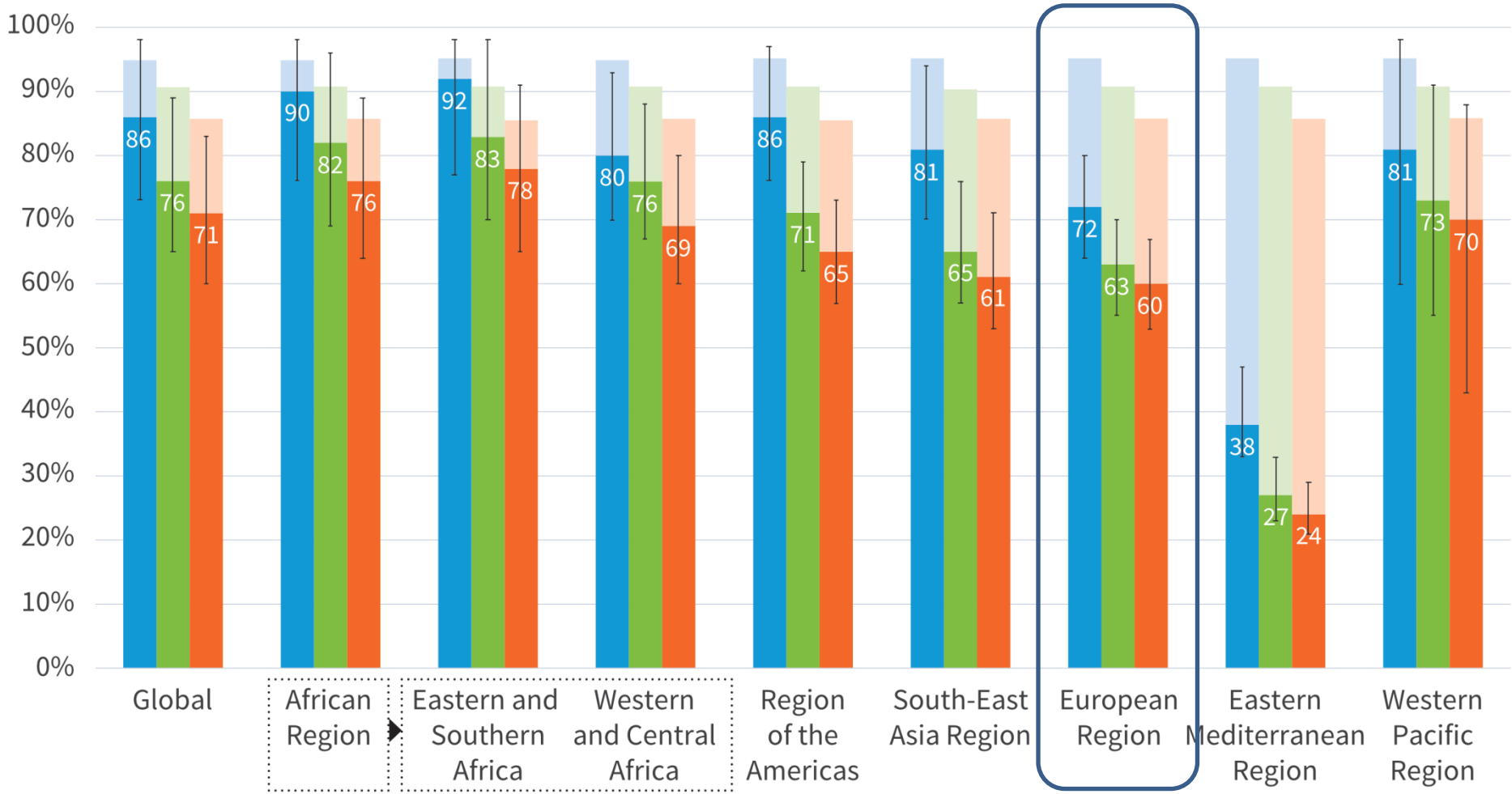


Note: The United Nations global targets for 2025 are twinfold: reducing the number of people acquiring HIV to less than 370 000 and reducing the number of HIV-related deaths to less than 250 000. To end AIDS as a public health threat by 2030, the targets are a 90% reduction of the number of people acquiring HIV and dying from HIV using 2010 as the baseline.

Sources: Avenir Health using 2025 targets and UNAIDS/WHO epidemiological estimates, 2023.

[a] Global health sector strategies on, respectively, HIV, viral hepatitis and sexually transmitted infections for the period 2022–2030. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/360348, accessed 7 July 2023).

Progress towards achieving the HIV testing, treatment and viral load suppression cascades targets among people living with HIV, globally and by WHO region, 2022



Ο HIV ΣΤΗΝ ΕΥΡΩΠΗ

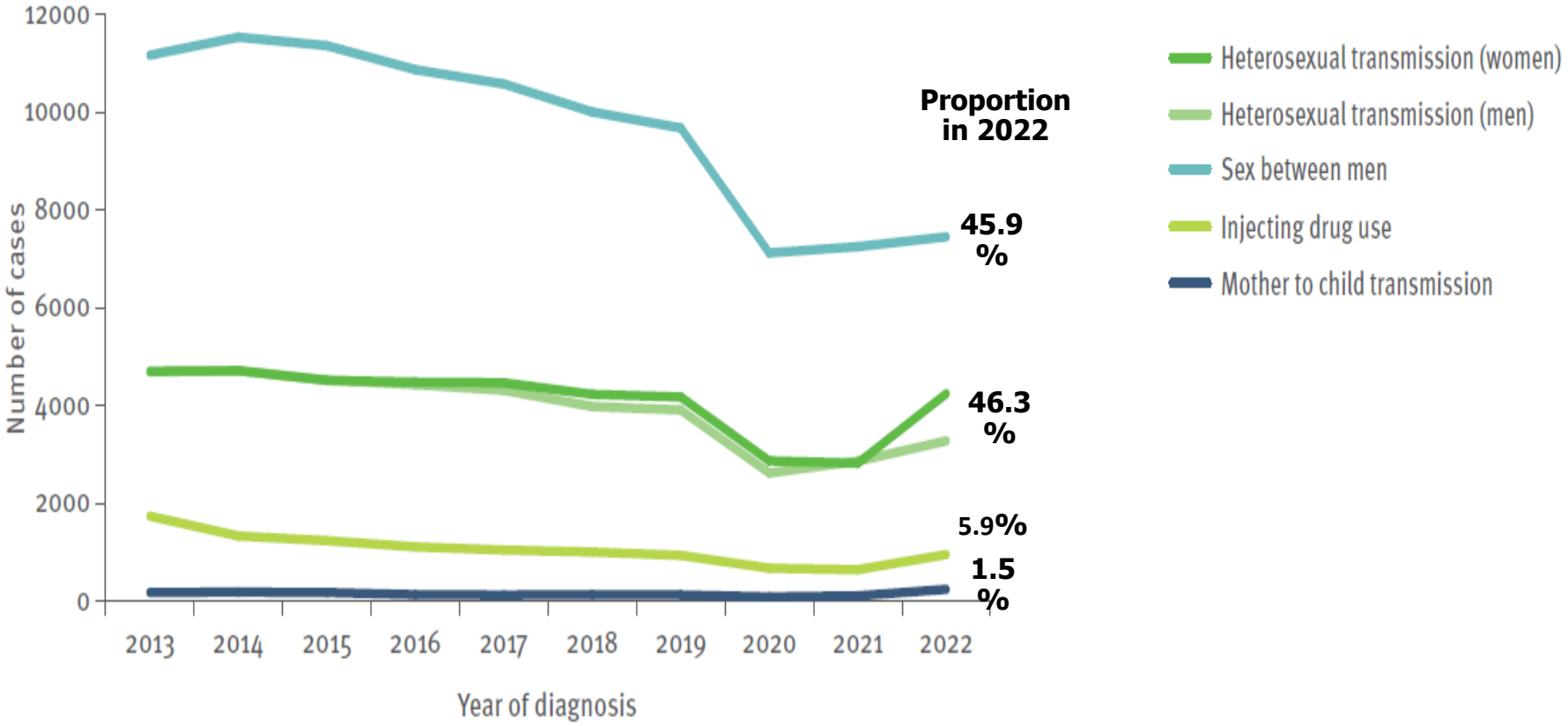
HIV diagnoses per 100 000 population EU/EEA, 2013–2022

- **EU/EEA countries recorded a 30.8% increase compared to the 2021 rate, but a 3.8% decrease compared to 2019**
- **When previous positive cases were excluded, the increase was 14.6% from 2021 to 2022.**

Rates exclude countries not reporting consistently over the period: Germany and Sweden (AIDS and AIDS deaths); Italy and Denmark (AIDS deaths).
The HIV rate was adjusted by removing previous positive cases from the 14 EU/EEA countries with sufficient reporting on this variable to exclude these cases.
AIDS and deaths rates were not impacted by previous positive cases and these rates are not adjusted.
Previous positive diagnoses are defined as an HIV diagnosis made either abroad or in another setting within the reporting country on any occasion before the current year of reporting. Some countries report previous positive HIV cases as they enter, re-enter or re-engage with the care system in the reporting country.
The variable identifying the HIV status as a previous positive or first-time diagnosis had a completeness of 51.4%

Source: ECDC/WHO (2023). HIV/AIDS Surveillance in Europe 2023 (2022 data)

HIV diagnoses, by transmission mode EU/EEA, 2013–2022



HIV epidemic driven by Key populations and their partners

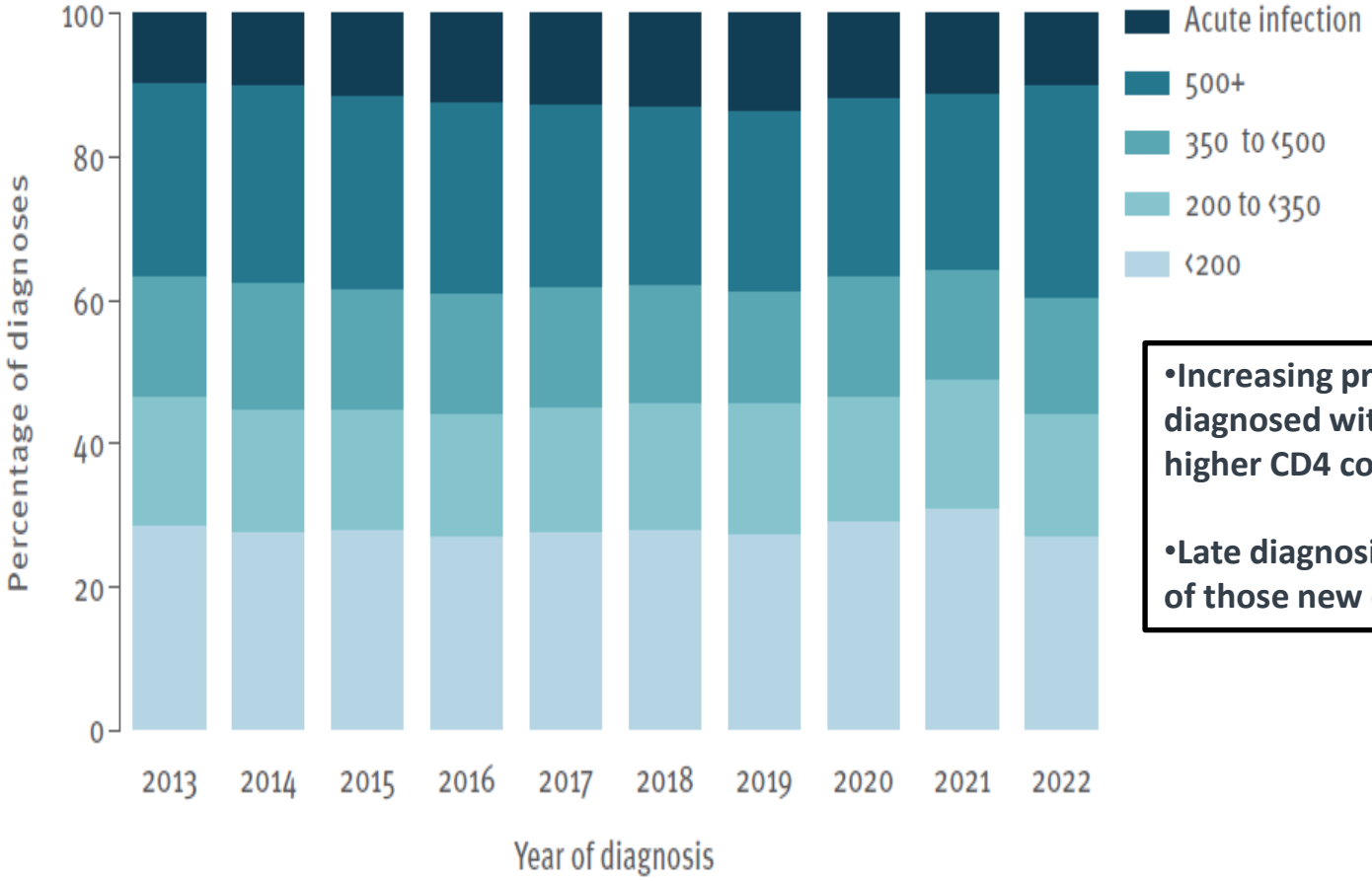
Proportions were derived from individuals with identifiable transmission modes, 1.5% had other mode of transmission

Source: ECDC/WHO (2023). HIV/AIDS Surveillance in Europe 2023 (2022 data)

UNAIDS

THE EFFECTS OF THE COVID-19 PANDEMIC ON THE HIV RESPONSE

Acute infection or CD4 count at diagnosis, EU/EEA, 2013-2022

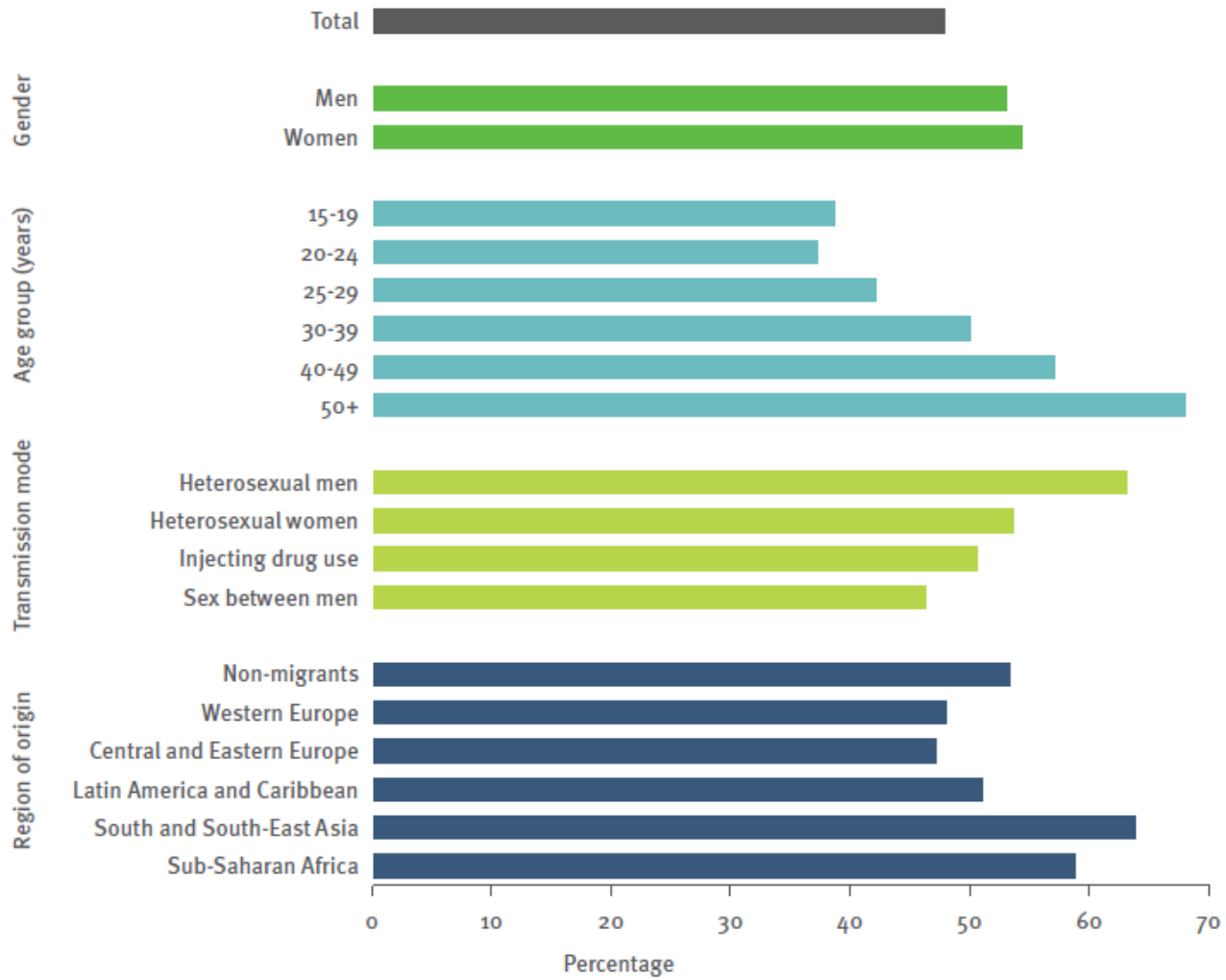


- **Increasing proportion of newly diagnosed with acute infection or at higher CD4 counts**
- **Late diagnosis remains too high; 47.9% of those new diagnoses are at CD4 <350**

Unknow information and previous positive cases are included from this analysis

Source: ECDC/WHO (2023). HIV/AIDS Surveillance in Europe 2023 (2022 data)

Figure 1.8: Percentage of people diagnosed late (CD_4 cell count < 350 per mm^3) by demographic, EU/EEA, 2022 (n = 6 451)



Note: This graph excludes cases with unknown CD_4 count and individuals with acute infection and those defined as previous positive diagnosed.

Source: ECDC/WHO (2023). HIV/AIDS Surveillance in Europe 2023 (2022 data)

Η HIV ΕΠΙΔΗΜΙΑ ΣΤΗΝ ΕΛΛΑΔΑ

Νέες διαγνώσεις HIV λοίμωξης* κατά κατηγορία μετάδοσης και κατά φύλο στην Ελλάδα (1/1/2022 - 31/12/2022)
New HIV diagnoses* by transmission mode and sex in Greece (1/1/2022 - 31/12/2022)

Κατηγορία μετάδοσης	Άνδρες** Males**		Γυναίκες Females		Σύνολο Total		Transmission mode
	N	(%)	N	(%)	N	(%)	
Σεξουαλική επαφή μεταξύ ανδρών	249	(55,3)	0	(0,0)	249	(44,1)	Sex between men
Ετεροφυλοφιλική σεξουαλική επαφή	52	(11,6)	72	(62,6)	124	(21,9)	Heterosexual contact
Ενέσιμη χρήση εξαρτ. ουσιών	52	(11,6)	15	(13,0)	67	(11,9)	Injecting drug use
Κάθετη μετάδοση	5	(1,1)	1	(0,9)	6	(1,1)	Mother to child transmission
Ακαθόριστη	92	(20,4)	27	(23,5)	119	(21,1)	Undetermined
Σύνολο	450	100	115	100	565	100	Total

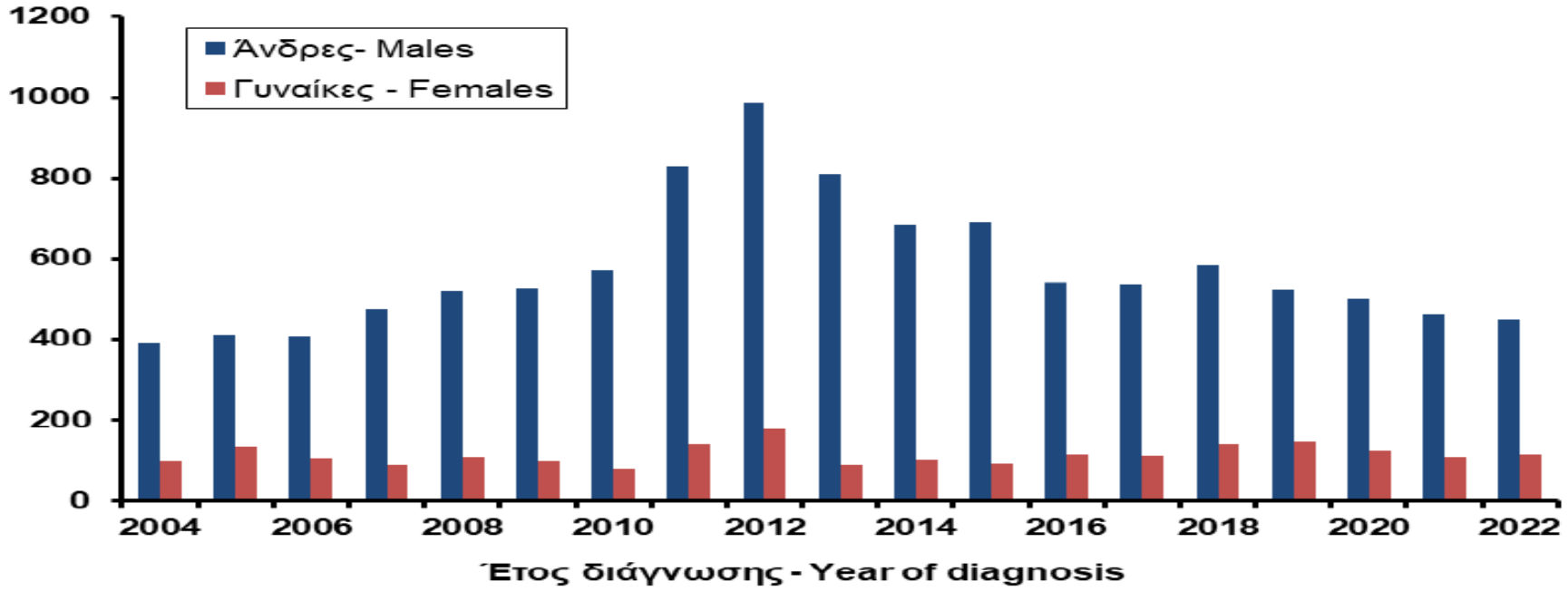
** Συμπεριλαμβανομένων των περιστατικών που όταν διαγνώσθηκαν είχαν ήδη αναπτύξει AIDS*

