

NIH Office of AIDS Research

Working Toward Ending the HIV Epidemic

Tribal Advisory Council Meeting

Bethesda, MD

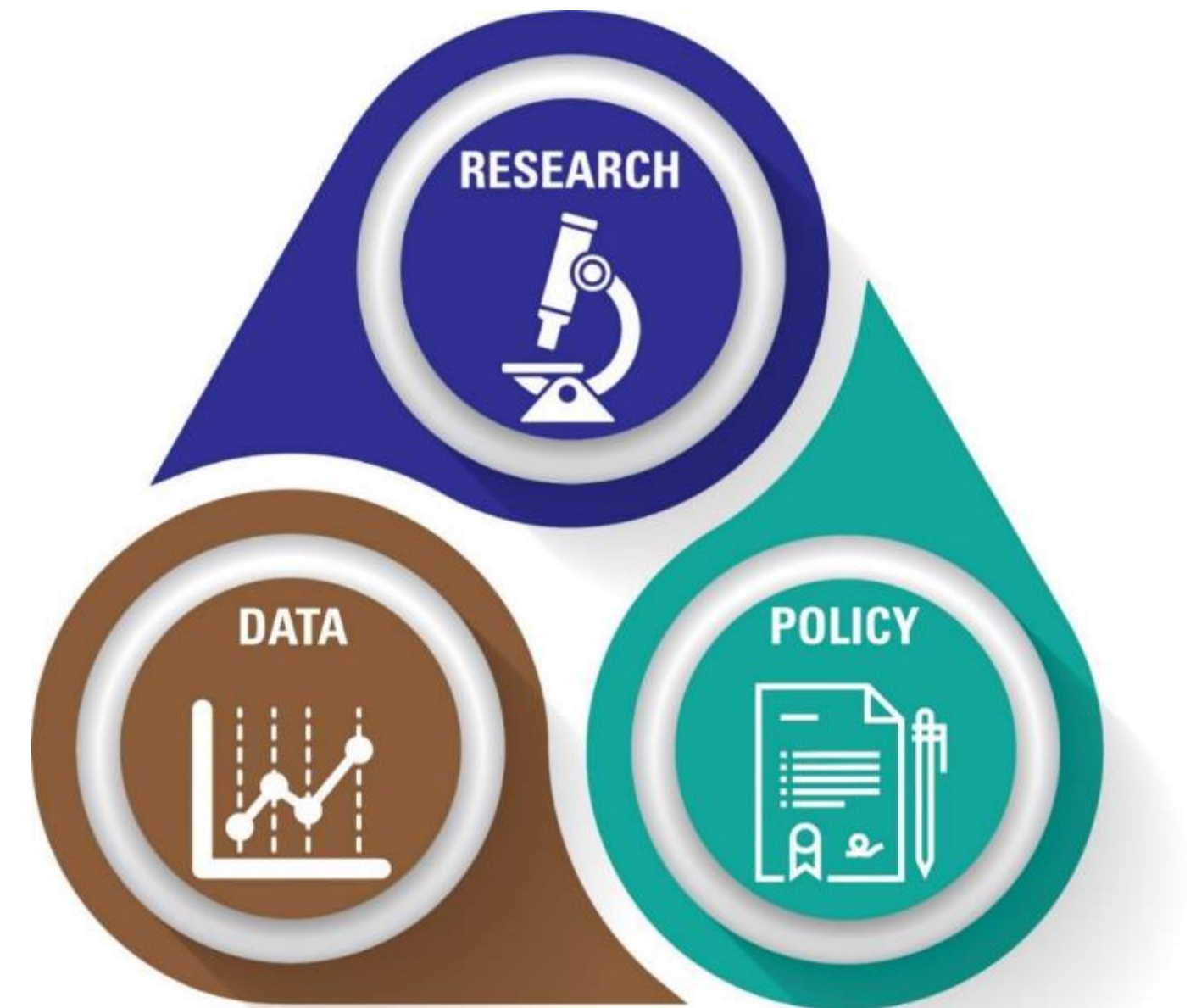
March 21, 2019

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Health Science Administrator,
Office of AIDS Research



