The National HIV/AIDS Strategy: Grounding National Policy in Sound Basic Sciences

November 30, 2018

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A TIME OF HOPE AND UNCERTAINTY

Can we maintain our momentum amid our national division?

After remaining fairly stable for about fifteen years, the recent period has brought significant progress.

From 2008-2014, the number of new HIV infections declined by 18% and within the Ryan White HIV/AIDS Program, the major HIV discretionary care program, viral suppression is up in all groups examined along lines of race, gender, risk group

I believe three factors converged to create new opportunities for progress: the first comprehensive National HIV/AIDS Strategy was released in 2010, compelling new science—that reinforces the Strategy’s direction and emphasizes the importance of early initiation of HIV treatment, and the implementation of the Affordable Care Act, which provides a platform for expanding insurance coverage that can help expand access to HIV treatment
THE HIV EPIDEMIC IN THE US

The US has the most serious epidemic among developed nations.

- Approximately 1.1 million Americans living with HIV and about 40,000 new infections per year.

- Declining infections and deaths: The annual number of new HIV infections decline from a peak of about 130,000 per year in the mid-1980s. After years of stability with around 50,000 infections per year, HIV infections declined nearly 20% from 2008 to 2014. In 2014, 6,721 deaths were attributed directly to HIV.

- Heavily concentrated among gay and bisexual men, Black Americans, Latinx Americans, Black women, transgender women, and people who inject drugs (Other highly impacted groups in specific communities.)

- Southern US is disproportionately impacted: Half of new HIV diagnoses occur in the South, but South contains only 38% of the US population.
INFECTIONS ARE HEAVILY CONCENTRATED

Source: Screenshot from presentation by Dr. Anthony Fauci, Director, NIAID, at the HIV R4P Conference in Madrid, Spain on October 22, 2018.
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THE NATIONAL HIV/AIDS STRATEGY: GROUNDING NATIONAL POLICY IN SOUND BASIC SCIENCES

SNAPSHOT OF US HIV EPIDEMIC
NEW HIV DIAGNOSES, BY TRANSMISSION CATEGORY (2016, N=39,782)

GAY AND BISEXUAL MEN REMAIN MOST AFFECTED

3%
GAY AND BISEXUAL MEN WHO INJECT DRUGS
1,201 DIAGNOSES

6%
PEOPLE WHO INJECT DRUGS
2,224 DIAGNOSES

39,782
NEW HIV DIAGNOSES IN 2016

GAY AND BISEXUAL MEN
26,570 DIAGNOSES

HETEROSEXUALS
9,578 DIAGNOSES

67%
NEW DIAGNOSES BY RACE
BLACK GAY AND BISEXUAL MEN
10,223
LATINO GAY AND BISEXUAL MEN
7,425
WHITE GAY AND BISEXUAL MEN
7,390

24%
NEW DIAGNOSES BY RACE
BLACK WOMEN, HETEROSEXUAL CONTACT
4,189
BLACK MEN, HETEROSEXUAL CONTACT
1,926
WHITE WOMEN, HETEROSEXUAL CONTACT
1,032
LATINO WOMEN, HETEROSEXUAL CONTACT
1,025

GETTING ALL PEOPLE WITH HIV VIRALLY SUPPRESSED IS A KEY GOAL

Persons Living with Diagnosed or Undiagnosed HIV Infection
HIV Care Continuum Outcomes, 2015—United States

Source: Understanding the HIV Care Continuum, Centers for Disease Control and Prevention, June 2018.
DURABLE VIRAL SUPPRESSION
AMONG PERSONS AGED 13 YEARS OR OLDER DIAGNOSED THROUGH 2013 AND ALIVE AT THE END OF 2014

SUSTAINED SUPPRESSION TOO LOW IN ALL GROUPS; INEQUITIES PERSIST


THE STRATEGY IS AN EFFORT TO REFOCUS ON THE DOMESTIC EPIDEMIC

A plan for all stakeholders, not just the federal government

• Developed with broad public input (14 White House meetings across country, online input process, community led meetings, followed by cross-agency development process)

• Not a catalog, but a concise list of high-impact actions

• 5-year plan with small number of core metrics

• Grounded in best scientific evidence

• Presidential Memorandum identified lead agencies, called for agency plans, and took steps to ensure ongoing implementation
THE STRATEGY PRIORITIZES KEY ACTIONS

REDUCE NEW HIV INFECTIONS
- Intensify HIV prevention efforts in communities where HIV is most heavily concentrated
- Expand targeted efforts to prevent HIV using a combination of effective, evidence-based approaches
- Educate all Americans about the threat of HIV and how to prevent it

INCREASE ACCESS TO CARE AND IMPROVE HEALTH OUTCOMES FOR PEOPLE LIVING WITH HIV
- Establish a seamless system to immediately link people to continuous and coordinated quality care when they learn they are infected
- Take deliberate steps to increase the number and diversity of available providers of clinical care and related services for people living with HIV
- Support people living with HIV with co-occurring health conditions and those who have challenges meeting their basic needs, such as housing