** Including cases presenting with AIDS when first diagnosed with HIV*

*** Περιλαμβάνονται 3 διεμφυλικές γυναίκες (γυναίκες των οποίων το φύλο κατά τη γέννηση ήταν άρρεν)*

*** Including 3 transgender women (women who assigned male at birth)*

Διαγνώσεις HIV λοίμωξης* κατά φύλο στην Ελλάδα (2004-2022)
HIV diagnoses* by sex in Greece (2004-2022)



** Συμπεριλαμβανομένων των περιστατικών που όταν διαγνώσθηκαν είχαν ήδη αναπτύξει AIDS*

** Including cases presenting with AIDS when diagnosed with HIV*

Επιδημιολογικά δεδομένα 2022

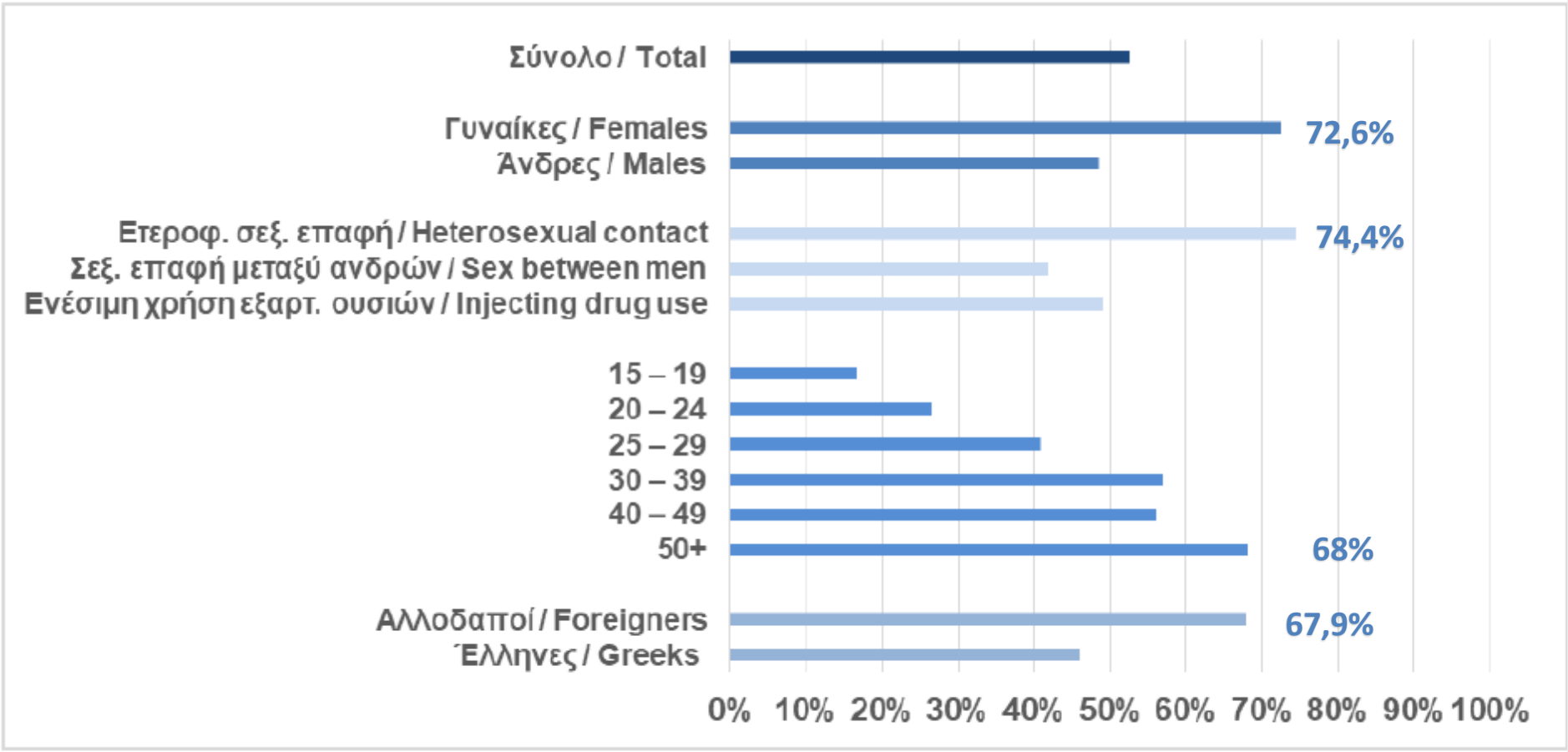
- Δηλώθηκαν στον ΕΟΔΥ **565 νέες διαγνώσεις** HIV λοίμωξης (**5,4 ανά 100.000 πληθυσμού)**
  - Τα 450 (**79,6%**) περιστατικά αφορούσαν σε άνδρες (*Περιλαμβάνονται 3 διεμφυλικές γυναίκες)*
  - Τα 115 (**20,4%**) περιστατικά ήταν γυναίκες.

- Οι τιμές των CD4+ Τ-λεμφοκυττάρων κατά τη διάγνωση της HIV λοίμωξης ήταν διαθέσιμες για 377 άτομα (**66,7**%).
  - 198 (**52,5%**) **είχαν <350 κύτταρα/mm^3**
  - 126 **(33,4%) είχαν <200 κύτταρα/mm^3**

CD4+ Τ-λεμφοκυττάρων	Σεξουαλική επαφή μεταξύ ανδρών (210 άτομα)	Ετεροφυλοφιλική σεξ. επαφή (90 άτομα)	Χρήση εξαρτησιογόνων ουσιών (51 άτομα)
<350 κύτταρα/mm^3	**41,9% (n=88)**	**74,4% (n=67)**	**49% (n=25)**
<200 κύτταρα/mm^3	**22,3% (n=49)**	**48,9% (n=44)**	**37,3% (n=19)**

Ποσοστό περιστατικών HIV* που διαγνώστηκαν καθυστερημένα το 2022 (CD4<350 κύτταρα/mm³), ανά φύλο, κατηγορία μετάδοσης, ηλικιακή ομάδα και εθνικότητα (1/1/2022 - 31/12/2022)

Proportion of HIV cases* diagnosed late in 2022 (CD4<350 cells/mm³), by sex, transmission group, age group and ethnicity (1/1/2022 - 31/12/2022)

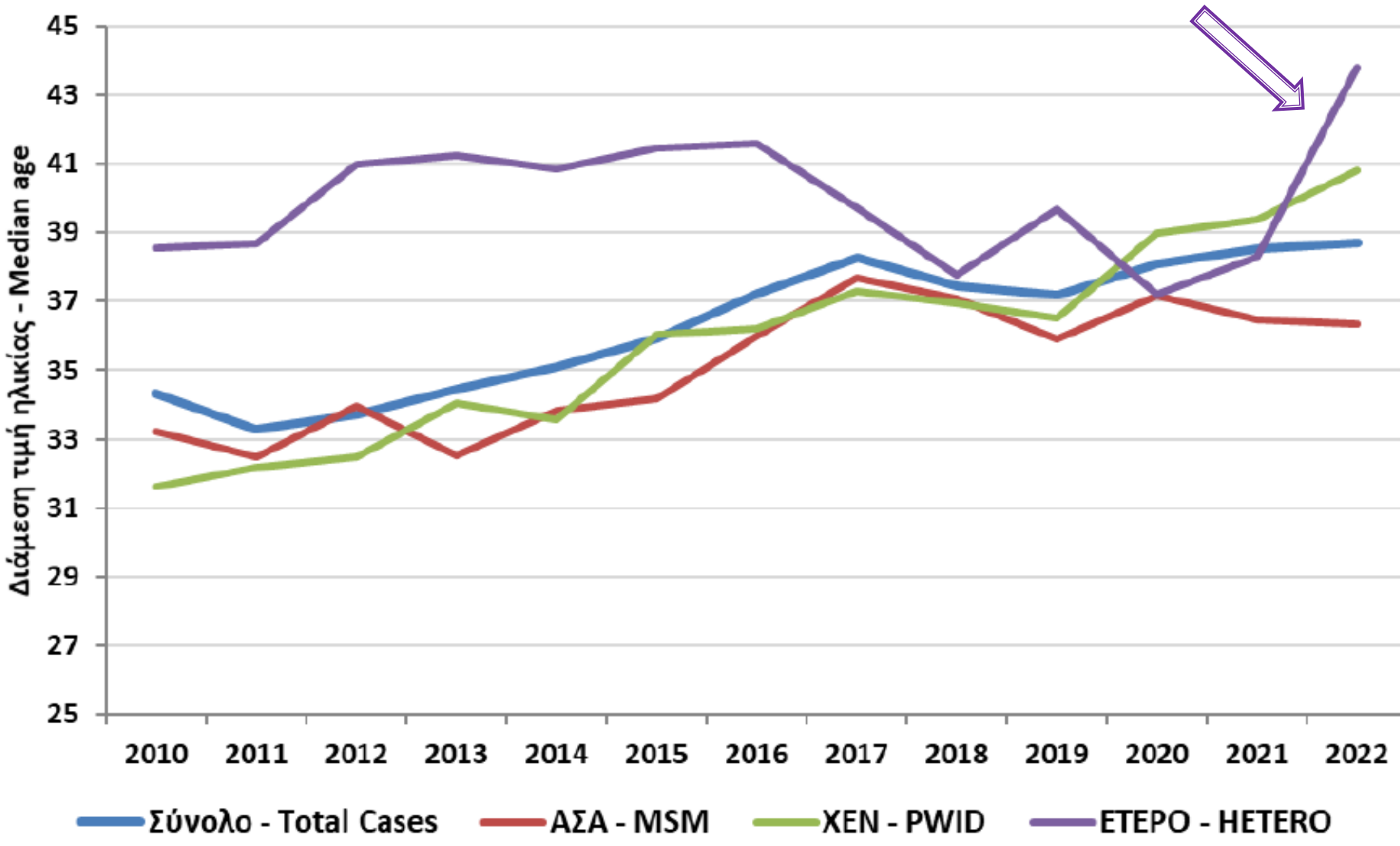


* *Συμπεριλαμβανομένων των περιστατικών που όταν διαγνώσθηκαν είχαν ήδη αναπτύξει AIDS*

* *Including cases presenting with AIDS when first diagnosed with HIV*

Διάμεση ηλικία των νέων περιστατικών HIV λοίμωξης* κατά τη διάγνωση στην Ελλάδα έως 31/12/2022

Median age of new HIV cases* at the time of diagnosis, Greece (by 31/12/2022)



* *Συμπεριλαμβανομένων των περιστατικών που όταν διαγνώσθηκαν είχαν ήδη αναπτύξει AIDS*

* *Including cases presenting with AIDS when diagnosed with HIV*

AIDS

Διαγνώσεις AIDS κατά κατηγορία μετάδοσης και κατά φύλο στην Ελλάδα (1/1/2022 - 31/12/2022)
AIDS diagnoses by transmission group and sex in Greece (1/1/2022 - 31/12/2022)

Κατηγορία μετάδοσης	Άνδρες Males		Γυναίκες Females		Σύνολο Total		Transmission mode
	N	(%)	N	(%)	N	(%)	
Σεξουαλική επαφή μεταξύ ανδρών	20	(37,7)	-	-	20	(28,2)	Sex between men
Ετεροφυλοφιλική σεξουαλική επαφή	12	(22,6)	14	(77,8)	26	(36,6)	Heterosexual contact
Ενέσιμη χρήση εξαρτησιογόνων ουσιών	12	(22,6)	2	(11,1)	14	(19,7)	Injecting drug use
Πολυμεταγγιζόμενοι/ες με παράγωγα αίματος	0	(0,0)	0	(0,0)	0	(0,0)	Multitransfusion of blood and blood products
Μετάγγιση	0	(0,0)	0	(0,0)	0	(0,0)	Transfusion
Κάθετη μετάδοση	0	(0,0)	0	(0,0)	0	(0,0)	Mother to child
Ακαθόριστο	9	(17,0)	2	(11,1)	11	(15,5)	Undetermined
Σύνολο	53	(100,0)	18	(100,0)	71	(100,0)	Total

**Περιλαμβάνεται 1 διεμφυλική γυναίκα (άρρεν φύλο κατά τη γέννηση)*
** Including 1 transgender woman (woman assigned male at birth)*

- Από τις περιπτώσεις που διαγνώσθηκαν με HIV το 2022, 60 (**10,6%**) άτομα **είχαν ήδη εμφανίσει ή ανέπτυξαν κλινικά AIDS εντός του έτους**.
- Η πλειονότητα των νέων περιπτώσεων AIDS (περίπου το **65%**) αφορά σε ηλικίες **>40 ετών** κατά τη διάγνωση.

HIV MEDICINE | BHIVA British HIV Association

ORIGINAL ARTICLE

Late diagnosis of HIV in 2022: Why so little change?

Simon Collins, Angelina Namiba, Alex Sparrowhawk, Sophie Strachan, Marc Thompson, Hideta Nakamura

First published: 17 November 2022 | https://doi.org/10.1111/hiv.13444

Volume 23, Issue 11
Special Issue: Late Diagnosis in HIV
December 2022
Pages 1118-1126

Abstract

Background

The proportion of people who are diagnosed late is a key metric to measure the public health response to HIV. But this percentage remains stubbornly high in nearly every country. Delays in accessing antiretroviral therapy affects both (i) individual health, due to a higher risk of mortality, and (ii) population-based health, due to continued risk of transmission. Despite huge efforts to increase testing, late diagnosis continues to be an indication of a public health failure.

Outline

This short review includes community perspectives on why late diagnosis continues and how it may be reduced. We discuss both structural barriers that prevent people from testing earlier and personal reasons why some people still refuse testing when offered. We note that late diagnosis is reported in all countries and in all demographic groups and that sex, gender, age, and sexuality all affect these rates. However, even in groups with high HIV awareness, such as in gay and bisexual men in the UK, more than one in three people with HIV continue to be diagnosed late. Fears and prejudice about HIV based on outdated information are still common among both health workers and people using health services. For example, testing is still not offered in primary or emergency care settings, and even free testing might not be accepted if someone fears the outcome might jeopardize their resident status, employment, relationship, or health.

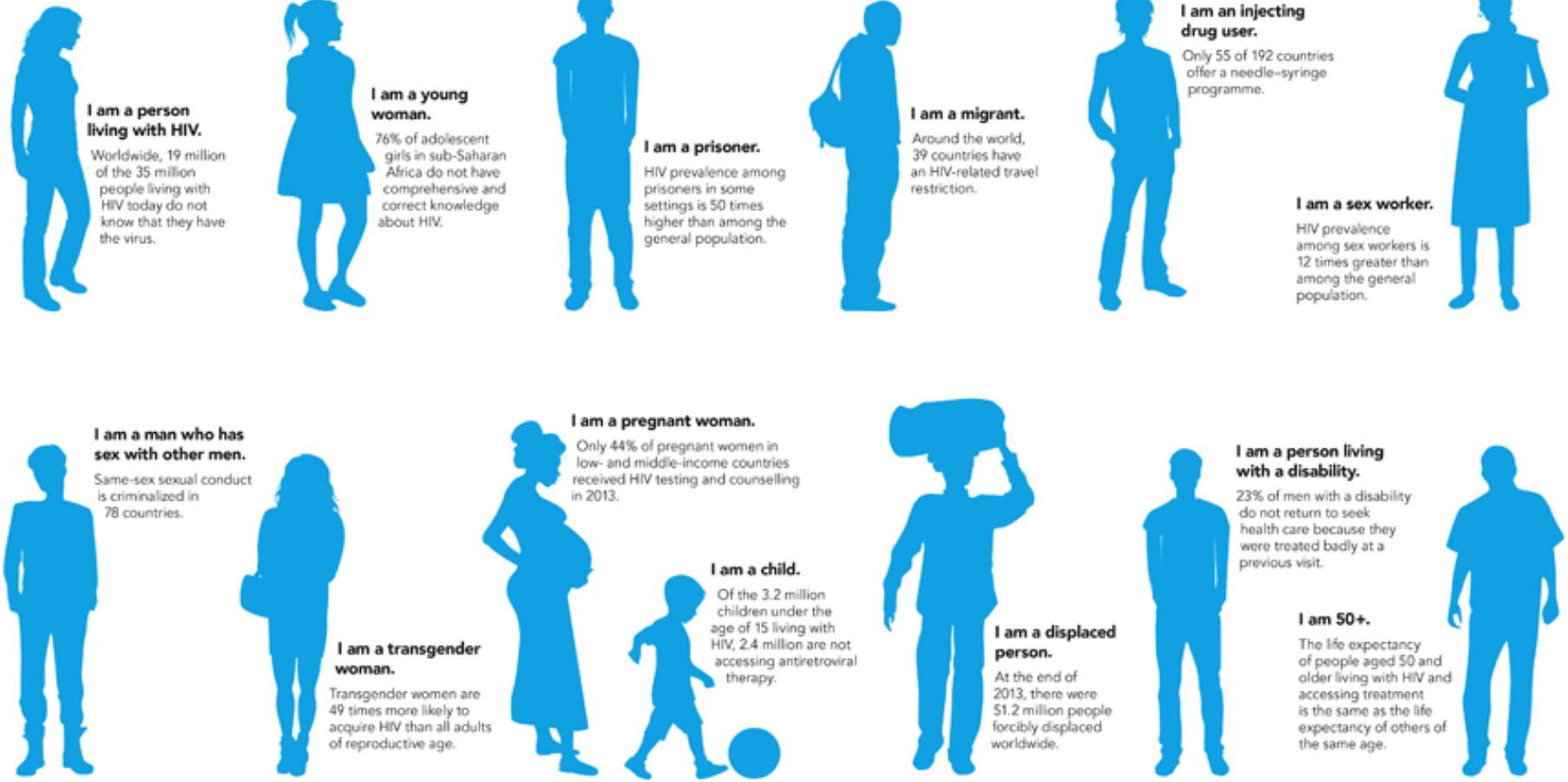
Summary

In addition to developing targeted projects to reach the highest-risk groups, a positive mainstream public campaign could make testing more acceptable at a broad population level across all demographics. This could challenge and repair the media campaigns from the 1980s that still contribute to the stigma that frightens people away from testing now. We hope that an effective approach in one country might also help others.

EQUITY

Address social and structural barriers to HIV testing and treatment access.

12 populations being left behind



I am a person living with HIV.

Worldwide, 19 million of the 35 million people living with HIV today do not know that they have the virus.

I am a young woman.

76% of adolescent girls in sub-Saharan Africa do not have comprehensive and correct knowledge about HIV.

I am a prisoner.

HIV prevalence among prisoners in some settings is 50 times higher than among the general population.

I am a migrant.

Around the world, 39 countries have an HIV-related travel restriction.

I am an injecting drug user.

Only 55 of 192 countries offer a needle–syringe programme.

I am a sex worker.

HIV prevalence among sex workers is 12 times greater than among the general population.

I am a man who has sex with other men.

Same-sex sexual conduct is criminalized in 78 countries.

I am a transgender woman.

Transgender women are 49 times more likely to acquire HIV than all adults of reproductive age.

I am a pregnant woman.

Only 44% of pregnant women in low- and middle-income countries received HIV testing and counselling in 2013.

I am a child.

Of the 3.2 million children under the age of 15 living with HIV, 2.4 million are not accessing antiretroviral therapy.

I am a displaced person.

At the end of 2013, there were 51.2 million people forcibly displaced worldwide.

I am a person living with a disability.

23% of men with a disability do not return to seek health care because they were treated badly at a previous visit.

