



PrEP In The Real World: The Delaware Flavor

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Disclosures

- Gilead ART Speaker's Bureau
- Viiv ART Speaker's Bureau
- Not a “Debbie Downer” talk but rather trying to highlight areas where we can focus our efforts to do better!

- PrEP Epidemiology
- Local PrEP Experience
- Role of PrEP Navigator
- Challenges & Bright Spots of PrEP in Delaware
- PrEP Support Services

Ending the HIV Epidemic

Ending
the
HIV
Epidemic
A PLAN FOR AMERICA



GOAL:
75%
reduction in new
HIV infections
by 2025
and at least
90%
reduction
by 2030.

www.hiv.gov

1.Treat

2.Diagnose

3.Prevent

4.Respond

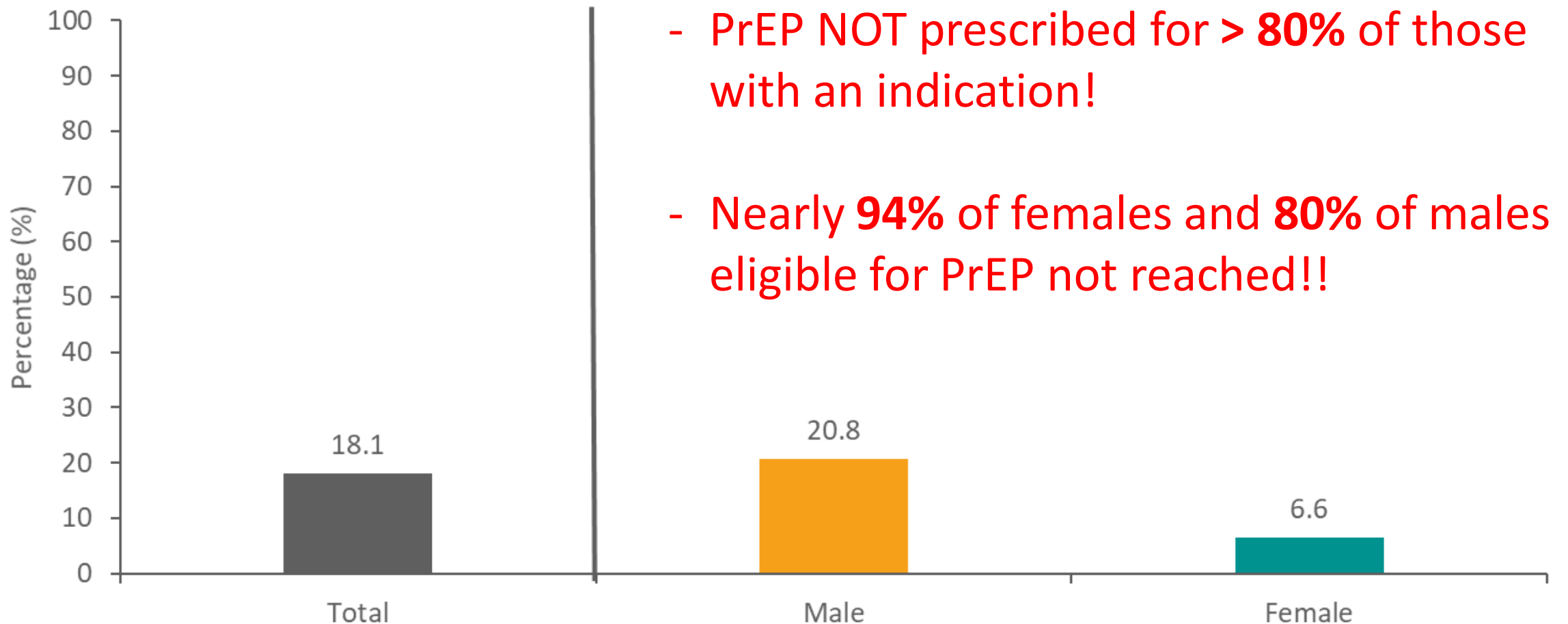
National PrEP Coverage Algorithm



Abbreviation: PrEP: preexposure prophylaxis.

Note. Algorithm has been validated by electronic health records with 96% sensitivity and 99% specificity.