NIH-wide HIV Research Vision

**End the HIV/AIDS Pandemic
AND
Improve the health of people
with, at risk for, or affected
by HIV.**

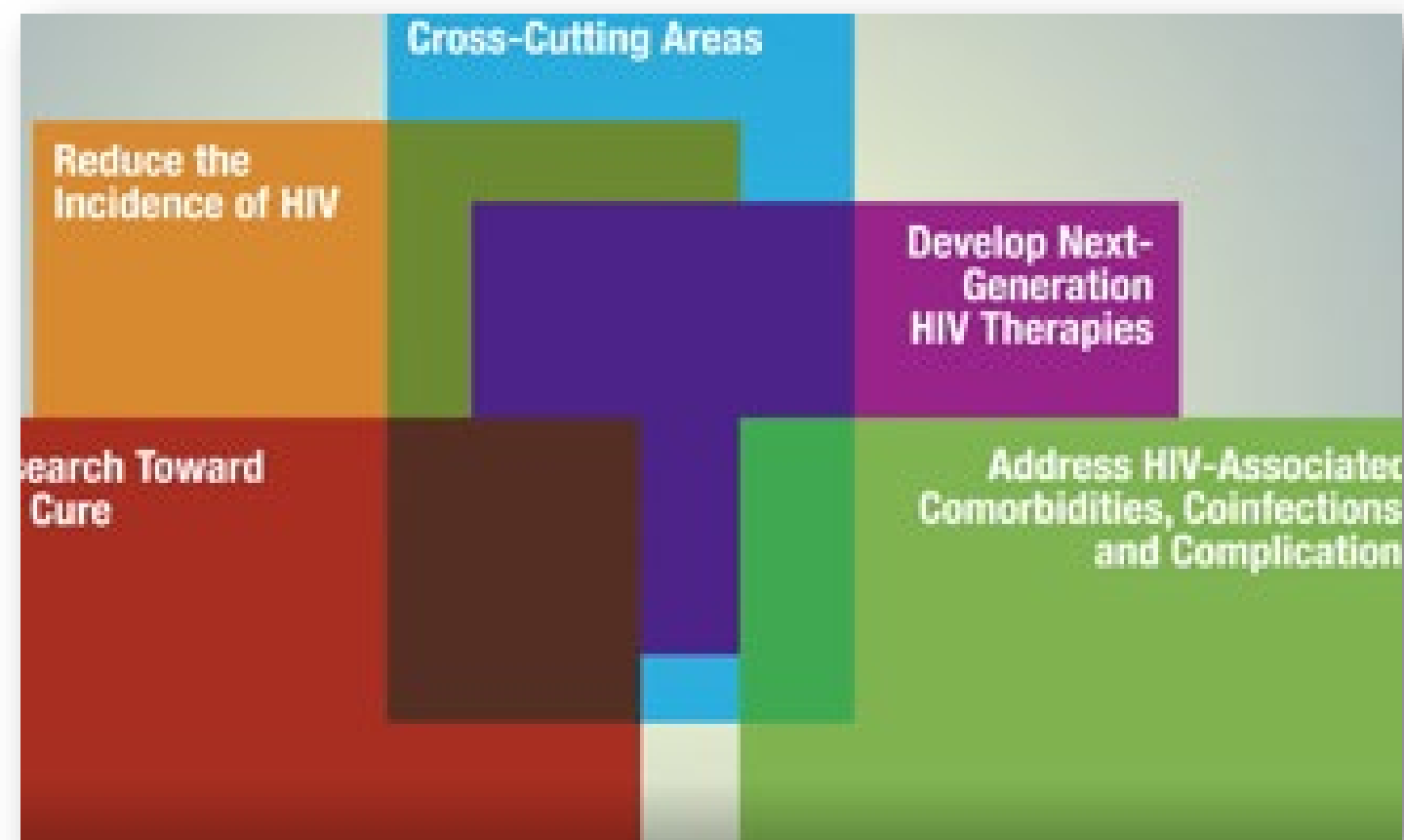


OAR Role in NIH HIV/AIDS Research

- Coordinates the largest public investment in HIV/AIDS research globally.
- Establishes scientific priorities.
- Allocates research funds in line with scientific priorities to nearly every NIH IC.
- Manages HIV/AIDS research across the NIH: scientific, budgetary, legislative, and policy components.



NIH Priorities for HIV and HIV-Related Research



Reduce Incidence

- Vaccines
- PrEP, U=U
- Microbicides & MPTs
- HIV Testing
- Treatment as Prevention
- Monoclonal Antibodies

Research Toward A Cure

- ART-free Viral Remission
- Viral Eradication
- Viral Latency & Sanctuaries
- Cure Ethics & Acceptability

Cross-Cutting Areas

- Virology & Immunology
- Behavioral & Social Sciences
- Epidemiology
- Health Disparities
- Information Dissemination
- Implementation Science
- Infrastructure, Capacity Building

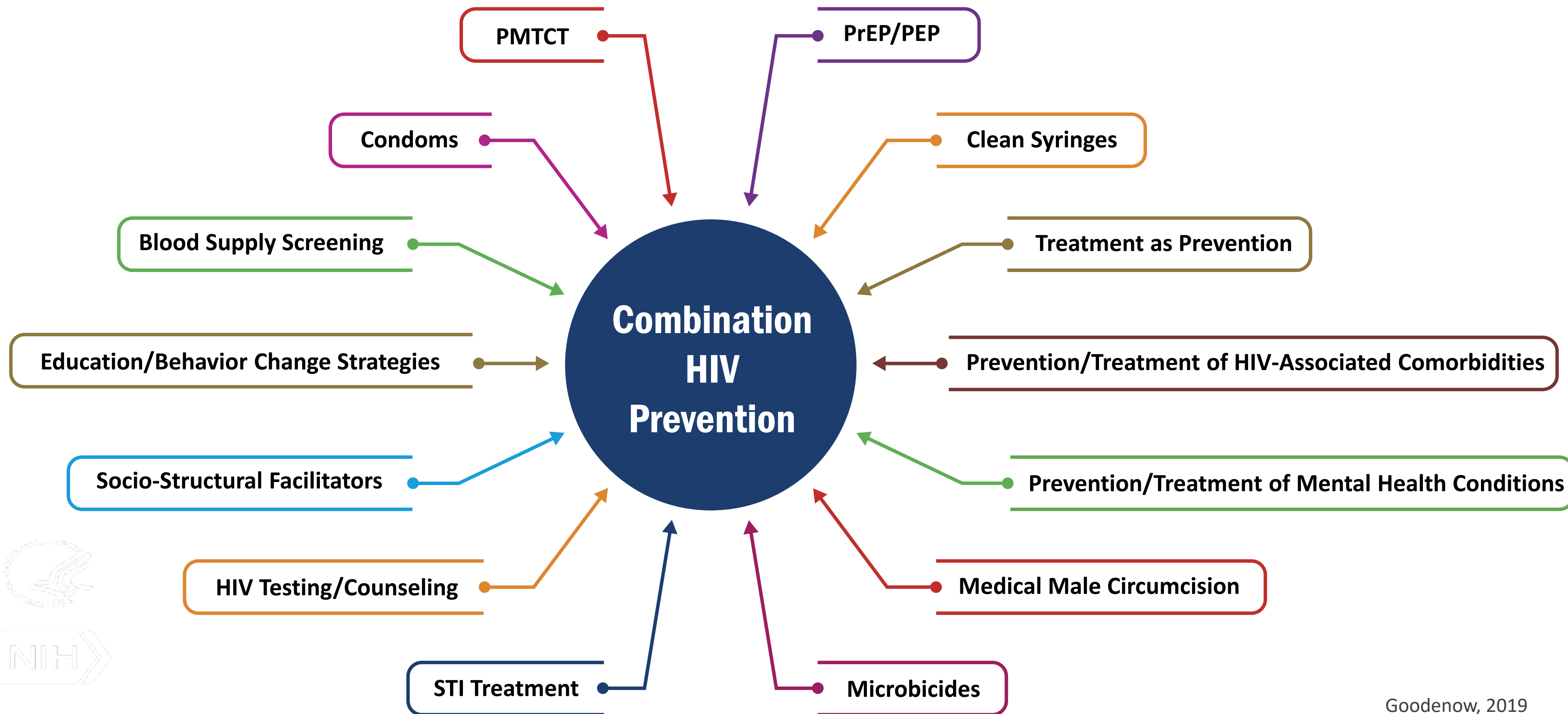
Next-Gen HIV Therapies

- Less Toxic, Longer Lasting ART
- Novel HIV Targets & Inhibitors
- Novel Immune-Based Therapies
- Adherence & Retention-Care