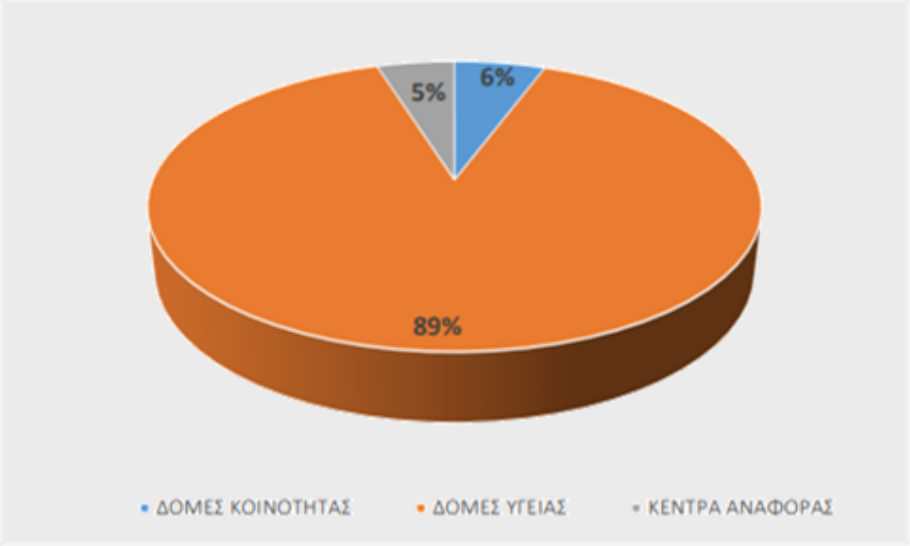
I am 50+.

The life expectancy of people aged 50 and older living with HIV and accessing treatment is the same as the life expectancy of others of the same age.

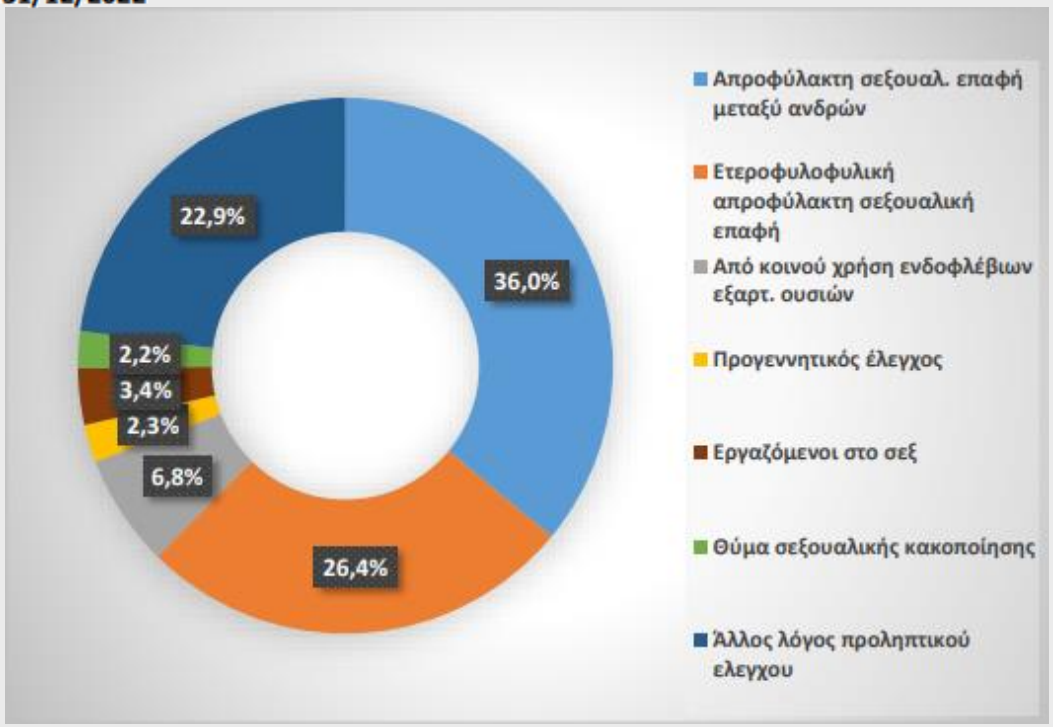
UNAIDS

Source: UNAIDS Gap report

Σχήμα 1. Κατανομή εξετάσεων HIV ανά κατηγορία δομής εξέτασης (01/01/2022 – 31/12/2022).



Σχήμα 7. Κατανομή εξετάσεων HIV ανά λόγο εξέτασης σε δομές της κοινότητας από 01/01 έως και 31/12/2022



Many Barriers May Keep People from Being Engaged in HIV Care.

- **HIV testing, treatment, and prevention services are often offered separately,** can be challenging to navigate, and further emphasizes a division between people with HIV and people who could benefit from prevention.
- **Separating HIV services from other routine healthcare** misses opportunities to engage people in HIV testing, prevention, and treatment when they seek sexual health or other non-HIV-focused services.
- Providing **critical support services**—like housing, food, and transportation assistance—is essential to keeping someone in ongoing care, but these **services are not necessarily offered** alongside what are considered "traditional" HIV care and prevention services.
- **Stigma** embedded in the experience of many people seeking HIV treatment and prevention services can stop people from visiting health care providers labeled as "HIV" or "STD" clinics.
- Everyone has **implicit biases** that affect their perceptions of others. The HIV care or prevention services someone receives may be affected by healthcare and other service providers' implicit biases on race/ethnicity, sexual orientation, gender identity, age, and other factors. These biases, in some cases, may be why a person does not return for care and services.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

Today, powerful HIV prevention and treatment tools can keep people healthy and help end the HIV epidemic.

CDC's Approach

Making HIV testing simple, accessible, and routine.

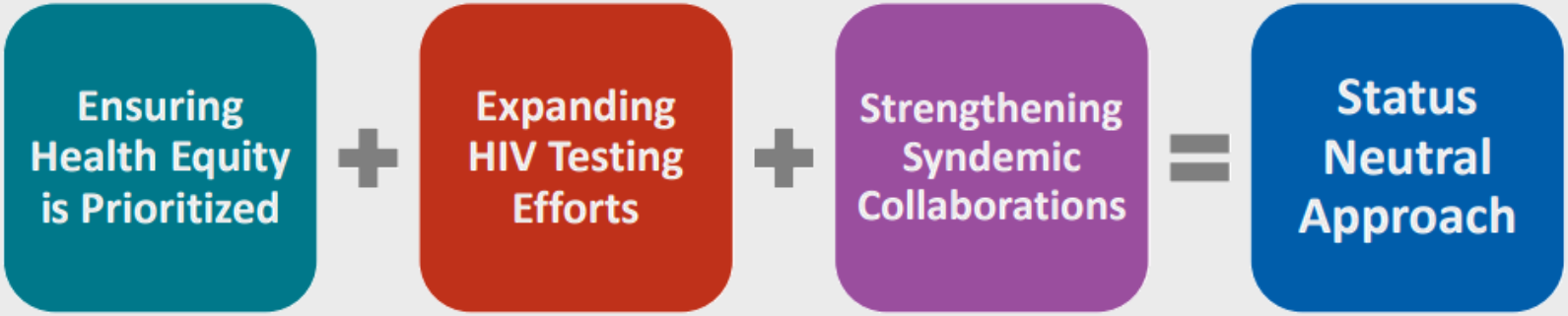
Quickly linking people with HIV to care and treatment, and re-engaging those who have stopped receiving care.

Increasing availability and use of PrEP among populations who could benefit most.

Partnering with other agencies and working with local communities to implement SSPs where they are needed and permitted by law.

Ensuring all jurisdictions have the capacity to identify, investigate, and respond to potential HIV outbreaks quickly.

CDC's priorities fit within the Status Neutral Approach

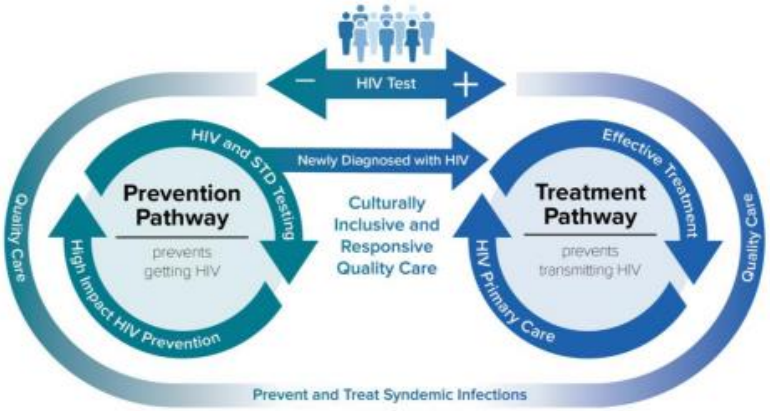


Understanding Status Neutral HIV Care

The status neutral framework provides care for the whole person by offering a "one-door" approach: people with HIV and people seeking HIV prevention services can access treatment, prevention, and other critical services in the same place. Normalizing HIV treatment and prevention helps to destigmatize both. In a status neutral approach to care, a provider continually assesses and reassesses a person's clinical and social needs. The goal is to optimize a person's health through continuous engagement in treatment and prevention services without creating or deepening the divide between people with HIV and people who could benefit from prevention.

The Status Neutral Framework

- **It's called "status neutral" because the same approach is used to engage and retain people in care, regardless of HIV status**
- **This continuous, high-quality care provides people with the tools they need to stay healthy and help stop HIV:**
  - Maintaining an undetectable viral load
  - Taking PrEP as prescribed

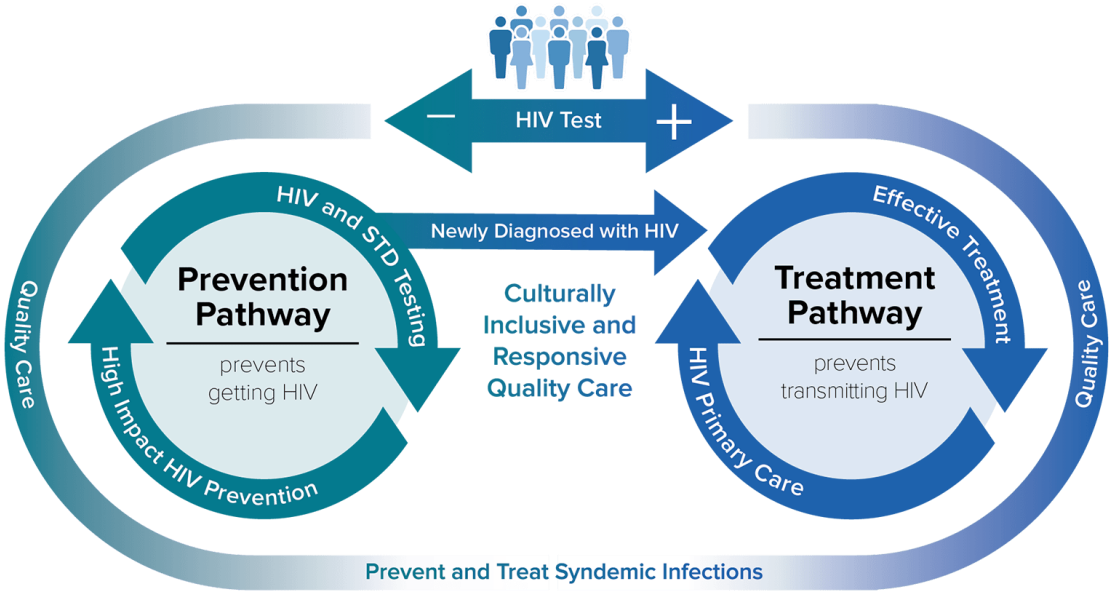


A status neutral approach meets people where they are by offering a "whole person" approach to care by putting the needs of the person ahead of their HIV status.

This approach helps improve care and eliminates stigma.

Status Neutral HIV Prevention and Care

People whose HIV tests are negative are offered powerful prevention tools like PrEP, condoms, harm reduction (e.g. SSPs), and supportive services to stay HIV negative.



People whose HIV tests are positive enter primary care and are offered effective treatment and supportive services to achieve and maintain viral suppression.

Follow CDC guidelines to test people for HIV. Regardless of HIV status, quality care is the foundation of HIV prevention and effective treatment. Both pathways provide people with the tools they need to stay healthy and stop HIV.

https://www.cdc.gov/hiv/pdf/policies/issue-brief/Issue-Brief-Status-Neutral-HIV-Care.pdf

"**A status neutral approach continually addresses the healthcare and social service needs of all people affected by HIV so that they can achieve and maintain optimal health and well-being**. ...Ultimately, status neutral approaches promote health equity by putting client needs above HIV status to improve care and eliminate stigma," the CDC stated March 1 in announcing a training module for medical and service providers.

The training takes off from the CDC's Issue Brief, "Status Neutral HIV Care and Service Delivery: Eliminating Stigma and Reducing Health Disparities," posted on November 28, 2022.

Status neutral care begins with an HIV test and goes from there. The CDC notes, however, that services should not be denied because a person hasn't taken an HIV test.

"How can we evolve the institutional structures that maintain a 'serodivide' in service delivery and that may maintain that same 'serodivide' and resulting stigma in the lives of people affected by HIV?" wrote Demetre C. Daskalakis, MD, an infectious disease expert on loan from the CDC to the White House for the national mpox response, in the Spring 2023 issue of *HIV Specialist*. "People don't care who funds their services. They are concerned with getting the services they need to support their health and well-being. 'Statusing' a place or a service may be aversive to people who could benefit from that place or service."

Status neutral HIV prevention and care was first introduced by the New York City Department of Health and Mental Hygiene, where Dr. Daskalakis championed the concept and led the city to the lowest number of new diagnoses seen in years.

ISSUE BRIEF

Status Neutral HIV Care and Service Delivery Eliminating Stigma and Reducing Health Disparities

Today, powerful HIV prevention and treatment tools can keep people healthy and help end the HIV epidemic. Combining these tools in a status neutral approach can help people maintain their best health possible, while also improving outcomes in HIV prevention, diagnosis, care, and treatment. A status neutral approach to HIV-related service delivery aims to deliver high-quality, culturally affirming health care and services at every engagement, supporting optimal health for people with and without HIV. This approach is especially important now to reduce the unacceptably high number of annual HIV infections and help close the persistent gaps along the HIV prevention and care continuum, which indicate that not enough people are being engaged or retained in HIV prevention and treatment.

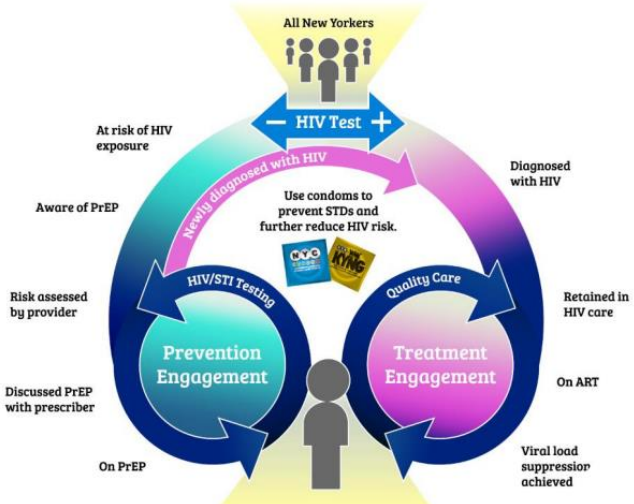
Many Barriers May Keep People from Being Engaged in HIV Care.

- **HIV testing, treatment, and prevention services are often offered separately,** can be challenging to navigate, and further emphasizes a division between people with HIV and people who could benefit from prevention.
- **Separating HIV services from other routine healthcare** misses opportunities to engage people in HIV testing, prevention, and treatment when they seek sexual health or other non-HIV-focused services.
- Providing critical support services—like housing, food, and transportation assistance—is essential to keeping someone in ongoing care, but these **services are not necessarily offered** alongside what are considered "traditional" HIV care and prevention services.
- **Stigma** embedded in the experience of many people seeking HIV treatment and prevention services can stop people from visiting health care providers labeled as "HIV" or "STD" clinics.
- Everyone has **implicit biases** that affect their perceptions of others. The HIV care or prevention services someone receives may be affected by healthcare and other service providers' implicit biases on race/ethnicity, sexual orientation, gender identity, age, and other factors. These biases, in some cases, may be why a person does not return for care and services.

Many HIV prevention experts believe a status neutral approach can help improve care and service provision and eliminate structural stigma by meeting people where they are, offering a "whole person" approach to care, and putting the needs of the person ahead of their HIV status. The status neutral approach aims to advance health equity and drive down disparities by embedding HIV prevention and care into routine care. Integrating HIV prevention and care with strategies that address social determinants of health can help reduce barriers to accessing and remaining engaged in care.

The status neutral approach also aims to increase efficiency, since the clinical and social services that prevent or treat HIV are nearly identical and can be unified in a single service plan rather than different plans based on an individual's HIV status. Adopting a status neutral approach is one way to help deliver better prevention and care and ultimately decrease new HIV infections and support the health and quality of life of people living with HIV in the United States.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention



The risk is not knowing!

Why you should get tested for HIV?

Being aware of being positive for HIV, means starting earlier your treatment. Treatment with ART reduces the amount of HIV in the blood, thus assuring your well-being for many years. Knowing your status means keeping yourself and others healthy.

NAT test

Measures: HIV RNA
Detection: 10-33 days

Antigen/Antibody test

Measures: antigens(p24)/antibodies
Detection: 18-45 days

Antibody test

Measures: antibodies
Detection: 23-90 days

One's safe, all safe!

When should I get tested for HIV?

CDC recommends that everyone between the ages of 13 and 64 gets tested for HIV at least once. You should be tested if you continue to engage in any of the following behaviors:

- You're a man who had intercourse with another man.
- You had sex with a partner who is positive for HIV.
- You had different partners since your last HIV test.
- You've shared syringes or other equipment to inject drugs.
- You've other sexually transmitted diseases.
- If you're pregnant or planning to get pregnant.

For more information please visit http://en.wondfo.com.cn/

Wondfo

ακας 1: Ορισμοί παθήσεων ενδεικτικών λοίμωξης και συστάσεις για εξέταση HIV

1. Παθήσεις οι οποίες ορίζουν τη νόσο AIDS μεταξύ των ατόμων που ζουν με τη λοίμωξη HIV (PLHIV)*

Η εξέταση συνιστάται ιδιαίτερα:

Νεοπλάσματα:
- Καρκίνος του τραχήλου της μήτρας
- Λέμφωμα Non-Hodgkin
- Σάρκωμα Kaposi

Βακτηριακές λοιμώξεις
- Μυκοβακτήριο φυματίωσης, με πνευμονική ή εξωπνευμονική εντόπιση
- *Mycobacterium avium* σύμπλοκο (MAC) ή *Mycobacterium kansasii*, διάχυτο ή με εξωπνευμονική εντόπιση
- *Mycobacterium, άλλα είδη ή μη ταυτοποιημένα είδη, διάχυτα ή με εξωπνευμονική εντόπιση*
- Πνευμονία, υποτροπιάζουσα (2 ή περισσότερα επεισόδια σε 12 μήνες)
- Σηψαιμία από σαλμονέλλα, υποτροπιάζουσα

Ιογενείς λοιμώξεις
- Αμφιβληστροειδοπάθεια από μεγαλοκυτταροϊό
- Μεγαλοκυτταροϊός, άλλες εντοπίσεις (εκτός από ήπαρ, σπλήνα, αδένες)
- Απλός έρπης, έλκος(η) >1 μήνα/βρογχίτιδα/πνευμονίτιδα
- Προϊούσα πολυεστιακή λευκοεγκεφαλοπάθεια

Παρασιτικές λοιμώξεις
- Εγκεφαλική τοξοπλάσμωση
- Διάρροια από κρυπτοσποριδίωση > 1 μήνα
- Ισοσπορίαση > 1 μήνα
- Άτυπη διάχυτη λεϊσμανίαση
- Επανενεργοποίηση Αμερικανικής τρυπανοσωμίασης (μηνιγγοεγκεφαλίτιδα ή μυοκαρδίτιδα)

Μυκητιασικές λοιμώξεις
- Πνευμονία από Πνευμονοκύστη carinii
- Καντιντίαση, οισοφαγική
- Καντιντίαση, βρογχική/τραχειακή/στους πνεύμονες
- Κρυπτοκόκκωση, εξωπνευμονική
- Ιστοπλάσμωση, διάχυτη/εξωπνευμονική
- Κοκκιδιομύκωση, διάχυτη/εξωπνευμονική
- Πενικιλλίωση, διάχυτη

2α. Παθήσεις που σχετίζονται με επιπολασμό μη διαγνωσθείσας λοίμωξης HIV ≥0,1%

Η εξέταση συνιστάται ιδιαίτερα:

- Σεξουαλικώς μεταδιδόμενες λοιμώξεις
- Κακόηθες λέμφωμα
- Καρκίνος/δυσπλασία πρωκτού
- Δυσπλασία τραχήλου της μήτρας
- Έρπης ζωστήρας
- Ηπατίτιδα Β ή C (οξεία ή χρόνια)
- Ανεξήγητη λεμφαδενοπάθεια
- Νόσος τύπου μονοπυρήνωσης
- Πνευμονία της κοινότητας
- Ανεξήγητη λευκοπενία/θρομβοπενία που διαρκεί > 4 εβδομάδες
- Σμηγματορροϊκή δερματίτιδα/εξάνθημα
- Διηθητική πνευμονοκοκκική νόσος
- Ανεξήγητος πυρετός
- Καντινταιμία
- Σπλαγχνική λεϊσμανίαση
- Εγκυμοσύνη (συνέπειες για το έμβρυο)

2β. Άλλες παθήσεις που θεωρείται ότι είναι πιθανό να έχουν επιπολασμό μη διαγνωσθείσας λοίμωξης HIV > 0,1%

Πρόταση για εξέταση:

- Πρωτοπαθής καρκίνος του πνεύμονα
- Λεμφοκυτταρική μηνιγγίτιδα
- Τριχωτή λευκοπλακία στόματος
- Σοβαρού βαθμού ή άτυπη ψωρίαση
- Σύνδρομο Guillain–Barré
- Μονονευρίτιδα
- Υποφλοιώδης άνοια
- Νόσος τύπου πολλαπλής σκλήρυνσης
- Περιφερική νευροπάθεια
- Ανεξήγητη απώλεια βάρους
- Ανεξήγητη καντιντίαση στόματος
- Ανεξήγητη χρόνια διάρροια
- Ανεξήγητη χρόνια νεφρική ανεπάρκεια
- Ηπατίτιδα Α
- Καντιντίαση

3. Παθήσεις στις οποίες η μη αναγνώριση της παρουσίας της λοίμωξης HIV ενδέχεται να δημιουργήσει σημαντικές ανεπιθύμητες συνέπειες για την κλινική αντιμετώπιση του ατόμου.