PrEP Coverage among Persons Aged ≥16 Years, by Sex at Birth 2018—United States

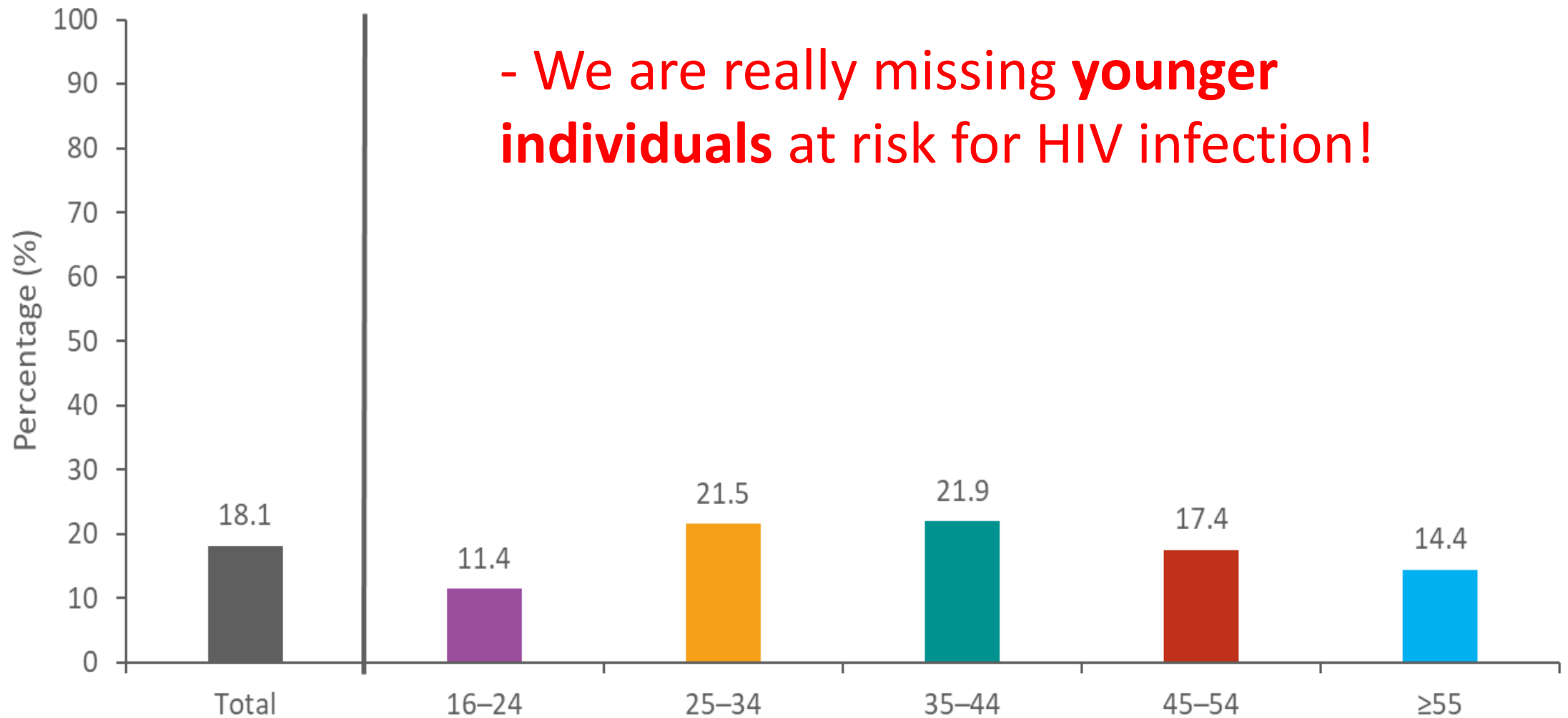


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Note. PrEP coverage, reported as a percentage, was calculated as the number who have been prescribed PrEP divided by the estimated number of persons who had indications for PrEP. Different data sources were used in the numerator and denominator to calculate PrEP coverage.