Comorbidities, Coinfections, & Complications

- Coinfections
- Neurologic Complications
- Malignancies
- Cardiovascular Complications
- Mental Illness/Substance Use
- Metabolic Disorders
- Across the Lifespan

HIV Prevention Toolbox



Accomplishments

- In 30+ years, a fatal disease is now a chronic condition with treatment.
- Breakthroughs in non-vaccine biomedical prevention methods
 - ✓ Over half of the world's 37 million PWH receive ART
 - ✓ Some take ART to prevent infection (PrEP, PEP)
- Behavioral and social science-based interventions contribute to reduced HIV incidence and improve the lives of PWH.
- Promising trials testing the efficacy of multipurpose prevention technologies (microbicides, intravaginal rings)



Breakthroughs Leading to Improved Health Outcomes

Undetectable = Untransmittable
(U=U)

People with HIV (PWH) who take ART
as prescribed

- Can achieve and maintain an undetectable viral load.
- Have effectively no risk of sexually transmitting the virus to an HIV-negative partner.

UNDETECTABLE = UNTRANSMITTABLE



Game changer; reduces stigma



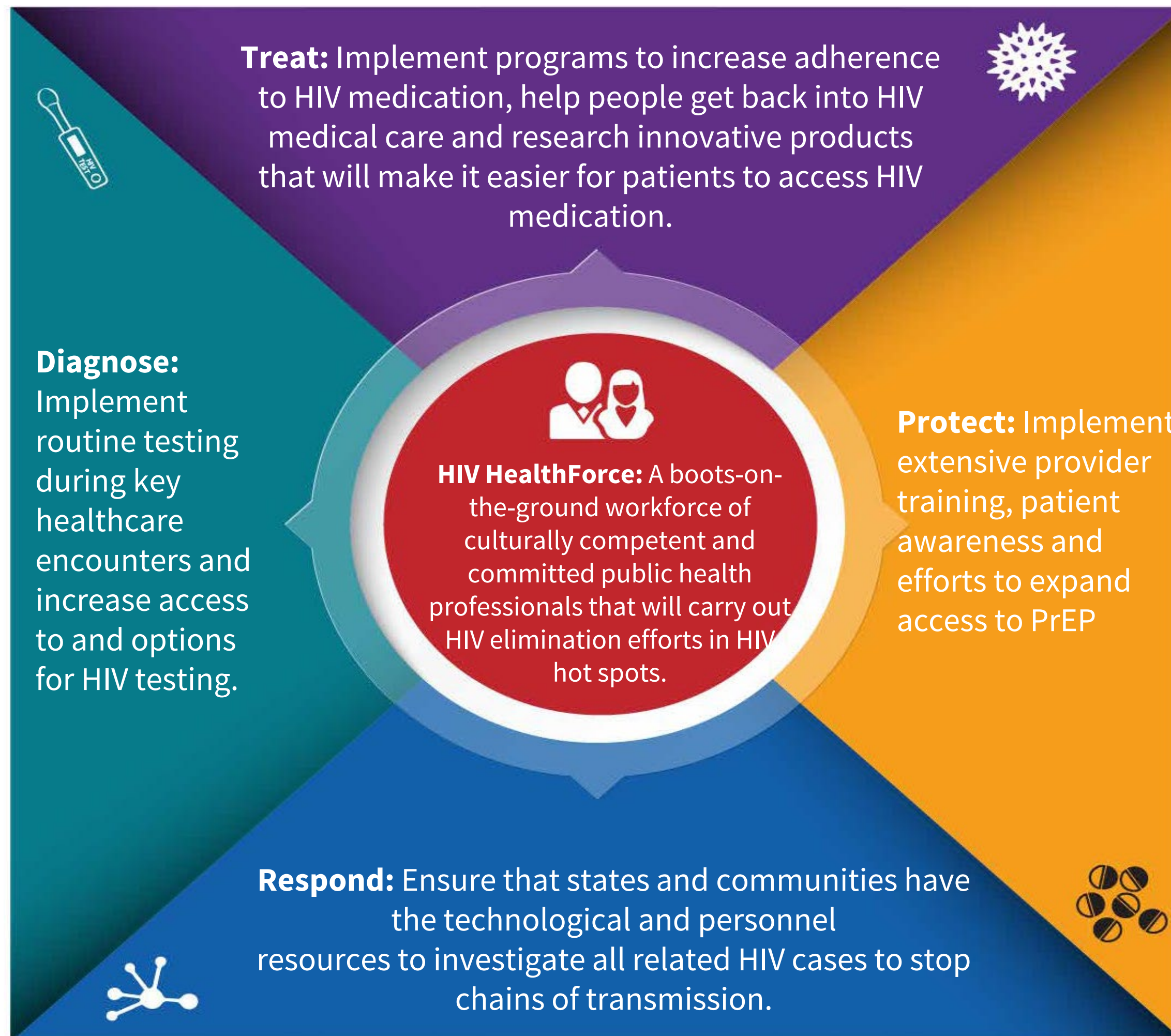
Ending the Epidemic: A Plan for America

- **Overall goal**

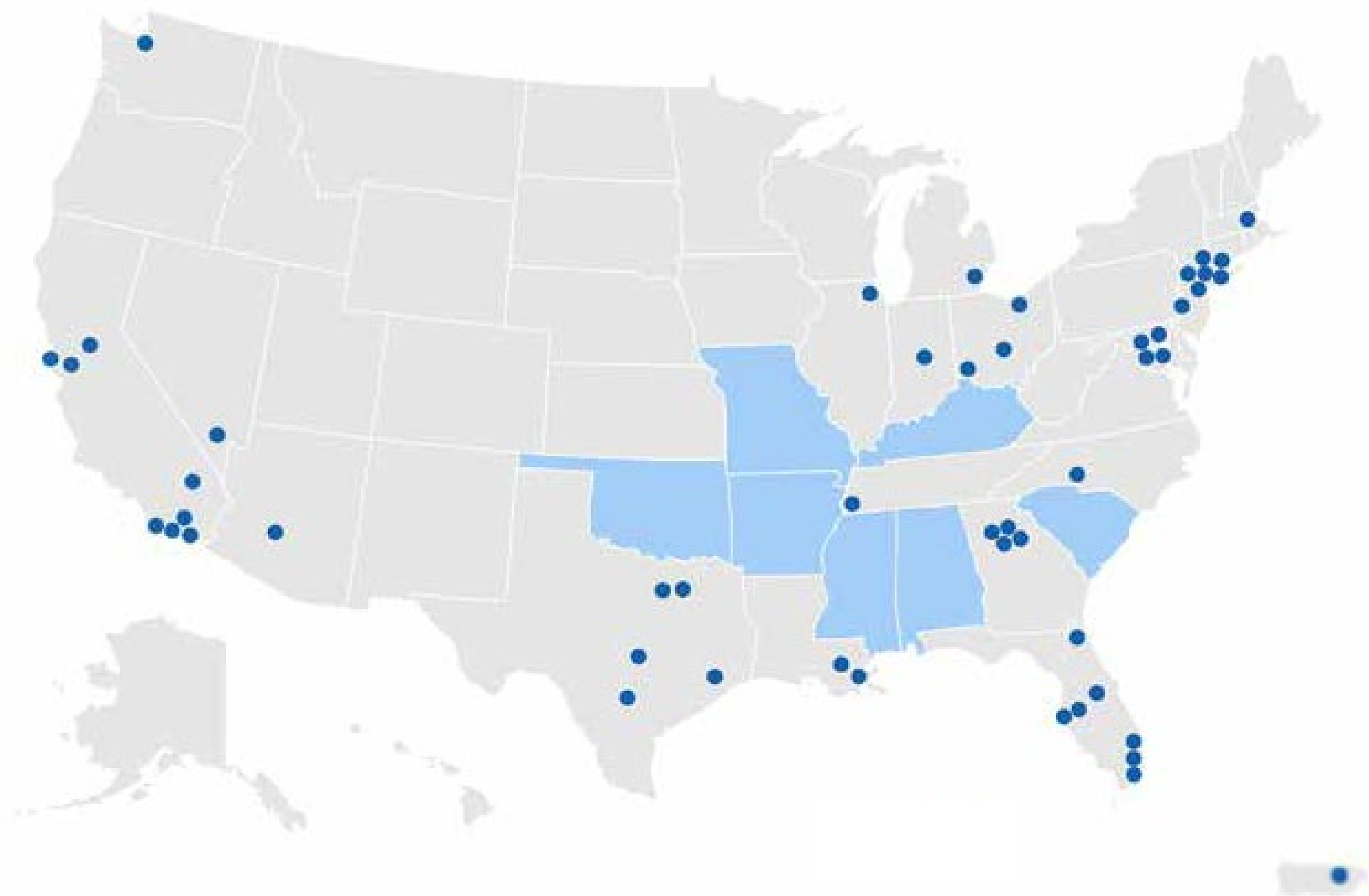
Reduce new infections by 75% in the next five years and by 90% in the next 10 years.

- **Four key strategies**

- ✓ **Diagnose** as early as possible
- ✓ **Treat** rapidly and effectively
- ✓ **Protect** people at risk using proven interventions
- ✓ **Respond** rapidly to growing clusters and prevent new infections