Πρόταση για εξέταση:

- Παθήσεις στις οποίες απαιτείται επιθετική ανοσοκατασταλτική θεραπεία:
  - Καρκίνος
  - Μεταμόσχευση
  - Αυτοάνοση πάθηση που αντιμετωπίζεται με ανοσοκατασταλτική θεραπεία
- Πρωτοπαθής χωροκατακτητική βλάβη του εγκεφάλου.
- Ιδιοπαθής/Θρομβωτική θρομβοπενική πορφύρα

"I did not think HIV was a risk for me ... nor did my GP. So HIV testing was never really thought about until I was ill and in hospital."

Ben Cromarty

Stigma Considerations

- Misconceptions that HIV only affects some groups means that some people don't think they are at risk of HIV and so don't test.
- Healthcare staff sometimes don't think of HIV when patients present indicator conditions because of misconceptions about who is at risk of HIV.

ACTION 4

Opt-out rather than opt-in HIV testing must become routine across healthcare settings, starting with areas of high prevalence.

PRESS STATEMENT

UNAIDS welcomes new research on 'opt-out' HIV testing in England

HIV opt-out testing will consolidate the gains towards HIV epidemic control in the UK

LONDON/GENEVA, 29 November 2023—Ahead of World AIDS Day (1 December) UNAIDS welcomes a new research project to potentially expand 'opt-out' HIV testing programmes across England. According to NHS figures, a pilot 'opt-out' HIV testing scheme, pioneered by the Elton John Foundation in England has identified more than 3,500 cases of three bloodborne infections since April 2022—HIV, Hepatitis B and Hepatitis C—including identifying more than 580 HIV cases of HIV.

Under pilot scheme in England, anyone having a blood test in selected hospital accident and emergency units has also been offered a test for HIV, Hepatitis B and Hepatitis C, and has been given the option to opt out should they not wish to have the test. The trials have been taking place in 33 hospitals in London, Greater Manchester, Sussex and Blackpool.

Contact tracing is not new to sexual health, but in recent months it has also become a central part of the government's strategy for controlling the spread of COVID-19. We hope that changes in public awareness of this strategy created by the 'test and trace' moment will support partner notification efforts, as virus control becomes a bigger part of all our daily lives. We must capitalise on this opportunity to normalise HIV testing and partner notification as part of virus control, as this strategy will become even more important as the numbers of undiagnosed HIV infections fall.

Health Equity Considerations

- Community engagement and involvement in developing and tailoring appropriate partner notification options could address inequalities in late diagnoses.

Stigma Considerations

- Partner notification activities must consider that HIV stigma can interact with stigma related to sexual behaviours, gender identity and sexuality.

ACTION 6

Partner notification should be prioritised by local government, particularly in relation to key populations.

ecdc

SCIENTIFIC ADVICE

Public health guidance on HIV, hepatitis B and C testing in the EU/EEA

An integrated approach

www.ecdc.europa.eu

World Health Organization

SUPPLEMENT

GUIDELINES ON

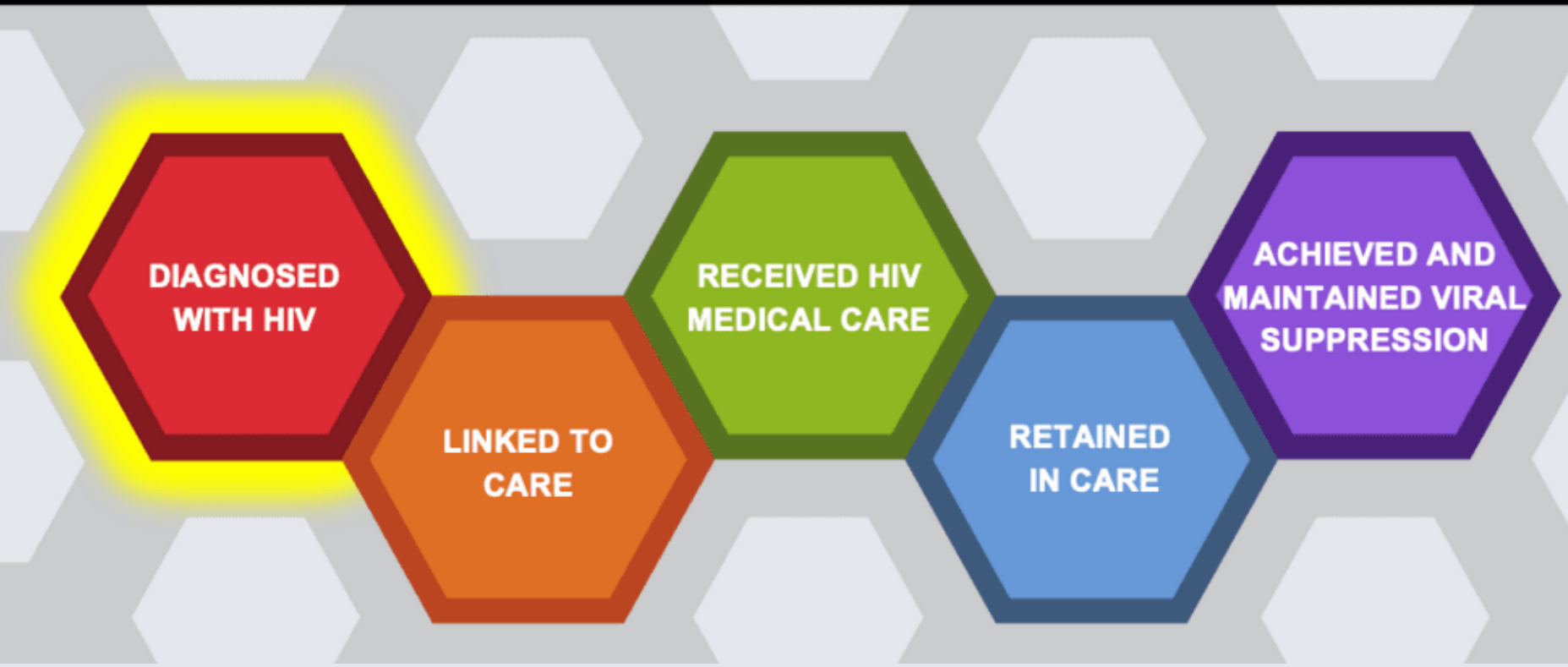
HIV SELF-TESTING AND PARTNER NOTIFICATION

SUPPLEMENT TO CONSOLIDATED GUIDELINES ON HIV TESTING SERVICES

DECEMBER 2016

HIV TESTING SERVICES

HIV CARE CONTINUUM



Core Concepts - HIV Diagnostic Testing - Screening and Diagnosis - National HIV Curriculum
https://www.hiv.uw.edu/go/screening-diagnosis/diagnostic-testing/core-concept/all

WHAT ARE THE TYPES OF HIV TESTS?

THE AURUM INSTITUTE

PCR

- **P**olymerase **C**hain **R**eaction
- Tests for HIV DNA + RNA
- Must be used in children <18 months

RAPID

- Tests for HIV antibodies
- If 1st test positive, confirmatory Rapid must be done
- If the results are discrepant, repeat the HIV rapid test algorithm.
- If results are still discrepant, do an ELISA test
- Used in children ≥18 months
- Also used to screen children <18 months for HIV exposure (if mother's status unknown)

ELISA

- **E**nzyme **L**inked **I**mmuno **S**orbent **A**ssay
- Tests For HIV Antibodies
- Used in children ≥18 months
- Also used to screen children <18 months for HIV exposure (if mother's status unknown)
- Often used to confirm status when Rapid results are discrepant

Public Health England

Healthmatters Increasing opportunities for HIV testing

5 key actions

for all providers of HIV testing services

1 Understand local prevalence of HIV

by using PHE's Sexual Health and Reproductive Health Profiles

2 Normalise testing

so it is seen as a routine healthy behaviour

3 Raise awareness

of testing through marketing campaigns such as It Starts with Me

4 Adopt innovative approaches

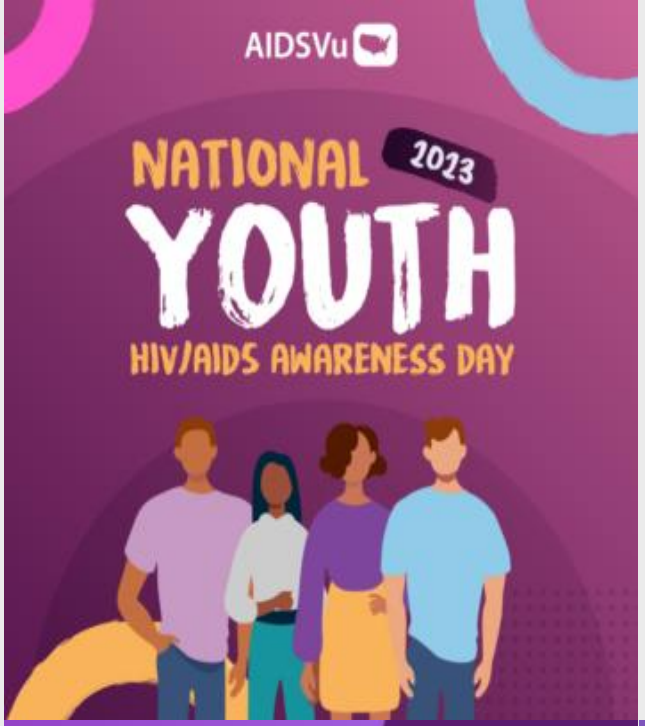
to testing such as self-sampling

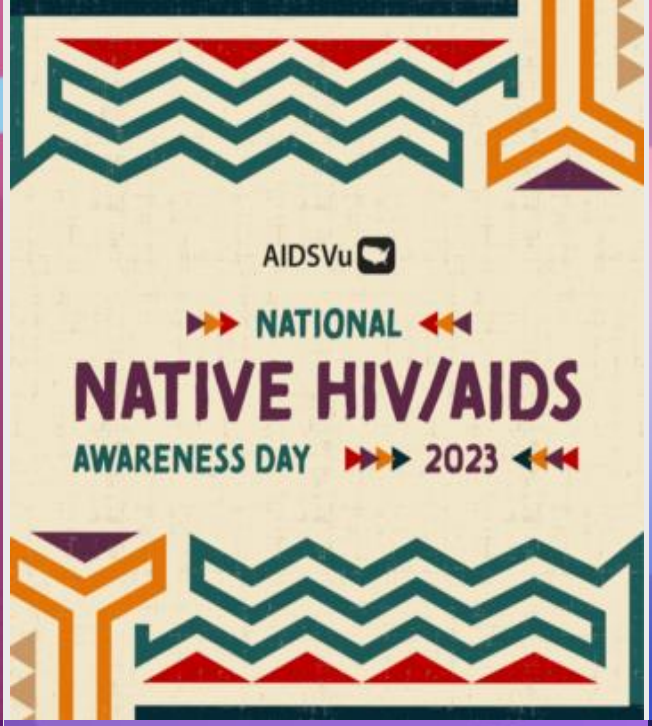
5 Reduce stigma

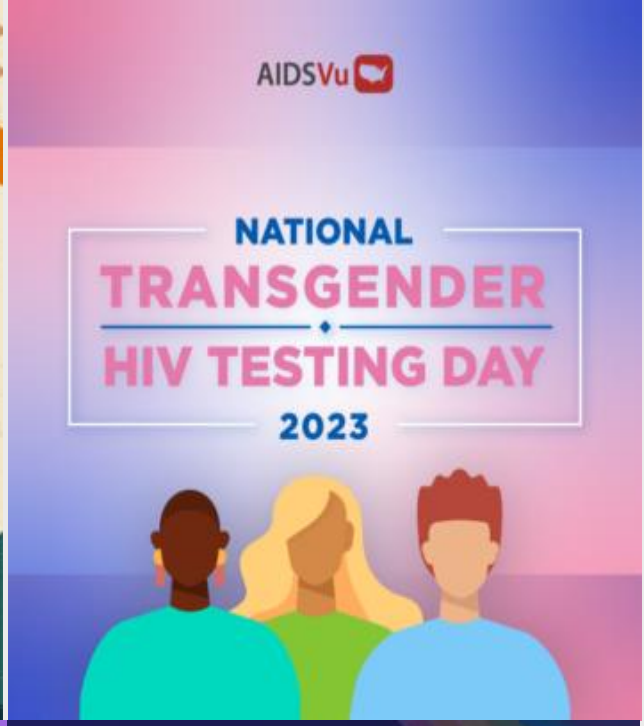
around HIV and emphasise that testing is confidential

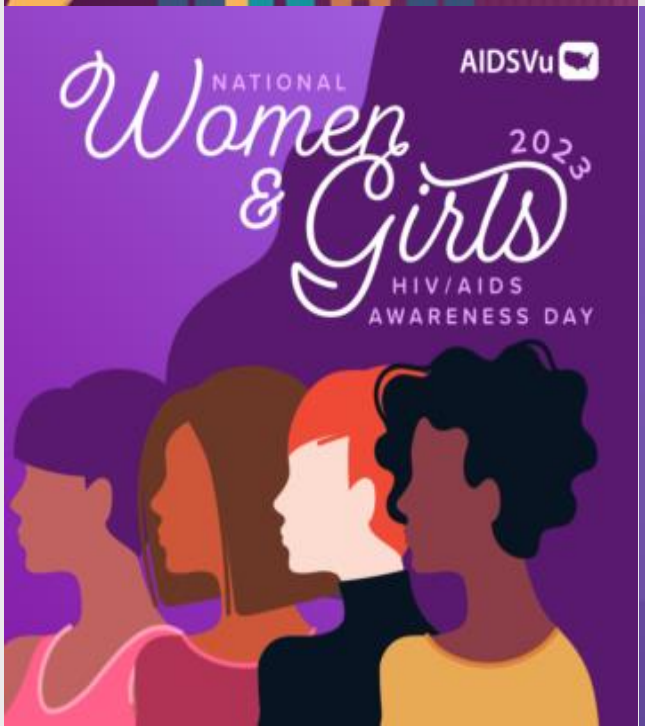
Common barriers to HIV testing among health professionals include

- Lack of time in consultations to discuss testing
- A belief that it is down to sexual health clinics to carry out testing
- A belief that testing will scare patients
- A misconception that HIV testing is complicated and expensive


AIDSVu
NATIONAL 2023
YOUTH
HIV/AIDS AWARENESS DAY

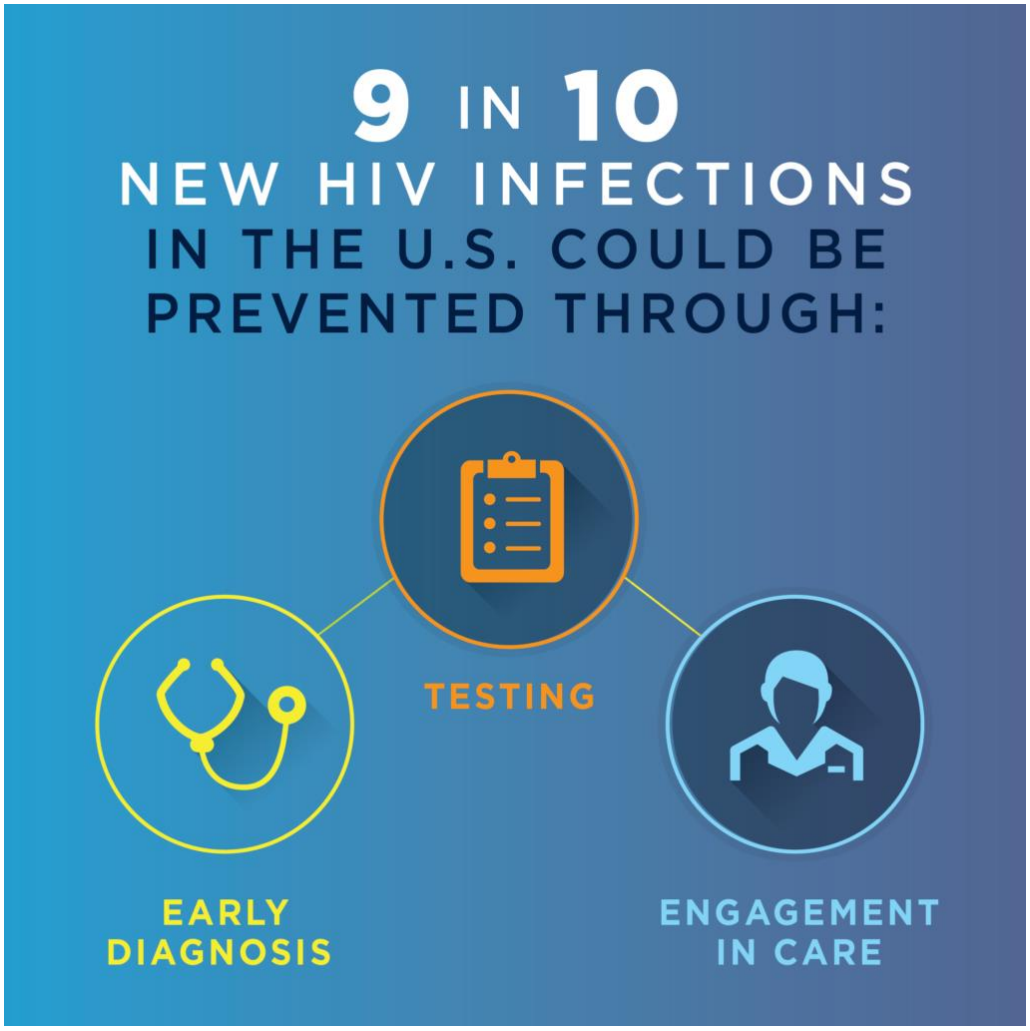

AIDSVu
NATIONAL
NATIVE HIV/AIDS
AWARENESS DAY 2023


AIDSVu
NATIONAL
TRANSGENDER
HIV TESTING DAY
2023

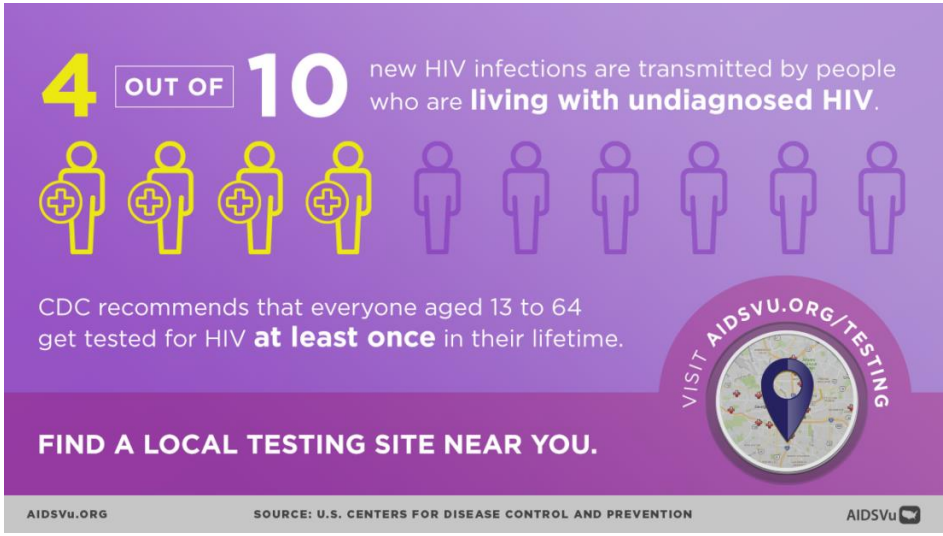

NATIONAL
Women & Girls
2023
HIV/AIDS
AWARENESS DAY
AIDSVu

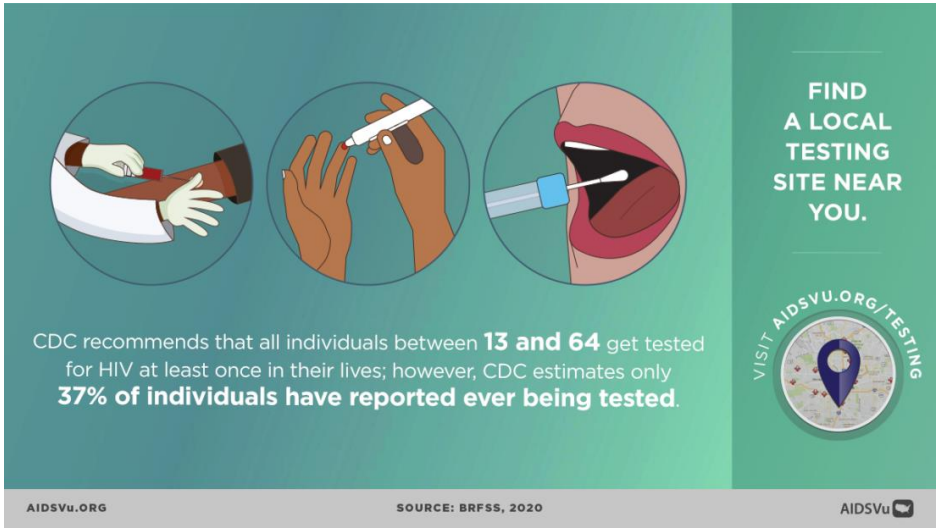

NATIONAL
HIV/AIDS
AND AGING
AWARENESS DAY
AIDSVu


NATIONAL
GAY MEN'S HIV/AIDS
AWARENESS DAY
AIDSVu


9 IN 10
NEW HIV INFECTIONS
IN THE U.S. COULD BE
PREVENTED THROUGH:
TESTING
EARLY
DIAGNOSIS
ENGAGEMENT
IN CARE


1 IN 8 people in the U.S. living with HIV are unaware of their status.
FIND A LOCAL TESTING SITE NEAR YOU.
VISIT AIDSVU.ORG/TESTING
CDC recommends that everyone aged 13 to 64 get tested for HIV at least once in their lifetime.
AIDSVu.ORG
SOURCE: U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION
AIDSVu


4 OUT OF 10 new HIV infections are transmitted by people who are living with undiagnosed HIV.
CDC recommends that everyone aged 13 to 64 get tested for HIV at least once in their lifetime.
VISIT AIDSVU.ORG/TESTING
FIND A LOCAL TESTING SITE NEAR YOU.
AIDSVu.ORG
SOURCE: U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION
AIDSVu


FIND A LOCAL TESTING SITE NEAR YOU.
VISIT AIDSVU.ORG/TESTING
CDC recommends that all individuals between 13 and 64 get tested for HIV at least once in their lives; however, CDC estimates only 37% of individuals have reported ever being tested.
AIDSVu.ORG
SOURCE: BRFSS, 2020
AIDSVu


HIV self-testing allows you or your partner to take a test privately in your home.
VISIT AIDSVU.ORG/TESTING
GET A FREE HIV AT-HOME TEST KIT THROUGH CDC'S TAKE ME HOME PROGRAM.
AIDSVu.ORG
SOURCE: U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION
AIDSVu


@STOPHIVTOGETHER
I
SELF-TEST
FOR HIV
MY TEST
MY WAY

What is a rapid HIV self-test kit?