REDUCE HIV-RELATED HEALTH DISPARITIES
- Reduce HIV-related mortality in communities at high risk for HIV infection
- Adopt community-level approaches to reduce HIV infection in high-risk communities
- Reduce stigma and discrimination against people living with HIV

ACHIEVE A MORE COORDINATED NATIONAL RESPONSE
- Increase the coordination of HIV programs across the federal government and between federal agencies and state, territorial, tribal, and local governments
- Develop improved mechanisms to monitor and report on progress toward achieving national goals
IT IS BUILT ON A FOUNDATION OF SCIENCE

Acknowledging important discoveries that past research investments have yielded and highlighting where priority new investments are needed are core parts of the Strategy

REDUCE NEW HIV INFECTIONS

“Vaccines and microbicides are two biomedical approaches that are of promising, but safe and effective vaccines and microbicides are not yet available and investments in research to produce safe and effective vaccines and microbicides must continue. In addition, an important area to study is the feasibility and effectiveness of using treatment to prevent new infections. Such strategies include: 1) pre-exposure prophylaxis (PrEP), the use of antiretroviral therapy by high-risk uninfected populations, such as by HIV-negative individuals in committed relationships with HIV-positive individuals; and 2) potential prevention strategies known as ‘test and treat’ or ‘test, treat and link to care’ to determine whether a community-wide HIV testing program with an offer of immediate treatment can decrease the overall rate of new HIV infections in that community.”
FOUNDATION OF SCIENCE (continued)

INCREASE ACCESS TO CARE AND IMPROVE HEALTH OUTCOMES

“Safer, more potent, and more durable treatments are still needed. Additionally, we need to better understand how to manage the clinical complications and consequences of HIV infection and long-term use of antiretroviral drugs—including issues related to accelerated heart disease, kidney disease, cancers, and premature aging. More work is also needed to understand differences in treatment response between women and men and among racial and ethnic minorities.”

REDUCE HIV-RELATED HEALTH DISPARITIES

“Moreover, the scientific evidence shows that the average viral load among all diagnosed HIV-positive individuals in a given community who are in care is strongly associated with the number of new infections that occur in that community. Thus, neighborhoods with a high community viral load are also places where uninfected individuals are at greater risk for acquiring HIV than neighborhoods or other localities with a comparatively lower viral load. Innovative solutions such as reducing community viral load may help reduce the number of new HIV infections in specific communities that may, in turn, reduce disparities in HIV infection. Recently, NIH has launched a pilot study in Washington, D.C., and is working with CDC to launch a companion study in the Bronx, New York, to test this approach.
STRATEGY WAS UPDATED TO 2020

Trump Administration is working on a new plan to respond to epidemic, but has not moved away from the Strategy

### NATIONAL HIV/AIDS STRATEGY: UPDATED TO 2020

#### 5 MAJOR CHANGES SINCE 2010

Since the first National HIV/AIDS Strategy was released in 2010, major advances have transformed how we respond to HIV, provided new tools to prevent new infections, and improved access to care. With a vision for the next five years, our National HIV/AIDS Strategy has been updated to leverage these achievements and look ahead to 2020.

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<tr>
<th>Our prevention toolkit has expanded.</th>
<th>The Affordable Care Act has transformed health care access.</th>
<th>HIV testing and treatment are recommended.</th>
<th>Improving HIV Care Continuum outcomes is a priority.</th>
<th>Research is unlocking new knowledge and tools.</th>
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| **Pre-Exposure Prophylaxis (PrEP)** | A daily pill to prevent HIV. When taken consistently, can reduce the risk of HIV by up to 92%. | Federal Guidelines now recommend routine HIV screening for people aged 15 TO 65. | President Obama’s HIV Care Continuum Initiative directed Federal departments to increase the number of people with HIV who are diagnosed with HIV linked to HIV care retained in HIV care prescribed HIV treatment virally suppressed (having very low levels of HIV in their body). | • Evidence that starting HIV treatment early lowers the risk of developing AIDS or other serious illnesses  
  • New HIV testing technologies, including new diagnostic tests  
  • New HIV medications with fewer side effects, less frequent dosing, and a lower risk of drug resistance  
  • Continued investigation of long-acting drugs for HIV treatment and prevention, an HIV vaccine, and, ultimately, a cure. |
| Treatment as Prevention | The risk of transmitting HIV is reduced by 96% in those who start treatment early. | CDC updated recommendations for HIV testing to help labs detect infections earlier. | Federal HIV treatment guidelines now recommend antiretroviral therapy for all people living with HIV. | |
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Learn more about the National HIV/AIDS Strategy: Updated to 2020 at [AIDS.gov/2020](https://AIDS.gov/2020) #HIV2020
CONTINUING PROGRESS DEMANDS ONGOING INNOVATION AND DISCOVERY

We often say that we have the tools to end the HIV epidemic. Theoretically, this is true. Nonetheless, we need continued innovations and breakthrough discoveries to get us there.

Priority issues and exciting opportunities include:

• Research for a cure

• Broadly neutralizing antibodies for prevention and treatment

• Vaccines for prevention

• Long-acting agents for treatment and prevention

• Implementation science to translate research success into population-level impact

• Research on aging with HIV and management of co-morbidities