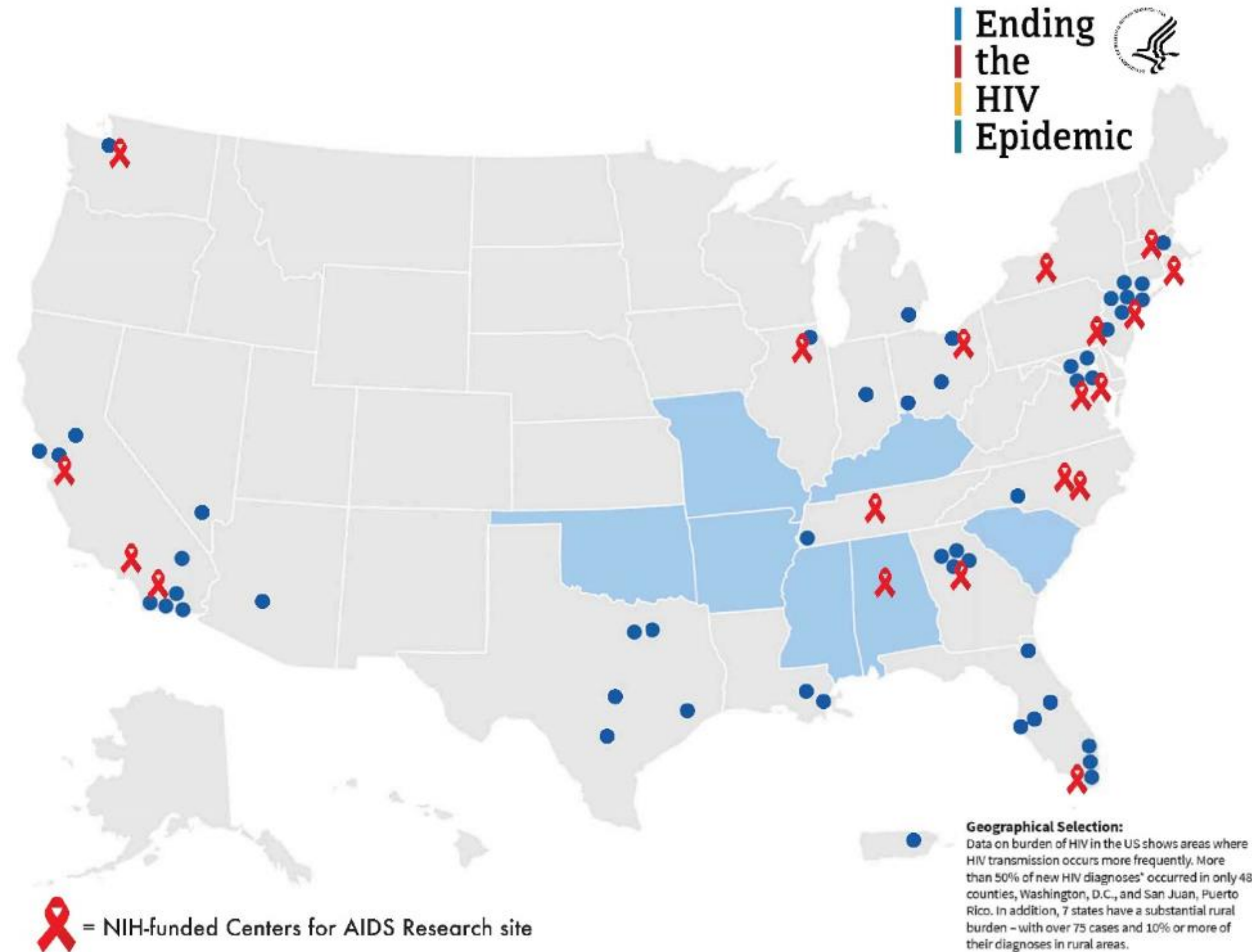
Ending the Epidemic: A Plan for America



The Initiative will focus resources in the 48 highest burden counties, Washington, D.C., San Juan, Puerto Rico, and 7 states with a substantial rural HIV burden.