- **A kit that contains everything you need to test for HIV.**

It allows you to test in the privacy of your own space, on your own time. It's fast and easy. You can get your results in as little as 20 minutes.

Where can I get an HIV self-test?

- **Many health departments and organizations offer free self-tests online, or you can purchase one at a pharmacy.**

Get your FREE HIV self-test

Learn more about self-testing and how to get free HIV self-tests at **cdc.gov/HIVSelfTesting**

How do I use an HIV self-test?

3 Fast and Easy Steps

1 SWAB
Run the test swab across your gums.

2 INSERT
Insert swab into the test tube.

3 RESULTS
Get your results in as little as 20 minutes.

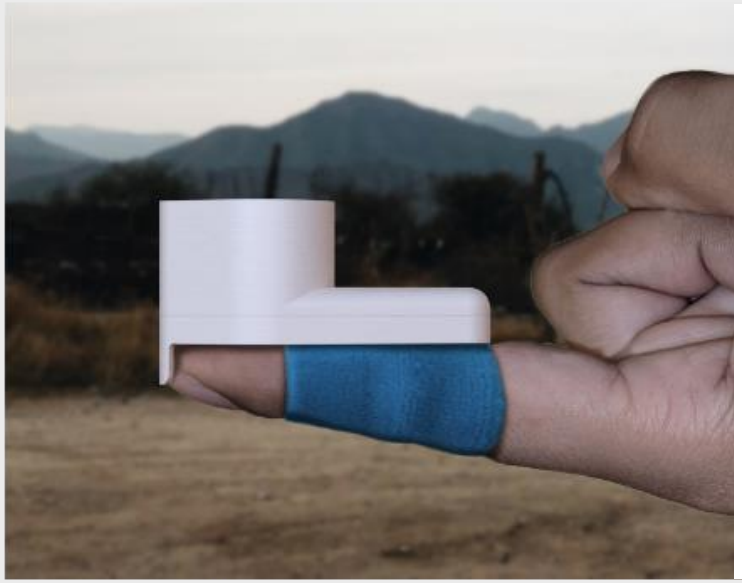
Οι ταχείες δοκιμασίες ανίχνευσης αντισωμάτων HIV
Rapid Diagnostic Test-RDT

- Δεν απαιτούν ειδικό εξοπλισμό και εξειδικευμένο προσωπικό
  - Εγκεκριμένα για χρήση από επαγγελματίες υγείας
  - Δυνατότητα χρήσης από κατάλληλα εκπαιδευμένα άτομα (lay providers)

- Απλό στη χρήση (σύμφωνα με τις οδηγίες του κατασκευαστή)
- Δεν απαιτούν ειδικές συνθήκες φύλαξης
- Ο επωφελούμενος λαμβάνει το αποτελεσμα
- Ο επωφελούμενος δέχεται την κατάλληλη συμβουλευτική
- Χρήση στην κοινότητα
- Δε χρησιμοποιούνται ευρέως σε κλινικό περιβάλλον- Αναφορές για χρήση στη πρωτοβάθμια φροντίδα υγείας
- Κατάλληλα σε περίπτωση επείγοντος περιστατικού σε άτομα με άγνωστο HIV ορολογικό προφίλ (π.χ. **επαγγελματική έκθεση**, **πριν το τοκετό** σε γυναίκα με άγνωστο HIV ορολογικό προφίλ) και για δομές υγείας με περιορισμένους πόρους
- Συνδυαστική εξέταση HIV και άλλων νοσημάτων: Πολλαπλά τεστ σε μία συσκευή (multiplex) για 2 ή περισσότερα νοσήματα (π.χ. HIV/Syphilis)- cost effective

- Δυνατότητα διάκρισης HIV-1, HIV-2

Catch, the self-testing HIV detector by Hans Ramzan



Catch, designed by **Hans Ramzan**, is a low-cost and user-friendly HIV detector, specifically designed for people in developing countries, where difficult access to healthcare, education and infrastructure hinders early diagnosis.

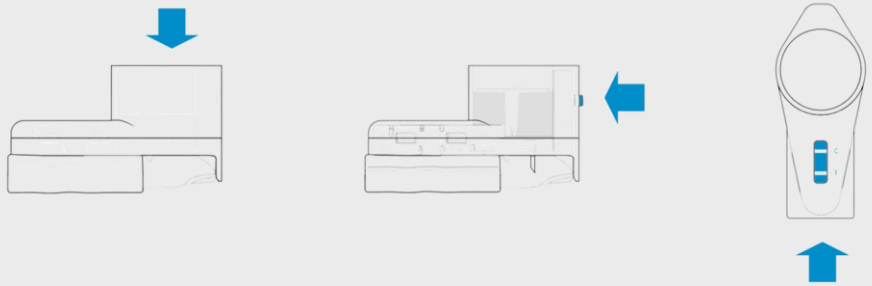
HIV is the leading cause of death in developing countries, with 2.5 million people infected every year, where the virus often goes unnoticed to the point of developing into AIDS – the final stage of HIV. If caught early, HIV is treatable.

British product designer Hans Ramzan, recently nominated for the Beazley Designs of the year, has created a low-cost, pocket-sized device that allows easy blood extraction, enabling people to test autonomously for HIV.

Catch, designed by Hans Ramzan, is a self-testing HIV detector extremely easy to use

Moreover, with a production cost of just £4, Catch is partly made from recycled plastic, a composite of recycled polyethylene terephthalate (PET) water bottles and regular PET. The choice of using recycled material was to help fight the ever-growing issue of environmental degradation.

Following the "form follows function" ideology, Catch is a user-friendly and intuitive product, accurate at 99.9% for negative results and with result ranges between 91-96% for positive ones.



Increasing Access to HIV Testing Through Direct-to-Consumer HIV Self-Test Distribution — United States, March 31, 2020–March 30, 2021

Jen Hecht, MPH[1]; Travis Sanchez, DVM[2]; Patrick S. Sullivan, PhD[2]; Elizabeth A. DiNenno, PhD[3]; Natalie Cramer, MSSW[4]; Kevin P. Delaney, PhD[3]

Take Me Home

Summary

What is already known about this topic?

Gay, bisexual, and other men who have sex with men (MSM) should be tested for HIV at least annually. Major disruptions to HIV testing services occurred during the COVID-19 pandemic.

What is added by this report?

During March 2020–March 2021, a novel public-private partnership provided free HIV self-test kits directly to MSM. Most participants reported they had never tested (36%) or tested >1 year ago (56%); approximately 10% reported accessing services including sexually transmitted infection testing and preexposure prophylaxis after using the self-test.

What are the implications for public health practice?

Public funding of HIV self-testing can engage MSM who never previously tested and might increase HIV testing frequency among this population.

TABLE 2. Follow-up survey results, overall and by selected respondent characteristics — TakeMeHome program, United States, March 31, 2020–March 30, 2021

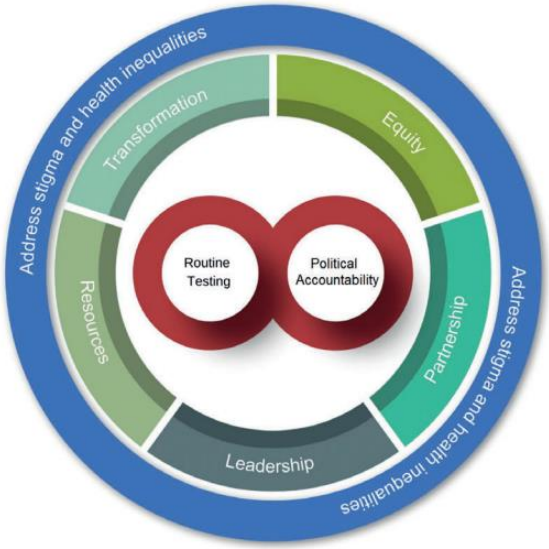
Characteristic	No. (%)
Total	**855 (100)**
How did you hear about TakeMeHome?	
Dating app	605 (71)
Public health campaign	105 (12)
Friend	25 (3)
Google/Other website	97 (11)
Missing	23 (3)
Risk category (multiple responses permitted)	
Male-to-male sexual contact	625 (73)
Injection drug use	29 (3)
Partner injection drug use or partner HIV-positive	57 (7)
Multiple sex partners	484 (57)
STI diagnosis or treatment for TB or HCV	60 (7)
No HIV risk reported	85 (10)
Missing	35 (4)
Reasons for participating (multiple responses permitted)	
It was free	549 (64)
It was convenient	542 (63)
I prefer testing in the privacy of my home	395 (46)
I feel uncomfortable going to a doctor in my area	267 (31)
I don't know where to go	160 (19)
COVID-19 has limited regular testing in my area	294 (34)
Missing	40 (5)
Would you recommend TakeMeHome to a friend?	
Yes	770 (90)
Maybe	32 (4)
No	6 (1)
Missing	47 (5)

Abbreviations: HCV = hepatitis C virus; STI = sexually transmitted infection; TB = tuberculosis.

HIV COMMISSION

HOW ENGLAND WILL END NEW CASES OF HIV

FINAL REPORT & RECOMMENDATIONS



TARGETS

By 2025: Reduce new HIV transmissions by 80%
By 2030: End new HIV transmissions
England : the first country to end new cases of HIV

Testing outside traditional healthcare settings

Most of the above has been focused on increasing and normalising testing opportunities in healthcare settings. This is, however, only one piece of the puzzle. Online and community testing play a vital role. In 2019, PHE reported that 25,514 self-sampling test kits were returned via the national HIV self-sampling scheme alone [7]. Community HIV testing describes testing which is generally led by voluntary and community sector organisations and that is delivered by and for communities it targets. PHE has in recent years tried to capture data on community testing to demonstrate the contribution and impact. 35,095 tests were reported through PHE's 'Survey of HIV Testing in Community Settings' in 2019 [xiv] [8].

Test reactivity in self sampling and community tests was 0.5% in both services. This compares with 0.2% in specialist sexual health services, 0.6% in A&E departments, 0.3% in GPs in extremely high prevalence areas and 0.7% in prisons. Community testing services are a proven tool in reaching people who are not accessing traditional health services.[19] Well designed, community-led and culturally competent testing can overcome some of the barriers to testing we see such as concerns around stigma, lack of trust in services, or low perception of personal risk. It also provides opportunities to open up conversations about HIV and sexual health, providing a gateway to broader services.

The best way to address late diagnoses is through increased HIV testing. The sooner a person knows their HIV status, the better chance they have of improving their health and accessing HIV treatment if needed.

However, this also represents an additional challenge. As increased testing leads to more people being diagnosed during the very early stages of infection, the definition of late diagnosis (as having a CD4 count below 350) may misclassify people diagnosed who seroconverted recently – as during this period when immune systems have recently started fighting the HIV virus, CD4 counts can be lower. This could be addressed by close monitoring and investigation of each late diagnosis reported in the country. This approach would also allow us to better understand missing opportunities to identify cases earlier.

Πηγή: www.hivcommission.org.uk/report

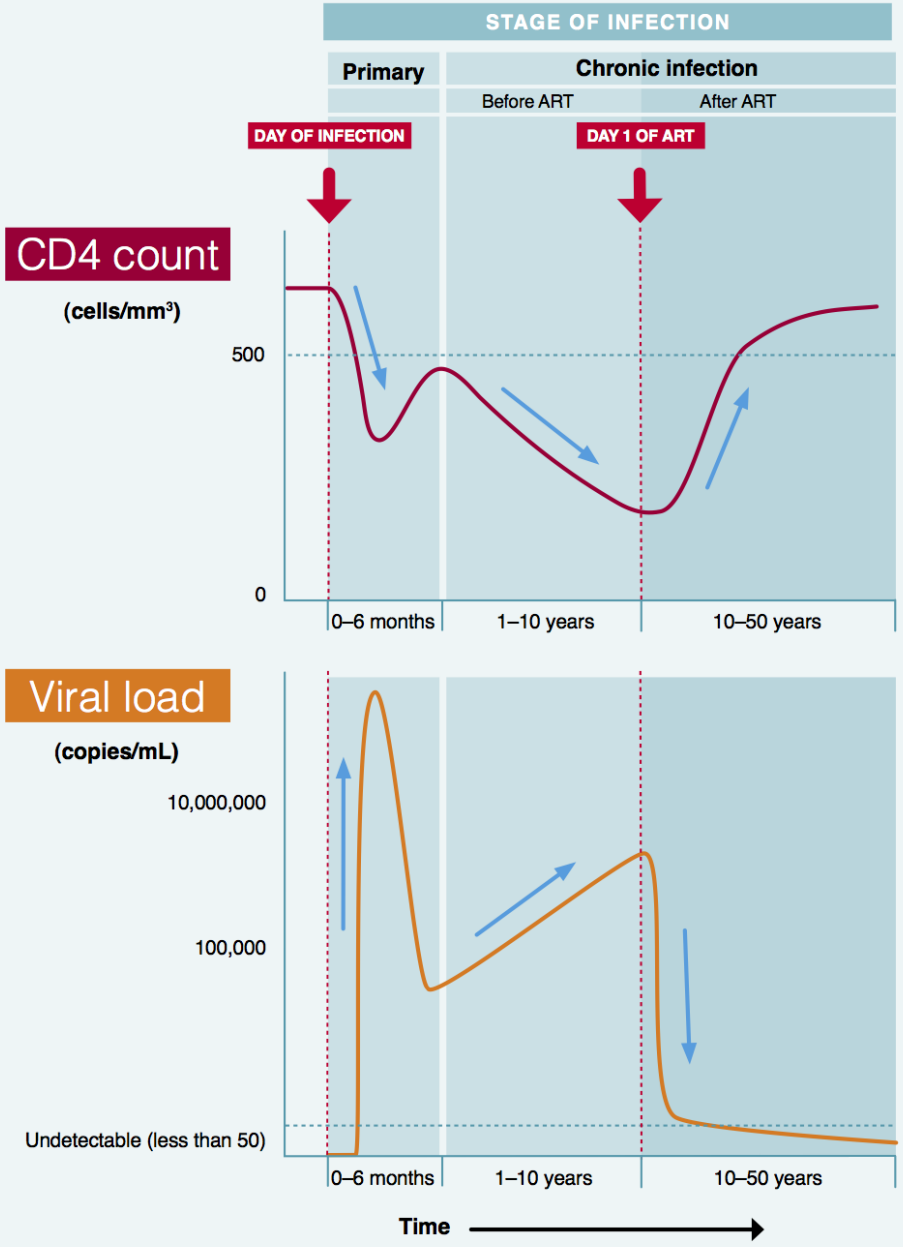
The consensus definition of late presentation for HIV care

As a premise for the definition, it was agreed that, while the definition should be valid for identifying persons at particularly increased risk of clinical disease progression, it should also help to improve surveillance and satisfy public health needs.

Two definitions were agreed upon, as follows.

- *Late presentation:* Persons presenting for care with a CD4 count below 350 cells/μL or presenting with an AIDS-defining event, regardless of the CD4 cell count.
- *Presentation with advanced HIV disease:* Persons presenting for care with a CD4 count below 200 cells/μL or presenting with an AIDS-defining event, regardless of the CD4 cell count.

The natural history of HIV without ART



ORIGINAL ARTICLE

Re-assessing the late HIV diagnosis surveillance definition in the era of increased and frequent testing

Peter D. Kirwan[1,2] | Sara Croxford[1] | Adamma Aghaizu[1] | Gary Murphy[1] | Jennifer Tosswill[1] | Alison E. Brown[1] | Valerie C. Delpech[1]

[1]United Kingdom Health Security Agency, London, UK

[2]Medical Research Council Biostatistics Unit, University of Cambridge, Cambridge, UK

Correspondence
Peter D. Kirwan, Medical Research Council Biostatistics Unit, University of Cambridge, East Forvie Building, Forvie Site, Robinson Way, Cambridge Biomedical Campus, Cambridge, CB2 0SR.
Email: peter.kirwan@mrc-bsu.cam.ac.uk

Funding information
Medical Research Council, Grant/Award Number: MRC_MC_UU_00002/11

Abstract

Objectives: Late HIV diagnosis (CD4 <350 cells/mm^3) is a key public health metric. In an era of more frequent testing, the likelihood of HIV diagnosis occurring during seroconversion, when CD4 counts may dip below 350, is greater. We applied a correction, considering markers of recent infection, and re-assessed 1-year mortality following late diagnosis.

Methods: We used national epidemiological and laboratory surveillance data from all people diagnosed with HIV in England, Wales, and Northern Ireland (EW&NI). Those with a baseline CD4 <350 were reclassified as 'not late' if they had evidence of recent infection (recency test and/or negative test within 24 months). A correction factor (CF) was the number reclassified divided by the number with a CD4 <350.

Results: Of the 32 227 people diagnosed with HIV in EW&NI between 2011 and 2019 with a baseline CD4 (81% of total), 46% had a CD4 <350 (uncorrected late diagnosis rate): 34% of gay and bisexual men (GBM), 65% of heterosexual men, and 56% of heterosexual women.

Accounting for recency test and/or prior negative tests gave a 'corrected' late diagnosis rate of 39% and corresponding CF of 14%. The CF increased from 10% to 18% during 2011–2015, then plateaued, and was larger among GBM (25%) than heterosexual men and women (6% and 7%, respectively). One-year mortality among people diagnosed late was 329 per 10 000 after reclassification (an increase from 288/10 000).

Conclusions: The case-surveillance definition of late diagnosis increasingly overestimates late presentation, the extent of which differs by key populations. Adjustment of late diagnosis is recommended, particularly for frequent testers such as GBM.

KEYWORDS
HIV, HIV testing, late diagnosis, late presentation, seroconversion

Received: 1 August 2022 | Accepted: 4 October 2022
DOI: 10.1111/hiv.13425

SHORT COMMUNICATION

Late diagnosis of HIV: An updated consensus definition

Sara Croxford[1] | **Annemarie Rinder Stengaard**[2] | **Johanna Brännström**[3,4,5] | **Lauren Combs**[2] | **Nikos Dedes**[4,6] | **Enrico Girardi**[7] | **Sophie Grabar**[8] | **Ole Kirk**[2,9] | **Giorgi Kuchukhidze**[10] | **Jeffrey V. Lazarus**[4,11] | **Teymur Noori**[12] | **Anastasia Pharris**[12] | **Dorthe Raben**[2] | **Jürgen K. Rockstroh**[4,13,14] | **Daniel Simões**[4,15,16] | **Ann K. Sullivan**[1,4,13,17] | **Dominique Van Beckhoven**[18] | **Valerie C. Delpech**[1,4] | **The EuroTEST HIV Late Diagnosis Definition Working Group**

Abstract

Introduction: In recent years, HIV testing frequency has increased, resulting in more people being diagnosed during seroconversion with a temporarily low CD4 count. Using the current consensus definition of late HIV presentation ('presenting for care with a CD4 count < 350 cells/μL or an AIDS-defining event, regardless of CD4 count') these individuals would be incorrectly assigned as being diagnosed late.

Methods: In spring 2022, a European expert group convened to revise the current late HIV presentation consensus definition. A survey on data availability to apply this revised definition was sent to nominated European focal points responsible for HIV surveillance ($n = 53$).

Results: Experts agreed that the updated definition should refer to late HIV diagnosis rather than presentation and include the following addition: People with evidence of recent infection should be reclassified as 'not late', with evidence of recent infection considered hierarchically. The individual must have: (i) laboratory evidence of recent infection; (ii) a last negative HIV test within 12 months of diagnosis; or (iii) clinical evidence of acute infection. People with evidence of being previously diagnosed abroad should be excluded. A total of 18 countries responded to the survey; 83% reported capturing CD4 count and/or AIDS at diagnosis through national surveillance, 67% captured last negative test and/or previous HIV diagnosis, 61% captured seroconversion illness at diagnosis and 28% captured incident antibody results.

Conclusions: Accurate data on late diagnosis are important to describe the effects of testing programmes. Reclassification of individuals with recent infection will help to better identify populations most at risk of poor HIV outcomes and areas for intervention.

KEYWORDS

definition, diagnosis, HIV, late presentation, monitoring

HIV PREVENTION 2025

ROAD MAP

Getting on track to end AIDS
as a public health threat by 2030

Fewer than
370,000
annual new HIV
infections by 2025

1.5 million
new HIV
infections
in 2020

GPC
Global HIV
Prevention Coalition

It's another important tool in the HIV prevention toolkit...

Which tools are right for you?


Internet of Things
For Healthcare

mHealth

https://bit.ly/3K0SXTs

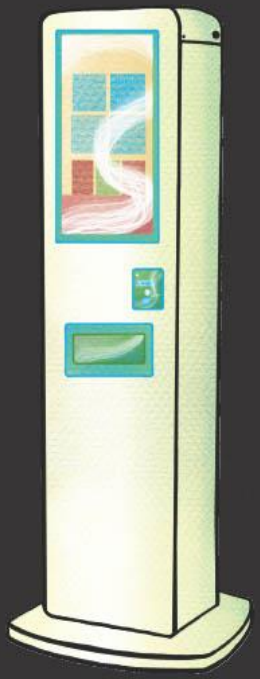
unity Sexual Health — Be Informed. Be Safe. Be In Control.

NHS University Hospitals Bristol and Weston NHS Foundation Trust

Pick up and take away

FREE SEXUAL HEALTH TESTING that works for you.

You only need a few minutes to pick up a free NHS sexual health test from a vending machine.



How?

- Answer six quick questions
- Choose your FREE test and pack that's right for your body
  — STI Tests: Chlamydia, Gonorrhoea, Syphilis and HIV
  — Instant mouth swab HIV test
- Enter a code sent to your mobile phone
- Get your pack, take your samples
- Post STI test kit back for FREE, results in 1-3 weeks
- Instant HIV test results in 20 minutes

Where?

Watershed, Bristol
Mon 5pm-10pm, Tues-Fri 9.30am-10.30pm, Sat 10am-11pm, Sun 10am-10pm

Willow Brook Centre, Bradley Stoke
Mon-Sat 6am-12am, Sun 10am-4pm

The Sovereign, Weston-super-Mare
Mon-Sat 9am-5.30pm, Sun 10.30am-4.30pm

Hamilton House, Bristol
Mon-Sun 8.30am-12am

FREE FAST EASY PRIVATE

WE HAVE DEVELOPED AN AWARD WINNING* DIGITAL VENDING MACHINE TO REDUCE UNDIAGNOSED HIV!

*2018 British Medical Journal (BMJ) Innovations Award

The digital vending machines (DVM) were developed by the charity in 2016/17 and funded by Public Health England (PHE) as part of the 2016 HIV Prevention Innovation Fund. They have been instrumental in enabling us to expand access to HIV testing and support individuals to take control of their sexual health. For those reluctant to access traditional healthcare settings, placing them in the community venues has reduced stigma and barriers to HIV testing, whilst facilitating confidentiality, privacy and convenience.

The world-first touch-screen machine has been distributing **free HIV self-tests** at the Brighton Sauna since 2017. It is unique in that during the interaction it collects anonymous user information (age, sex, sexuality, town of residence, testing history) which can inform HIV services in the future. In 2018 four more machines were fitted at Subline, The Marlborough Pub and Theatre, The Rainbow Hub and Prowler to ensure more widespread access to HIV tests.

During the COVID-19 pandemic and while the venues were closed we redeployed the machines from the Rainbow Hub, Subline, The Marlborough and the Brighton Sauna so they could be upgraded into full Sexual Health Machines dispensing both STI kits and HIV tests. This was in direct response to feedback we'd had from the Sauna and other sites that STI testing kits would be useful in addition to HIV self-tests. A new upgraded machine will be fitted at the Brighton Sauna soon, while the HIV self-test machine, now dispensing free HIV tests, remains at Prowler.

Sexual health test vending machines launch in Bristol, North Somerset and South Gloucestershire

Press release issued: 19 October 2022

New vending machines offering free sexual health testing kits have been launched in four venues across Bristol, North Somerset and South Gloucestershire by Unity Sexual Health, the sexual health service led by University Hospitals Bristol and Weston NHS Foundation Trust.

STI + HIV test vending machine located at the Watershed, Bristol
Image credit: NIHR ARC West

The vending machines aim to provide an easy, free, fast and confidential way to test for sexually transmitted infections, including HIV. The service will be evaluated by researchers from the National Institute for Health and Care Research Applied Research Collaboration West (NIHR ARC West) and the Health Protection Research Unit in Behavioural Science and Evaluation (HPRU) at the University of Bristol.

FREE SEXUAL HEALTH AND HIV TESTS AVAILABLE THROUGH DIGITAL VENDING MACHINES

The Martin Fisher Foundation and University Hospitals Sussex NHS Foundation Trust launched three new sexual health and HIV vending machines on Friday 18 June 2021. These machines are sited across the city in the centre (The Jubilee Library), the West (Portland Road, between Wish Park Surgery and Kamson Pharmacy) and the East (the Wellsbourne Centre, Whitehawk), providing easy access to kits in these areas.

The award-winning digital vending machines were developed by the Martin Fisher Foundation in collaboration with academics from BSMS in 2017 and funded by Public Health England (PHE) as part of the HIV Prevention Innovation Fund. Initially they were designed to distribute HIV self-tests, however, in response to user feedback they have developed them to additionally provide sexual health testing kits. This was also in response to the Coronavirus pandemic where people have been less able to access clinical services. Additionally, for people reluctant to access traditional healthcare settings, placing the machines in the community will reduce barriers to HIV testing, whilst facilitating confidentiality, privacy and convenience.

The sexual health kits contain swabs and blood sampling equipment which will be tested for chlamydia, gonorrhoea, syphilis and HIV when returned through the post to the Sexual Health Clinic. The HIV self-tests are extremely accurate (99.7%) and, by using a single drop of blood, give a result in just 15 minutes.

mHealth

AME

Vending machines in commercial sex venues to increase HIV self-testing among men who have sex with men

Chrysovalantis Stafylis[1], Lauren J. Natoli[2], Jamie A. Murkey[1], Kristie K. Gordon[1], Sean D. Young[3], Mark R. McGrath[2], Jeffrey D. Klausner[1]

[1]Department of Medicine, UCLA, Los Angeles, CA, USA; [2]AIDS Healthcare Foundation Public Health Division, Los Angeles, CA, USA; [3]University of California Institute for Prediction Technology (UCIPT), Department of Family Medicine, UCLA, Los Angeles, CA, USA

Contributions: (I) Conception and design: MR McGrath, SD Young, JD Klausner; (II) Administrative support: None; (III) Provision of study material or patients: MR McGrath, JD Klausner; (IV) Collection and assembly of data: KK Gordon, LJ Natoli, JA Murkey, C Stafylis; (V) Data analysis and interpretation: C Stafylis; (VI) Manuscript writing: All authors; (VII) Final approval of manuscript: All authors.

Correspondence to: Chrysovalantis Stafylis. 10920 Wilshire Blvd, suite 350, Los Angeles, CA 90024, USA. Email: chrstafylis@outlook.com.

Background: Commercial sex venues (CSV), bathhouses and sex clubs, have a long history of serving a high-risk population. In those facilities, patrons engage in multiple sexual encounters and often in high-risk sexual behaviors. Designing prevention interventions specifically for CSVs could be an effective way to increase testing and control HIV transmission.

Methods: In collaboration with the AIDS Healthcare Foundation (AHF), our team distributed free HIV self-test kits using vending machines located at two CSVs in Los Angeles, California. Test kit dispensing rate was monitored remotely. Patrons receiving a test kit were surveyed regarding their testing experience, test result and follow up. Linkage to care was offered to participants.

Results: During 18 months, 1,398 kits were dispensed. The survey was completed by 110 patrons (response rate =7.9%). Among those who reported that they used the test kit (n=96), 17 (17.7%) participants reported a first-time reactive HIV result. At the time of the survey, six participants with reactive results reported seeking confirmatory testing and linkage to care and four had initiated treatment. Two participants requested linkage-to-care assistance. Participants reported valuing the privacy and convenience of the vending machine but were skeptical on the accuracy of their result. The startup cost, including the purchase of two vending machines, was $10,000 and the recurring cost (monitoring, test kits, personnel) was $33.81 per kit vended.

Conclusions: While survey response was low, our results demonstrate that an intervention using vending machines and HIV self-test kits in CSVs was acceptable, feasible, used by the CSV patrons and can help identify new HIV cases.

Keywords: Human immunodeficiency virus (HIV); prevention; commercial sex venues; men who have sex with men (MSM); self-test kit

Received: 02 October 2018; Accepted: 17 October 2018; Published: 31 October 2018.

Aids and HIV

How street teams and vending machines are helping to eradicate HIV

Easier access to HIV tests and better medical treatment has led to a sharp fall in infections. But stigma is still a problem

Nicola Slawson

Tue 22 Oct 2019 14.01 CEST

Gillian Dean, consultant HIV physician at Brighton and Sussex University hospitals NHS trust, with an HIV test vending machine. Photograph: Sarah Lee/The Guardian

YOUTH

Why China Is Selling Cheap HIV Tests In Campus Vending Machines

APRIL 25, 2017 · 11:50 AM ET

Emily Feng

HIV testing kits in a vending machine in a university in Chengdu, Sichuan Province, China.

Reuters

nature medicine

LETTERS

https://doi.org/10.1038/s41591-021-01384-9

Check for updates

Deep learning of HIV field-based rapid tests

Valérian Turbé[1]✉, Carina Herbst[2], Thobeka Mngomezulu[2], Sepehr Meshkinfamfard[1], Nondumiso Dlamini[2], Thembani Mhlongo[2], Theresa Smit[2], Valeriia Cherepanova[3], Koki Shimada[3], Jobie Budd[1,4], Nestor Arsenov[1], Steven Gray[5], Deenan Pillay[2,6], Kobus Herbst[2,7]✉, Maryam Shahmanesh[2,8]✉ and Rachel A. McKendry[1,4]✉

Extended Data Fig. 2 | Screenshots of the Android application, to illustrate the capture of the HIV RDT image at the time of reading the test result. Images were captured sequentially from left to right. The end user is asked to align the test with the overlay on the screen, then continuously press the capture button for 3 seconds, after which the image is automatically captured and processed to extract the ROI. The 3 seconds press feature was implemented as a result of consultation with end users in the optimisation phase of the app development.

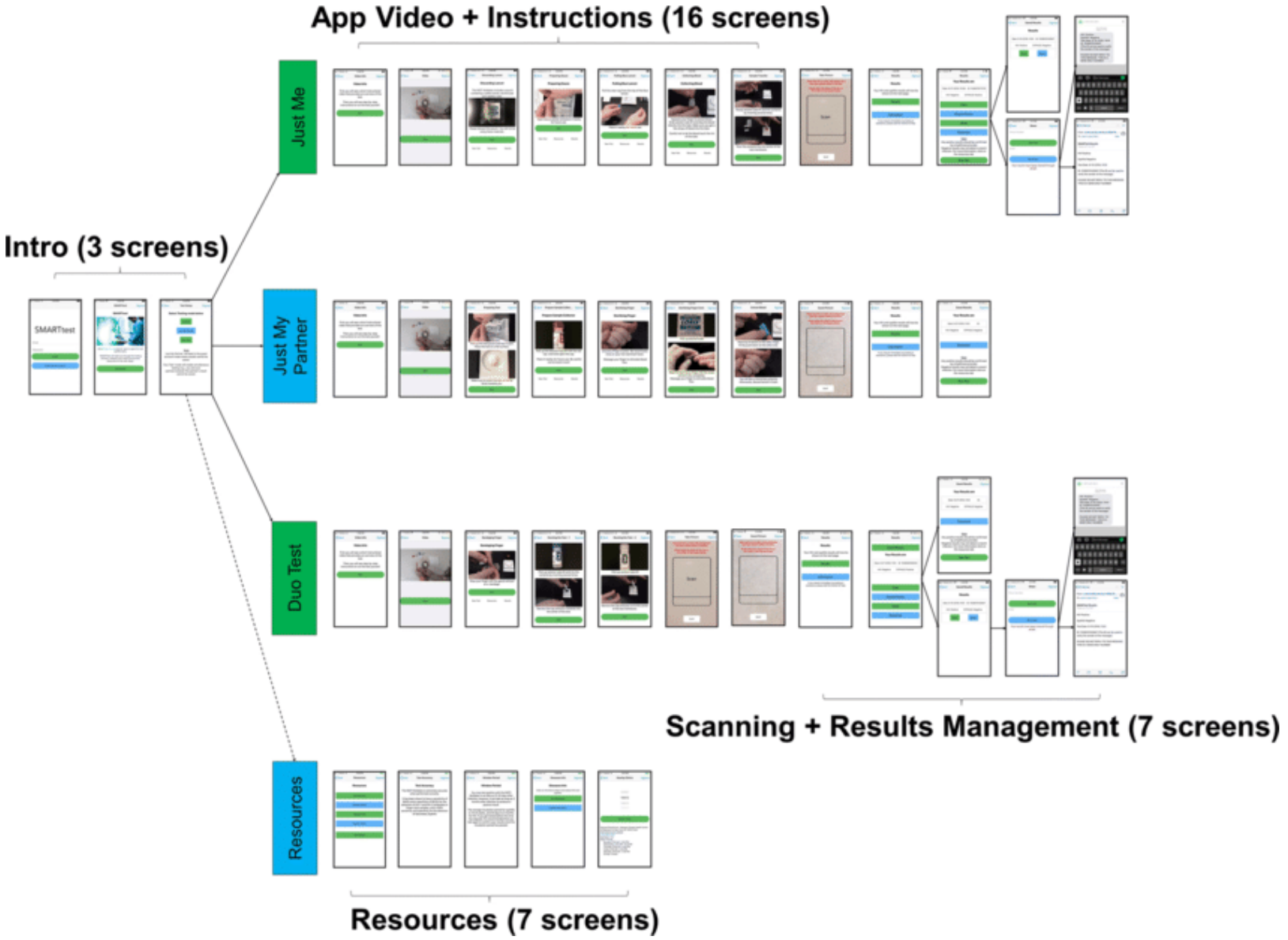
SMARTtest: A Smartphone App to Facilitate HIV and Syphilis Self- and Partner-Testing, Interpretation of Results, and Linkage to Care

Original Paper | Published: 02 November 2019 | **24**, 1560–1573 (2020)

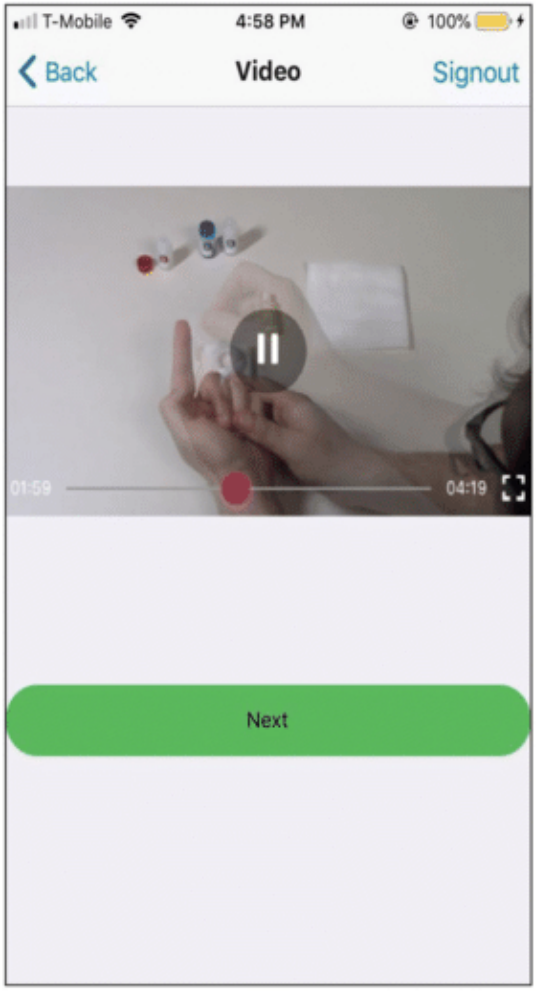
Iván C. Balán, Javier Lopez-Rios, Samiksha Nayak, Cody Lentz, Siddarth Arumugam, Bryan Kutner, Curtis Dolezal, Ongun Uzay Macar, Tejit Pabari, Alexander Wang Ying, Michael Okrah & Samuel K. Sia

Transgender Women's Experiences Using SMARTtest, a Smartphone Application to Facilitate Self- and Partner-HIV/Syphilis Testing Using the INSTI Multiplex

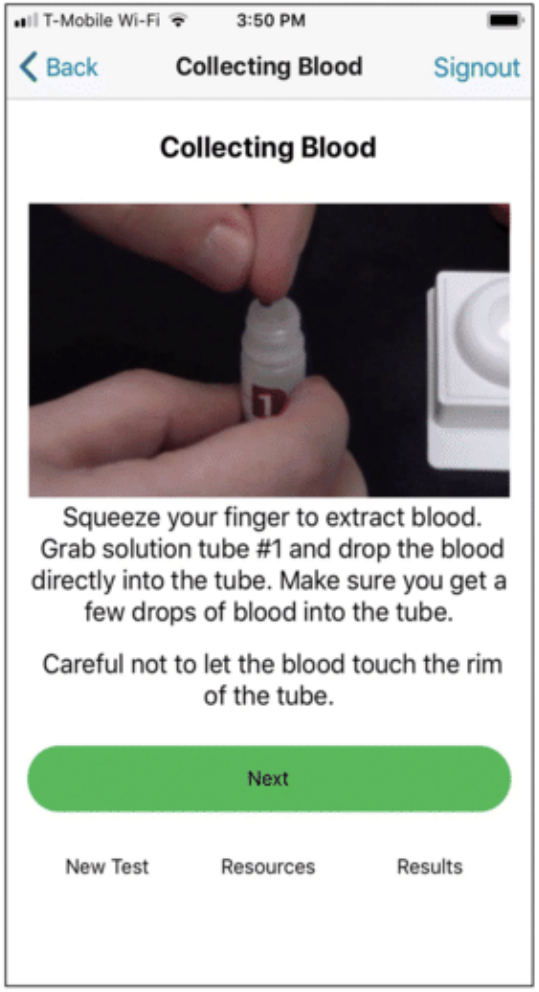
May 2023 · Archives of Sexual Behavior 52(5)
DOI:10.1007/s10508-023-02602-w