Ending
the
HIV
Epidemic

Multidisciplinary Approach



A Collaborative National Response to the HIV Epidemic

Basic Research to Public Health

Basic

Clinical

Translational

Implementation

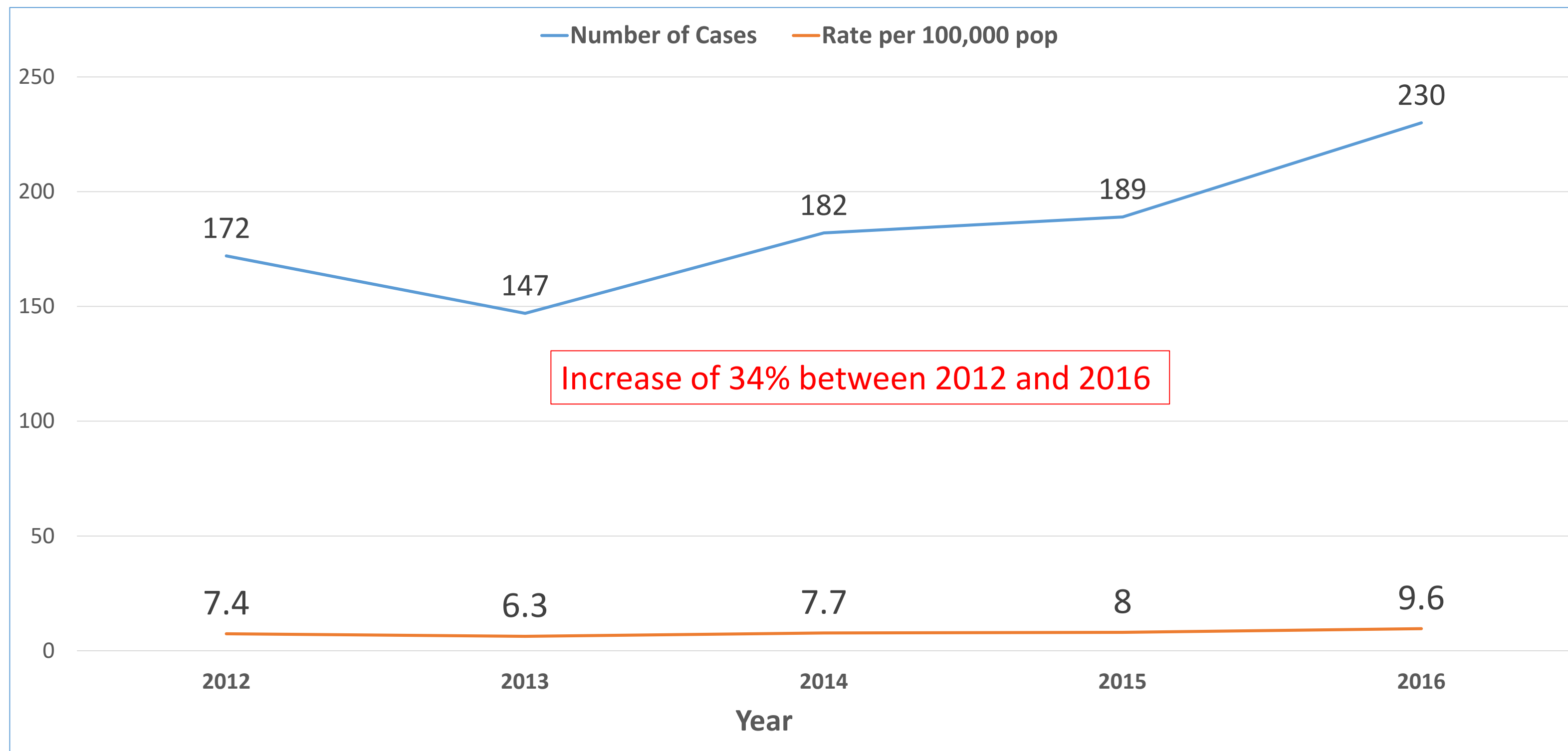
Public Health & Policy