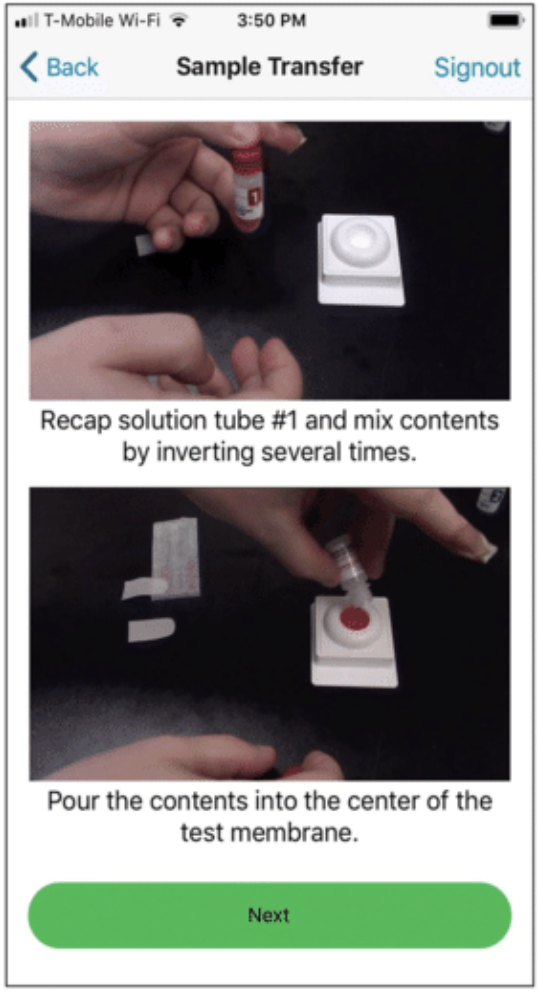
INSTRUCTIONS



A

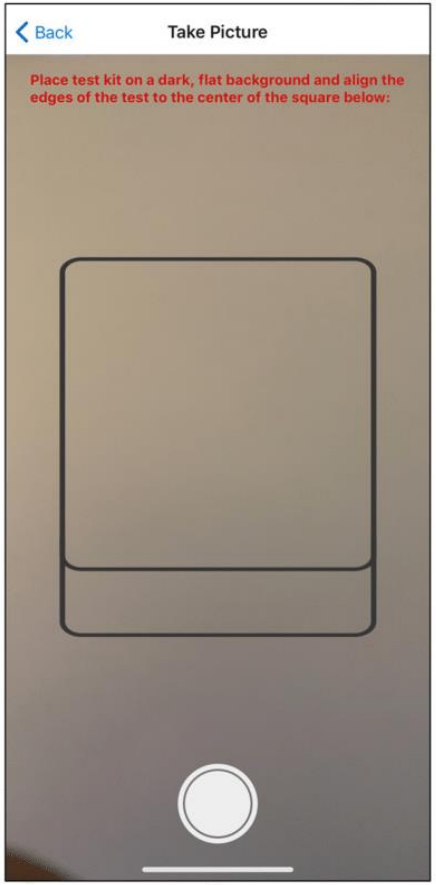


B



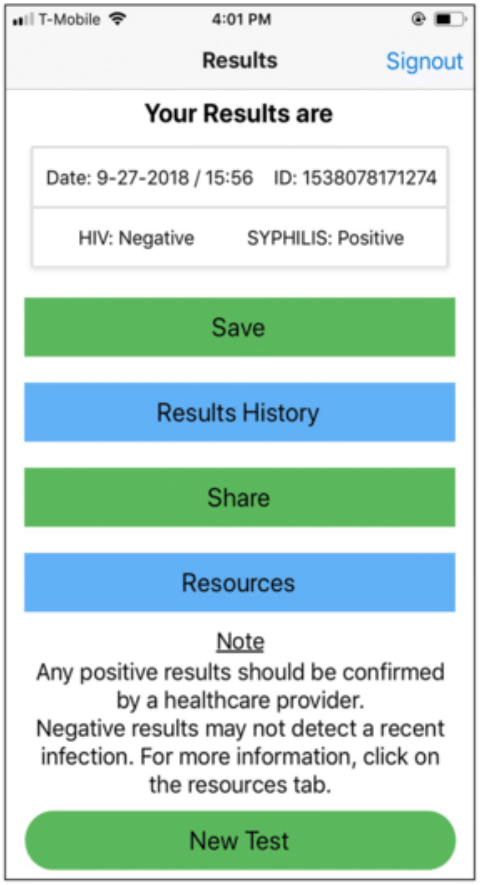
C

SCAN

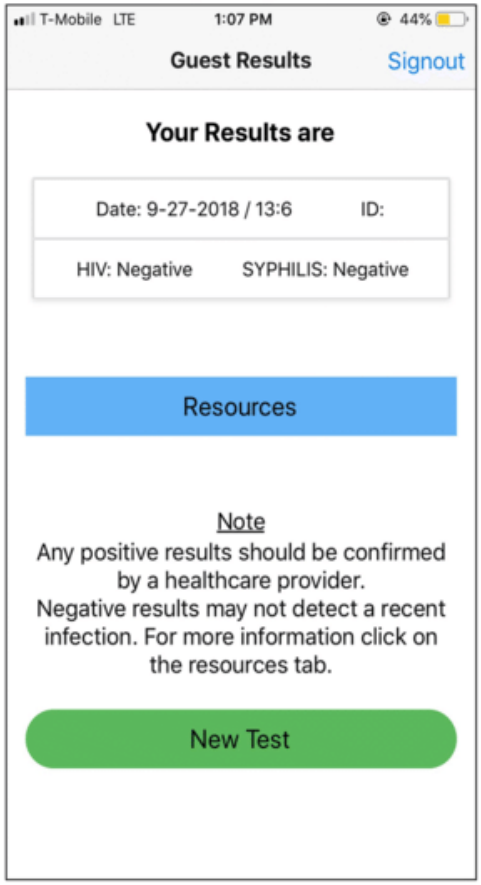


A

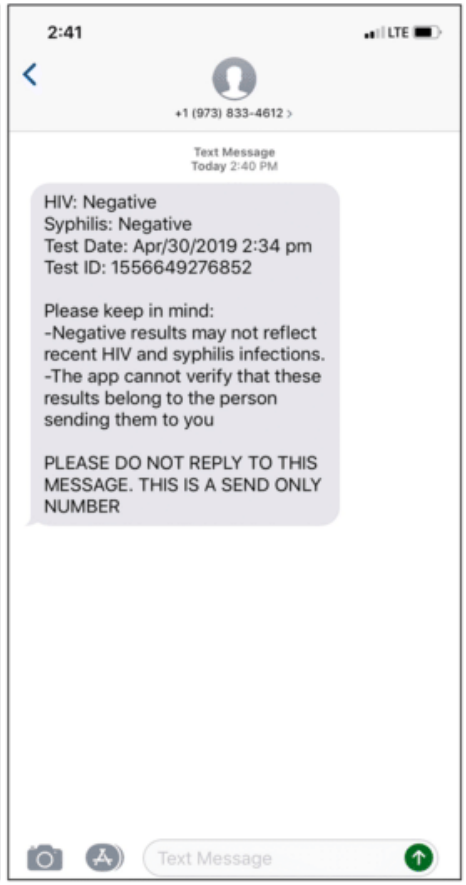
RESULTS



A



B



C

RESOURCES

T-Mobile 5:06 PM

Back Resources Signout

Resources

Test Accuracy

Window Period

Diseases Info

Nearby Clinics

Call Hotline!

A

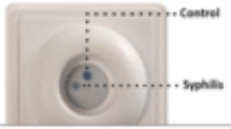
T-Mobile 3:45 PM 100%

Back Resources Signout

Result Interpretation key

HIV - Negative
Syphilis - Negative

HIV - Positive
Syphilis - Negative



B

T-Mobile 3:46 PM 100%

X

Filters:

- ○ Favorites
- ☑ Free
- ☑ Walk-In
- ☑ LGBT Friendly
- ○ Sliding-Scale
- ○ Primary Care
- ○ Takes Insurance

List Results: All

Apply Filters

C

T-Mobile 3:45 PM 100%

Back Signout

No filters selected Filter

Callen-Lorde Community Health Center ☆
356 W 18th St, New York
NY 10011, USA
Click here for the website
(212) 271-7200
OpenNow: Yes
Open Timings:
Monday: 8:15 AM – 8:15 PM
Wednesday: 8:15 AM – 8:15 PM
Thursday: 8:15 AM – 8:15 PM
Friday: 9:45 AM – 4:45 PM
Saturday: 8:30 AM – 3:15 PM
Sunday: Closed

Ryan Health | NENA ★
279 E 3rd St, New York
NY 10009, USA
Click here for the website
(212) 477-8500
OpenNow: Yes
Open Timings:
Monday: 8:30 AM – 7:30 PM
Wednesday: 8:30 AM – 5:00 PM
Thursday: 8:30 AM – 7:30 PM
Friday: 8:30 AM – 5:00 PM
Saturday: 9:30 AM – 1:30 PM
Sunday: Closed

D

nature communications

Explore content · About the journal · Publish with us

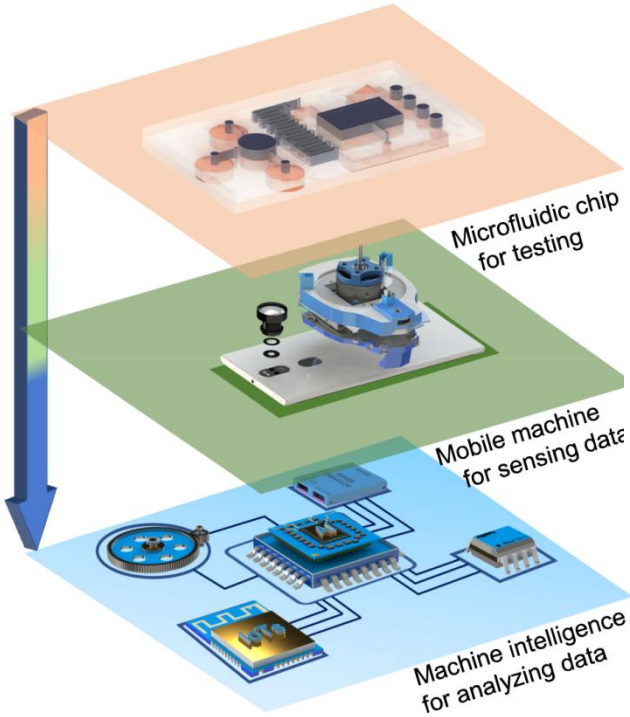
nature › nature communications › review articles › article

Review Article | Open access | Published: 11 March 2023

Smartphone-based platforms implementing microfluidic detection with image-based artificial intelligence

Bangfeng Wang, Yiwei Li, Mengfan Zhou, Yulong Han, Mingyu Zhang, Zhaolong Gao, Zetai Liu, Pen
Wei Du, Xingcai Zhang ✉, Xiaojun Feng ✉ & Bi-Feng Liu ✉

Nature Communications **14**, Article number: 1341 (2023) | Cite this article



The microfluidic chip is responsible for biosample processing and testing. The resulting signal is acquired by the mobile machine and preprocessed by software installed on the smartphone. After data is transmitted to the cloud server, it can be stored and further analyzed by machine intelligence. IoTs and AI denote internet of things and artificial intelligence, respectively.

nature communications

Review article

https://doi.org/10.1038/s41467-023-36017-x

Smartphone-based platforms implementing microfluidic detection with image-based artificial intelligence

Received: 23 March 2022

Accepted: 10 January 2023

Published online: 11 March 2023

Check for updates

Bangfeng Wang[1,3], Yiwei Li[1,3], Mengfan Zhou[1], Yulong Han[2], Mingyu Zhang[1], Zhaolong Gao[1], Zetai Liu[1], Peng Chen[1], Wei Du[1], Xingcai Zhang[2] ✉, Xiaojun Feng[1] ✉ & Bi-Feng Liu[1] ✉

The frequent outbreak of global infectious diseases has prompted the development of rapid and effective diagnostic tools for the early screening of potential patients in point-of-care testing scenarios. With advances in mobile computing power and microfluidic technology, the smartphone-based mobile health platform has drawn significant attention from researchers developing point-of-care testing devices that integrate microfluidic optical detection with artificial intelligence analysis. In this article, we summarize recent progress in these mobile health platforms, including the aspects of microfluidic chips, imaging modalities, supporting components, and the development of software algorithms. We document the application of mobile health platforms in terms of the detection objects, including molecules, viruses, cells, and parasites. Finally, we discuss the prospects for future development of mobile health platforms.

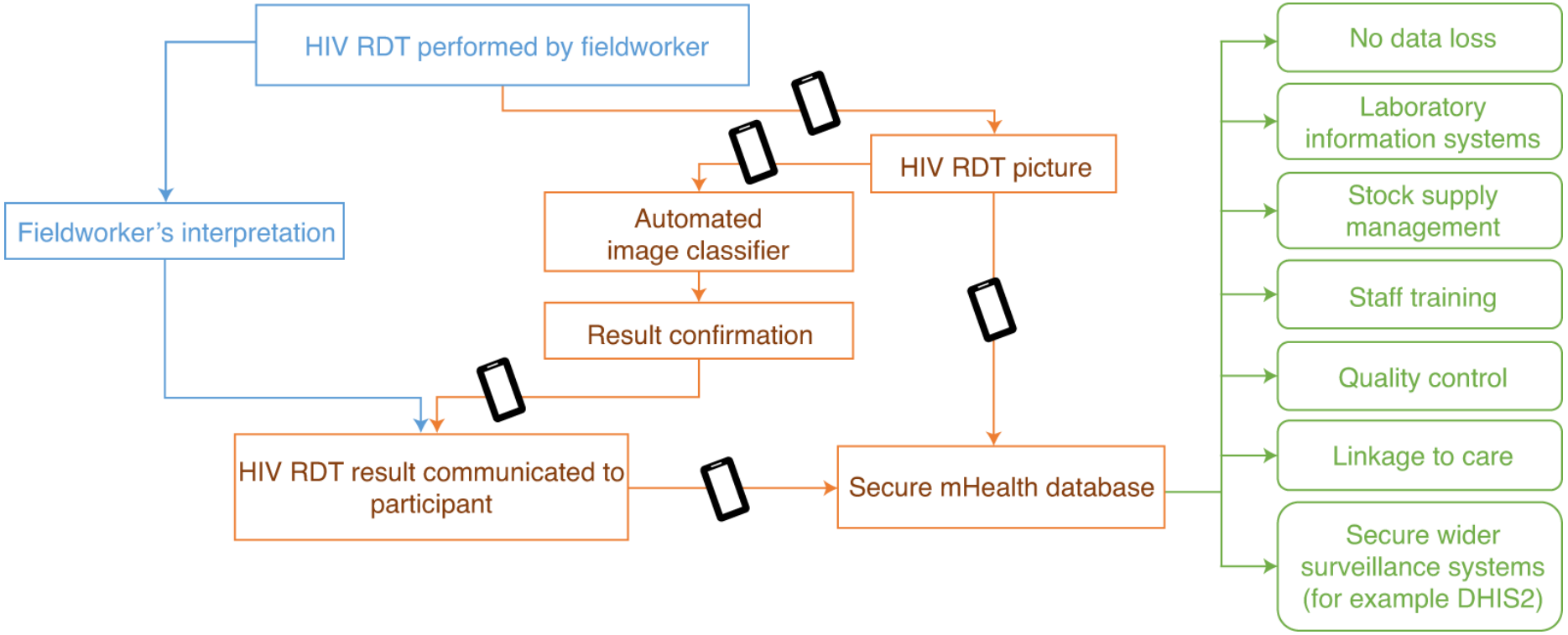
Honey, I Shrunk the Lab: Testing for STDs on a Smartphone

A lab-in-a-box

"Our dongle presents new capabilities for a broad range of users, from health care providers to consumers," explained professor Samuel K Sia. "By increasing detection of syphilis infections, we might be able to reduce deaths by 10-fold.“

"And for large-scale screening where the dongle's high sensitivity with few false negatives is critical, we might be able to scale up HIV testing at the community level with immediate antiretroviral therapy that could nearly stop HIV transmissions and approach elimination of this devastating disease," he said.

https://www.nature.com/articles/s41467-023-36017-x

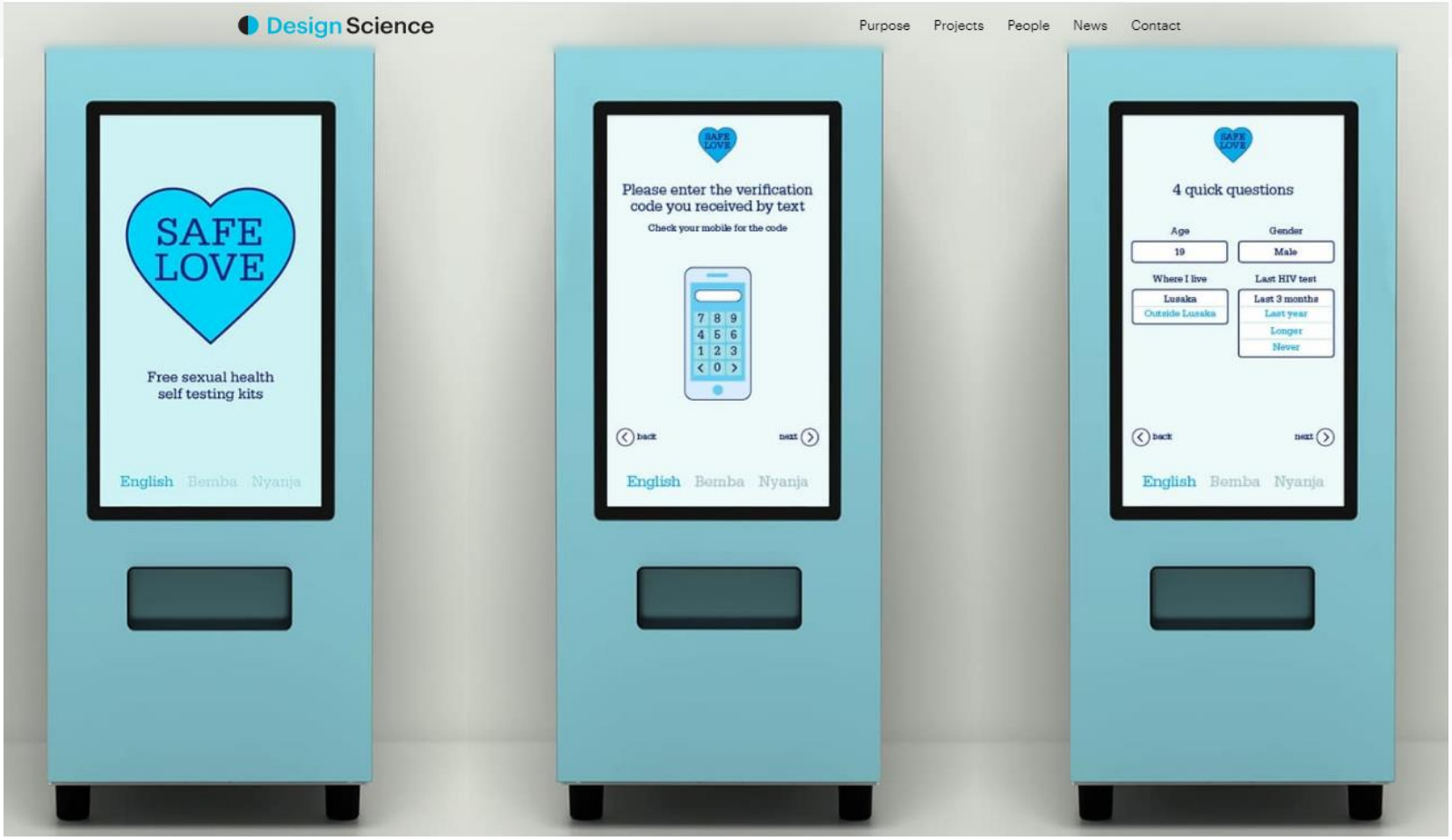


Current workflow used by fieldworkers (blue); our proposed mHealth system of automated RDT classifier plus data capture and transmission to a secure mHealth database (orange); and the benefits arising from deploying the proposed system (green). Black rectangles represent tablets or smartphones.

HIV self testing vending machine kit for young people in Zambia

We are working with Dr Jaime Vera Rojas at Brighton and Sussex Medical School and a team from the Centre for Infectious Disease Research in Zambia (CIDRZ) to develop a new service that aims to help young people in Zambia access safe HIV self-testing kits through digital vending machines with the aim of reducing the number of youngsters who have HIV without knowing their status.

Health • Identity • Digital & web • Interiors & installation • Service design • Strategic design



What we did

We began by supporting remote co-creation workshops with CIDRZ to understand what mattered to young people when they thought about their health and HIV in particular, and also received feedback on design alternatives to ensure that the language and visual design met their needs.

Discovery workshop

Learnings from the workshops included the desire for clinical, blue themed colours and lightweight style typography; a preference for positive messaging and a neutral design that worked for men and women.

Workshop participant shad strong opinions about the designs we presented in our initial workshop. The name 'SAFE LOVE' was unanimously approved, but the block-style font and warm, African inspired colours and patterns were firmly rejected. Participants also wanted to avoid the 'condom packaging' reference and sperm image we trialled.

"The colour blue is very much required as most adolescent spaces in health facilities have it."

"The yellow colour is like a warning in football – when given yellow card it is a warning if you do not practice safe sex you may end up dying."

Workshop participants, Zambia

SAFE LOVE

your sexual health kit guide

Step 1: get ready

- Find somewhere quiet
- Wait at least 30 minutes after eating, drinking or cleaning your teeth
- Ask someone to help if you want
- Read the instructions carefully
- Or call 09620 45699 for help

Step 2: test

- Follow the instructions
- Wait for at least 20 minutes before checking the result

Step 3: get advice

If the result is positive or you are unsure send a text to 09620 45699 or visit your health clinic

Don't worry if it's positive. We have good and free treatments to keep you healthy and living a normal life.

If it's negative, let us know by texting 'NO' to 09620 45699
We'll send you a reminder to follow up in 3 months

Please turn over for extra tips

SAFE LOVE

your sexual health kit extra tips

If your test is negative

- Make sure you continue to use condoms and practice safe sex.
- Keep testing at least twice a year.
- Try to stay healthy by eating well, doing plenty of exercise, washing regularly and avoiding alcohol, smoking and other drugs.