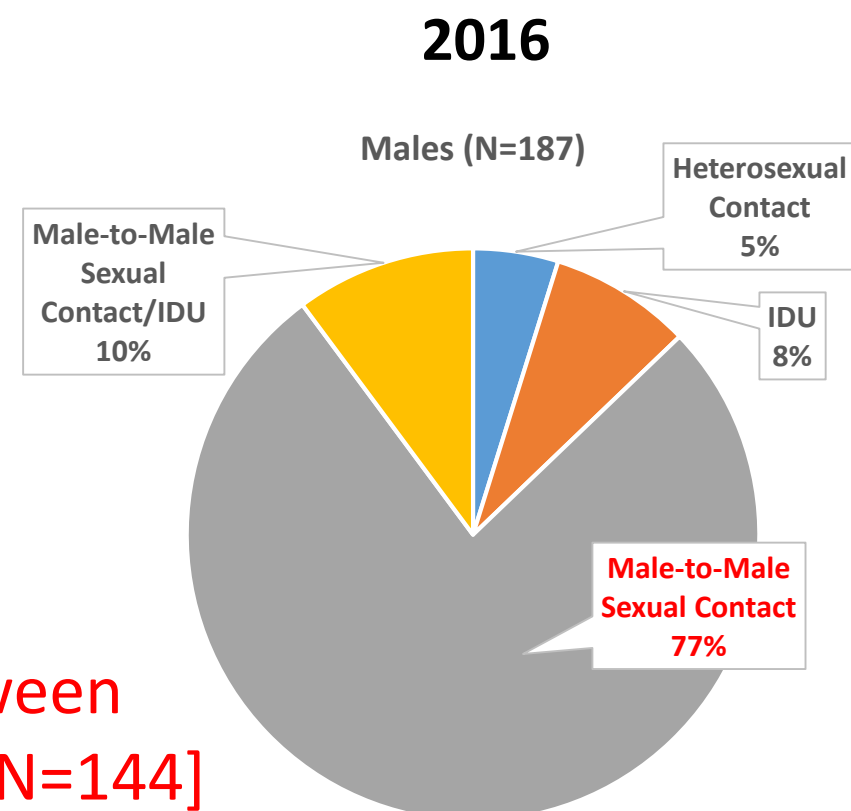
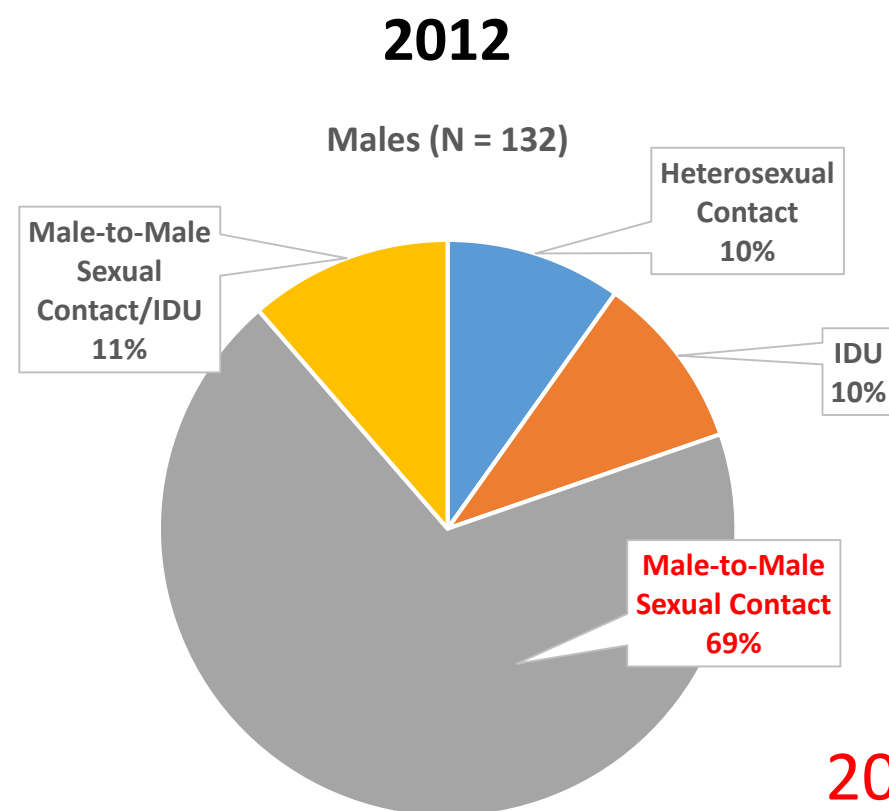
National Institutes
of Health



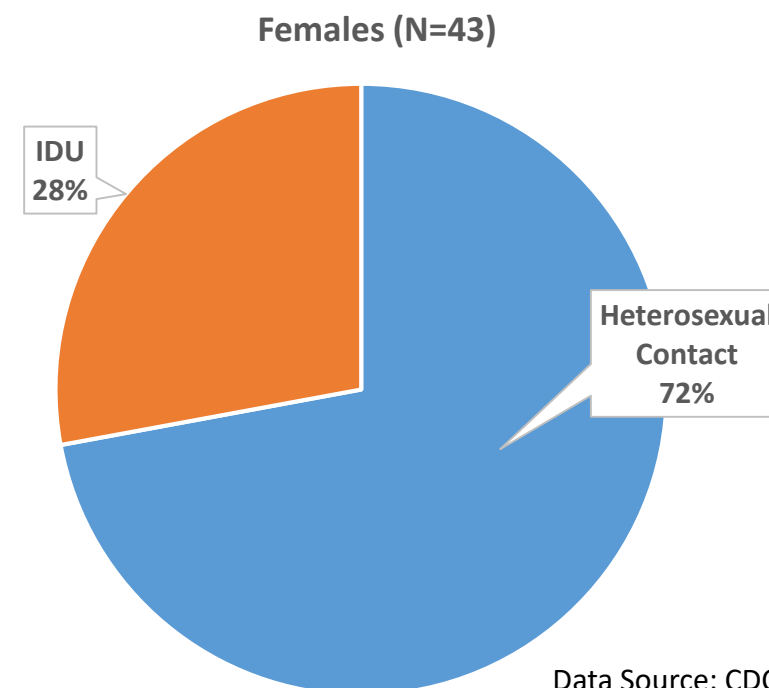
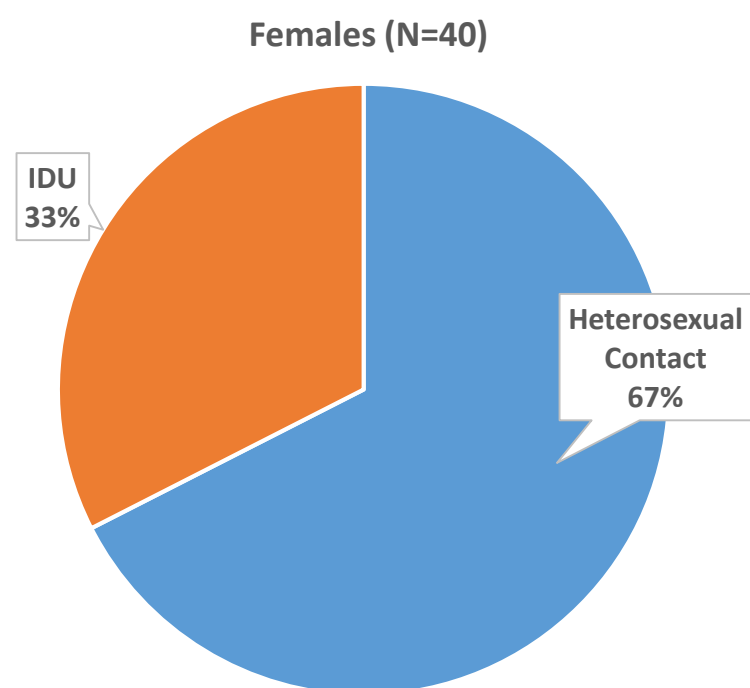
Estimated New HIV Diagnoses Among AI/AN in the US



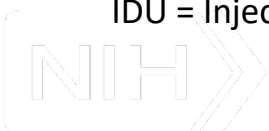
Estimated New HIV Diagnoses Among Adult and Adolescent AI/AN in the US by Transmission Category and Sex



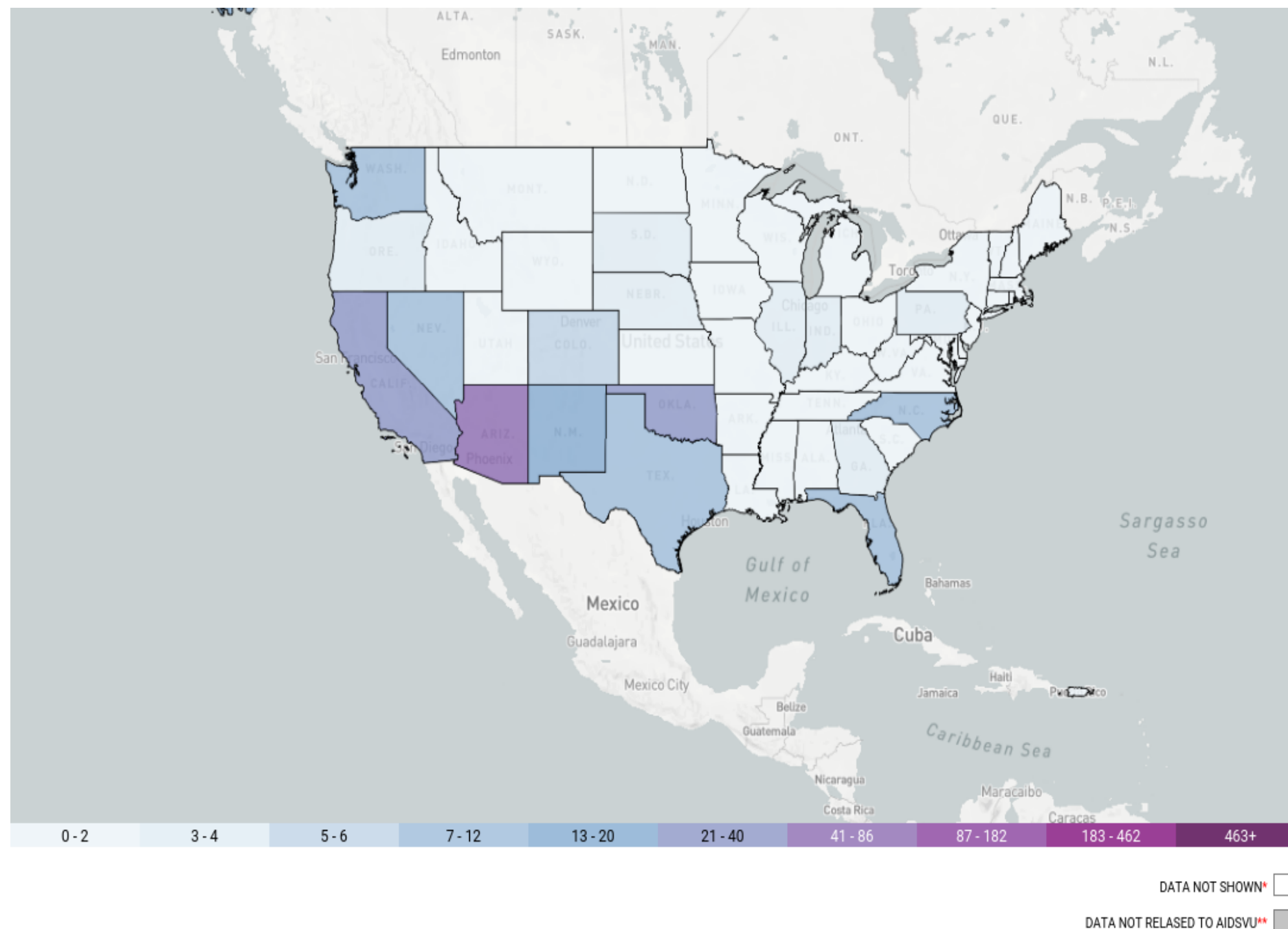
Increase of 58% between
2012 [N=91] and 2016 [N=144]