If your test is positive

- Don't be worried. You can live a normal life. You can have a healthy baby. We have free, very good treatments and free counselling advice to help you make the small changes in your life that will keep you healthy.
- Start your treatments as soon as possible.
- It's very important to make sure you stick with the treatment.
- It's very important that you continue to use a condom and practice safe sex.

Please tell your friends about this service:
@safelove.zm

MAP Centre for Urban Health Solutions

Machines that dispense HIV testing kits, clean needles and Naloxone launch in Canada

From the Toronto Star article

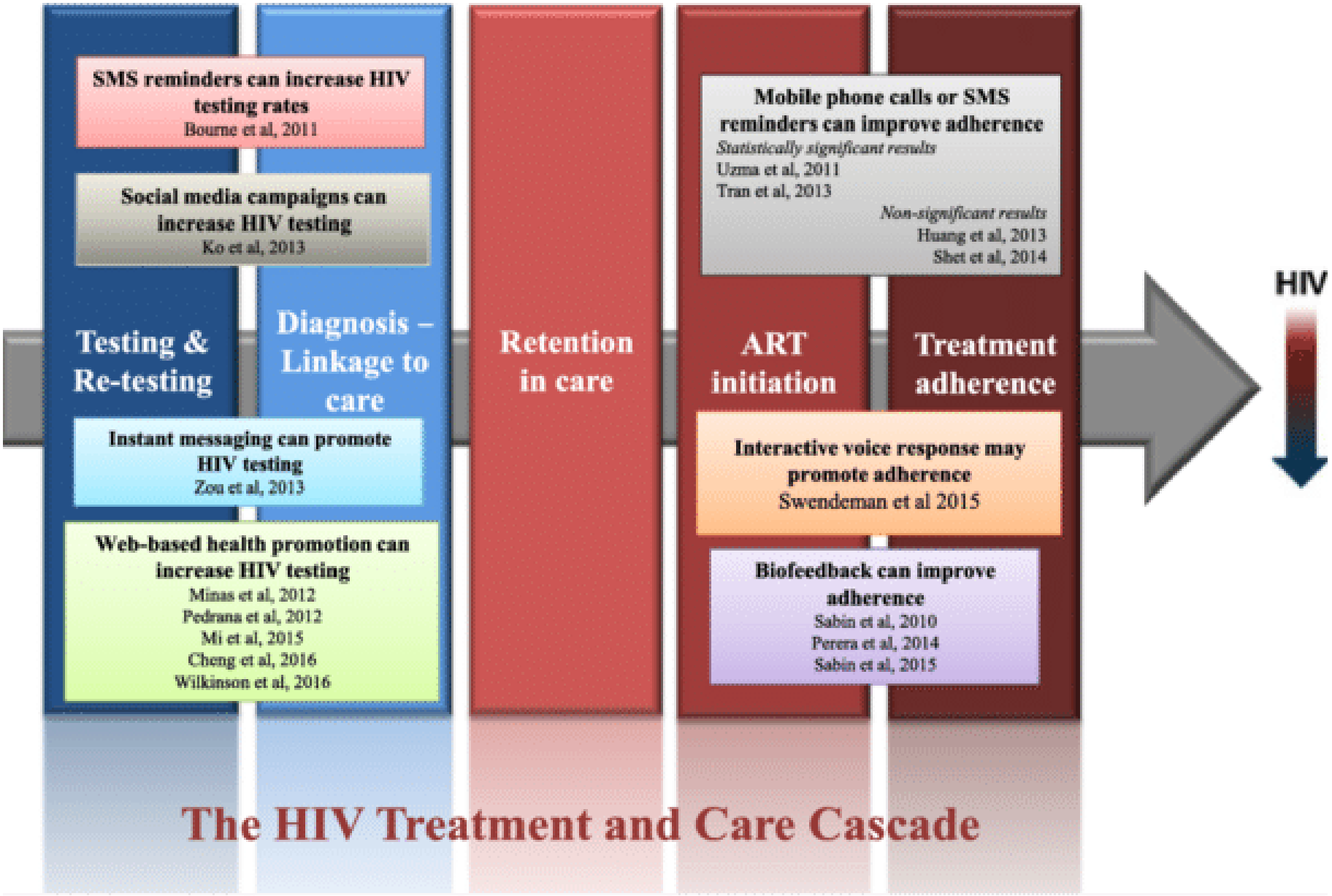
Machines that dispense HIV self-testing kits, clean needles and other harm reduction supplies have been installed in Atlantic Canada with plans for 100 in the next three years across the country, which continues to grapple with HIV cases and an opioid crisis.

Sean Rourke, scientist with MAP Centre for Urban Health Solutions, said the project started when he was working to get the first self-testing kit for HIV approved and available in Canada. Health Canada approved the test in November 2020 and Rourke said the next step was making it available to those who need it. MAP Centre is affiliated with Toronto's St. Michael's Hospital.

Rourke said 10 per cent of people in Canada with HIV don't know it. "That's about 7,000 people. Those people aren't benefiting from treatment."

To help distribute the tests, the I'm Ready program was launched, which allows people to download an app on their phone to get the test delivered to their home or ready for pickup at locations across the country. Rourke said the program is working but it's not reaching everyone, including those without a phone or stable housing.

That's when the idea to launch Our Healthbox machines in communities that need it came to life. It's a smart machine with a digital screen that works like a vending machine with free HIV and COVID-19 self-testing kits as well as clean needles, Naloxone, crack kits with safe smoking paraphernalia, condoms and other things Rourke says we take for granted like feminine hygiene products, socks and mitts. Our Healthbox will also notify clients if there is a bad drug supply.


SMS reminders can increase HIV testing rates
Bourne et al, 2011
Social media campaigns can increase HIV testing
Ko et al, 2013
Testing & Re-testing
Diagnosis – Linkage to care
Instant messaging can promote HIV testing
Zou et al, 2013
Web-based health promotion can increase HIV testing
Minas et al, 2012
Pedrana et al, 2012
Mi et al, 2015
Cheng et al, 2016
Wilkinson et al, 2016
Retention in care
Mobile phone calls or SMS reminders can improve adherence
Statistically significant results
Uzma et al, 2011
Tran et al, 2013
Non-significant results
Huang et al, 2013
Shet et al, 2014
ART initiation
Treatment adherence
Interactive voice response may promote adherence
Swendeman et al 2015
Biofeedback can improve adherence
Sabin et al, 2010
Perera et al, 2014
Sabin et al, 2015
HIV
The HIV Treatment and Care Cascade


Diagnose all people with HIV as early as possible.
Treat people with HIV rapidly and effectively to reach sustained viral suppression.
Prevent new HIV transmissions by using proven interventions, including pre-exposure prophylaxis (PrEP) and syringe services programs (SSPs).
Respond quickly to potential HIV outbreaks to get needed prevention and treatment services to people who need them.

Advancing HIV Prevention through Cluster Detection and Response

Responding to Emerging HIV Clusters

To end the HIV epidemic, it is critical to deliver timely, appropriate care and prevention services wherever HIV is spreading. With CDC support, state and local health departments are using several strategies to **detect and respond to growing clusters of HIV infection.**

Cluster detection strategies, such as *partner services* and *monitoring for increases in HIV diagnoses*, have been used by some health departments for many years. Now, many health departments are also using a newer strategy – *HIV molecular analysis* – to detect growing clusters of HIV infection more quickly and precisely than ever before, allowing prevention and treatment services to be directed where they are needed most.

Detecting Clusters through HIV Molecular Analysis: 5 Things to Know

1. Molecular analysis identifies groups of HIV strains that are very similar. Because HIV evolves quickly, **similar viral strains** signal that HIV transmission is occurring rapidly within a common network.

2. Health departments can use molecular analysis to quickly identify areas where HIV may be spreading and provide prevention and treatment services, **breaking the chain of transmission.**

3. Molecular analysis uses laboratory data that are already generated through **routine medical care** after a person is diagnosed with HIV.

4. Molecular analysis examines the genetics of the virus – not the person – and **doesn't identify who infected whom.**

5. As health departments collect and analyze molecular data, they must follow state and local laws and strict CDC guidelines designed to **protect data and maintain privacy and confidentiality**. Personal identifying information is not shared with CDC.

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Division of HIV/AIDS Prevention

Science Brief: Evidence That HIV Cluster and Outbreak Detection and Response Strengthens HIV Prevention and Care Services

Updated October 23, 2023

- We have tools to diagnose, treat, and prevent HIV, but sometimes these services don't reach the people who need them the most. HIV cluster detection and response (CDR) is an important strategy to identify and close gaps in prevention and care services for communities experiencing rapid HIV transmission.[1]
- CDR involves understanding networks of people experiencing rapid HIV transmission; linking people in these networks to essential HIV and other related prevention and care services; and identifying and addressing gaps in programs and services, such as testing, HIV and other medical care, pre-exposure prophylaxis, and syringe services programs.

Cluster and Outbreak Response Leads to Beneficial Results

Many responses to HIV clusters and outbreaks have led to:

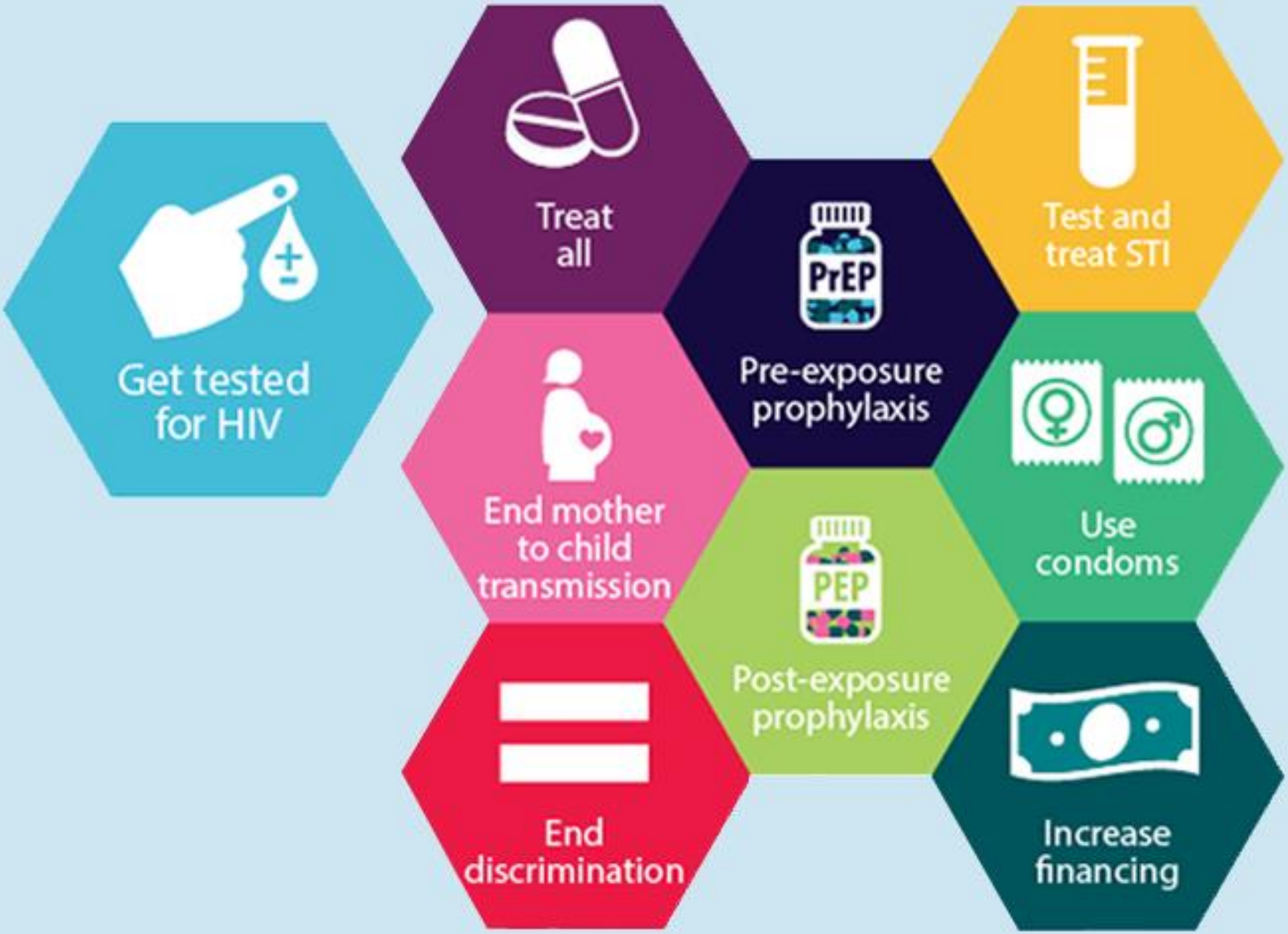
- Reductions in new HIV transmission and diagnoses;
- Improved HIV testing and diagnosis;
- Increased pre-exposure prophylaxis uptake;
- Expanded syringe services program utilization;
- Improved linkage to care, retention in care, and viral suppression; and
- Enhanced syndemic and structural interventions, including essential support services as well as prevention and care for syndemic conditions such as opioid use disorder and viral hepatitis.

Responding to Clusters and Outbreaks is Important

- CDR is an essential public health service.[2] HIV clusters and outbreaks are signals that specific people and places are experiencing rapid transmission.
- Rapid transmission occurs because affected communities are not being reached by existing services due to stigma, discrimination, racism, poverty, and other social and structural factors.
- CDR helps health departments, community-based organizations and other partners respond to address inequities and make sure that resources are reaching the people and places that can most benefit from them.
- HIV clusters and outbreaks generally have very rapid transmission compared to the national average.
  - Transmission rates in molecular clusters average 8–11 times the national rate, and individual clusters and outbreaks have had transmission rates exceeding 30 times the national rate.[3-8]
  - Rapidly growing clusters contribute disproportionately to future infections.[9]

Clusters and Outbreaks are Identified in Multiple Ways

- HIV clusters and outbreaks can be identified by:
  - Healthcare providers, community members, or health department partner services staff who notice changes in patterns of HIV diagnoses;[10-15]
  - Analyzing surveillance data to identify increased diagnoses during a specific time period in a geographic area, sometimes called time-space clusters;[7,16-32] and
  - Analyzing HIV molecular data to identify clusters of highly similar HIV sequences, indicating rapid transmission.[8,33-40]
- A detected cluster indicates a larger underlying network, which includes people with diagnosed and undiagnosed HIV and people who do not have HIV.
- In recent years, many of the largest responses have been to HIV outbreaks among people who inject drugs, which are often detected using non-molecular approaches, such as time-space analysis, partner services, or identification by providers or community members.[41,42] These approaches are particularly effective at detecting rapid transmission when the typical number of people with newly diagnosed HIV is relatively low.
- HIV is most commonly transmitted sexually in the United States. Most clusters of rapid transmission identified through molecular analysis involve sexual transmission, including large clusters that are the same size as some large outbreaks among people who inject drugs. When first detected, molecular clusters are often small, indicating opportunities to respond early, link people to needed care and prevention services, and prevent transmission.[7,8,12,39,43-46]
- CDR maximizes early detection of clusters and outbreaks and helps to identify the larger network of people affected by rapid transmission and tailor interventions to address gaps in their HIV care and prevention services.[7,11,12,14,30,47-49]


Get tested for HIV
Treat all
Pre-exposure prophylaxis
PrEP
Test and treat STI
End mother to child transmission
Use condoms
PEP
Post-exposure prophylaxis
End discrimination
Increase financing

Προκλήσεις

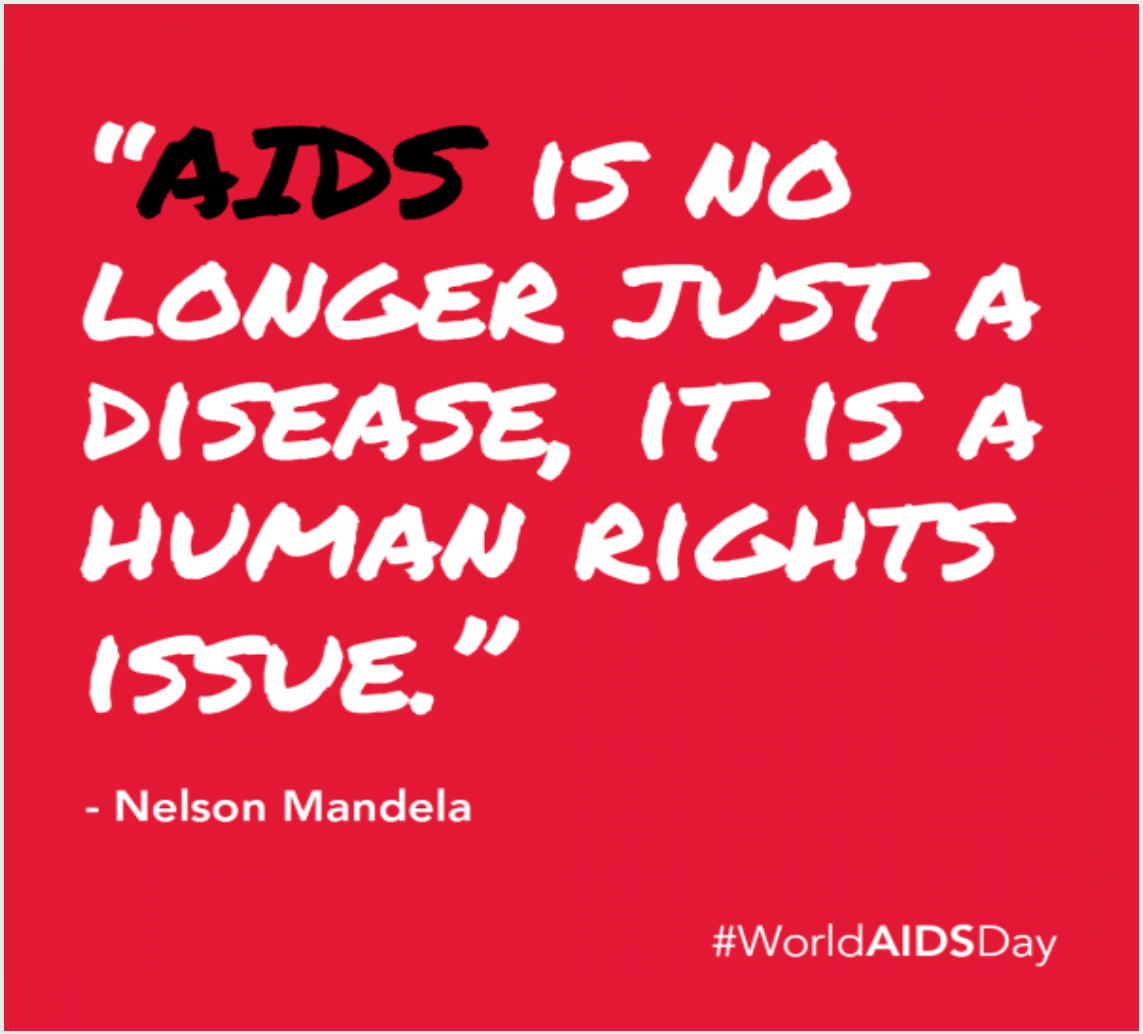
- Διασφάλιση απρόσκοπτης **πρόσβασης σε δωρεάν και ανώνυμο έλεγχο** για HIV
  - ✓ Διευκόλυνση της πρόσβασης στην εξέταση HIV (user-friendly)
  - ✓ Υποστήριξη εργαστηρίων διάγνωσης και παρακολούθησης
  - ✓ Περιορισμός του στίγματος και των διακρίσεων
  - ✓ Υπηρεσίες σε άτομα που πλήττονται από την ανθρωπιστική κρίση
- **Μείωση του χρόνου διάγνωσης** από τη στιγμή της μετάδοσης του ιού (περιορισμός του φαινομένου καθυστερημένης διάγνωσης) και του **χρόνου διασύνδεσης** σε κατάλληλες υπηρεσίες παρακολούθησης και θεραπείας.
- **Συνεχιζόμενη εκπαίδευση** επαγγελματιών υγείας για εξειδικευμένα ζητήματα που αφορούν στην εξέταση
- Ανάγκη υιοθέτησης και προσαρμογής **νέων μεθόδων και καινοτόμων τεχνολογιών**
- **Σχεδιασμός στοχευμένων παρεμβάσεων** και υπηρεσιών υγείας & φροντίδας των ατόμων που ζουν με τον HIV
- **Ενίσχυση των προγραμμάτων πρόληψης** και **βελτίωση της αποτελεσματικότητας τους με ενσωμάτωση δεικτών παρακολούθησης**
- Διασφάλιση της **ποιότητας σε ολιστικής φροντίδας** και **ενημέρωση σε θέματα σεξουαλικής και αναπαραγωγικής υγείας**
- **Εθνική στρατηγική για τον HIV (**Κατανόηση των κενών, ανακατανομή των πόρων) **- Νομοθεσία**

LET COMMUNITIES LEAD

World AIDS Day 2023

UNAIDS


LET'S STOP
HIV
TOGETHER™



ΕΥΧΑΡΙΣΤΩ ΓΙΑ ΤΗΝ ΠΡΟΣΟΧΗ ΣΑΣ