IDU = Injection Drug Use



Estimated Number of New Diagnoses Among AI/AN in the US, 2016



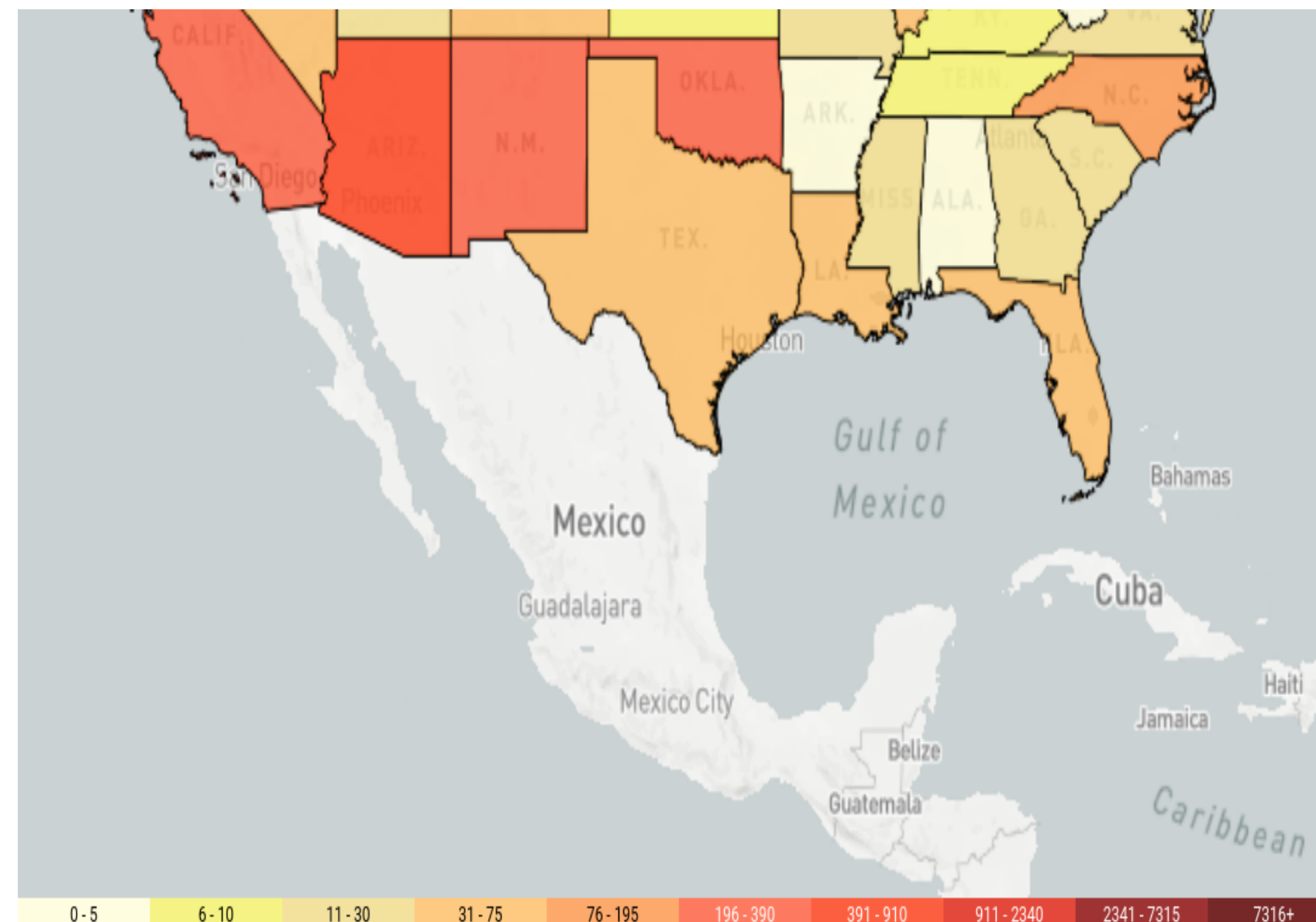
*Data not shown to protect privacy because of a small number of cases and/or a small population.

** State health department, per its HIV data re-release agreement with CDC, requested not to release data to AIDSVU. See Data Methods for more information.

NOTE: There are no country-level maps for Alaska, District of Columbia, and Puerto Rico because there are no countries in these states.



Estimated Number of AI/AN Persons with HIV in the US (Prevalence), 2016



DATA NOT SHOWN*

DATA NOT RELEASED TO AIDSVU**

*Data not shown to protect privacy because of a small number of cases and/or a small population.

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Linkage and Retention in HIV Medical Care

- There was a 26% increase in linkage to care following an HIV diagnosis in AI/AN since 2010.
- Substantial improvements in retention in care (34% increase between 2010-2015).
- Increase in viral suppression (63% between 2010 -2015).



Recent Developments

- Initial discussion between THRO, OAR, IHS to explore opportunities for collaboration within the framework of the *Ending the HIV Epidemic Initiative (EtHE)*.
- Administrative Supplements to support planning activities at existing NIH HIV/AIDS Centers (CFARs, ARCs) to address the *EtHE*.
 - NIH Centers for AIDS Research (CFAR) and IHS program staff to coordinate efforts and collaborative activities.
 - AI/AN Collaborative efforts across CFARs include; CAB representation, several ongoing and past research projects, such as a collaborative research project with the Indian Health Council in North Country (UCSD), inclusion in patient cohorts, and community events
- President's proposed budget for FY2020 includes \$25 M in new investments to establish the *Eliminating Hepatitis C and HIV/AIDS in Indian Country Initiative*
 - Will expand partnerships between IHS and Native communities to end the HIV epidemic in Indian Country.



Recent Developments

- March 4: Indigenous Wellness Research Institute (IWRI) at University of Washington, Seattle, hosted an OAR Constituency Engagement Meeting with participation by OAR Director.
- Presentation on the work of IWRI community-based research and the Urban Indian Health Initiative.
- Concerns raised during discussion:
 - Significant health disparities among AI/AN population.
 - Surveillance and reporting systems – lack of standardization.
 - Racial misrepresentation hinders designing better interventions.
 - Stigma, access to care affect testing, loss to follow-up.
 - Need for initiatives to specifically target AI/AN, particularly linking HIV with comorbidities such as STIs and IDU.
- OAR encouraged IRWI to work with UW-CFAR to focus project under *EtHE* on AI/AN.



The Challenges Moving Forward

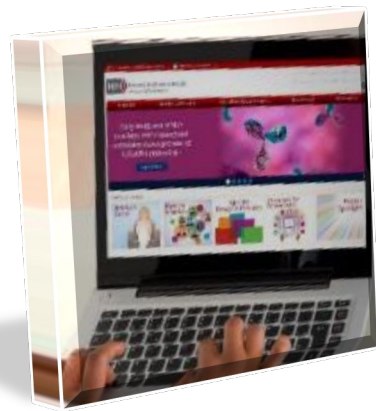
- Flat research funding, rising research costs.
- Need for effective vaccine and cure.
- Increasing comorbidities, coinfections, and complications in PWH.
- Stigma, scale-up, adherence, and lack of fully integrated approaches.
- Virus drug resistance.
- In alignment with **Ending the HIV Epidemic: A Plan for America**, eradicating HIV will require a significant infusion of resources and strategic practices in the right places targeted to the right people.



Questions?



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