PrEP Coverage among Persons Aged ≥16 Years, by Age 2018—United States

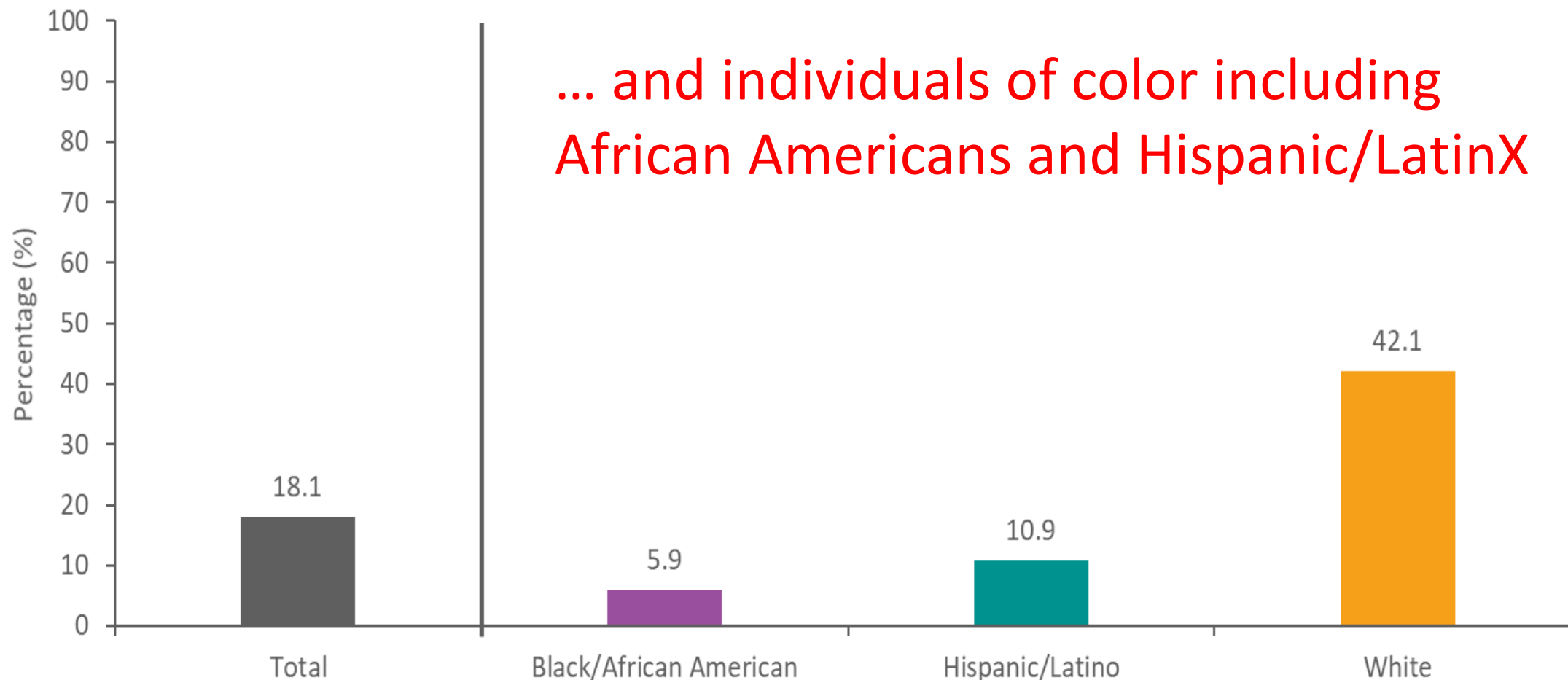


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PrEP Coverage among Persons Aged ≥ 16 Years, by Race/ethnicity 2018—United States

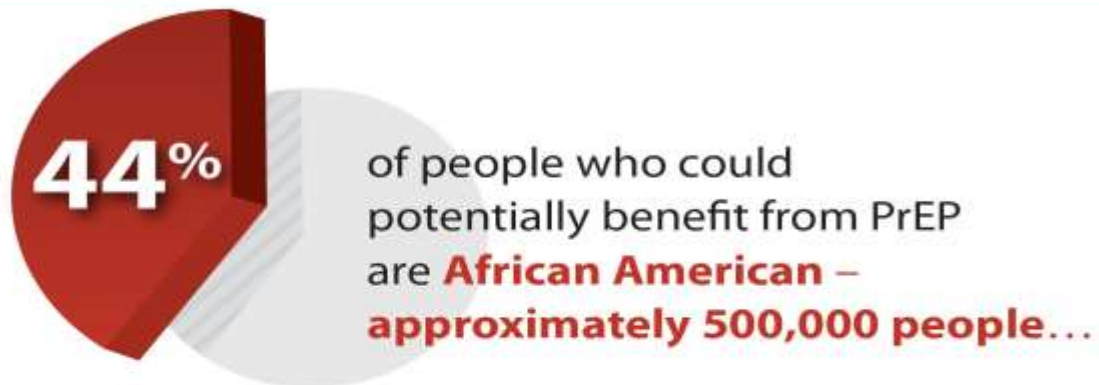


Abbreviation: PrEP, preexposure prophylaxis.

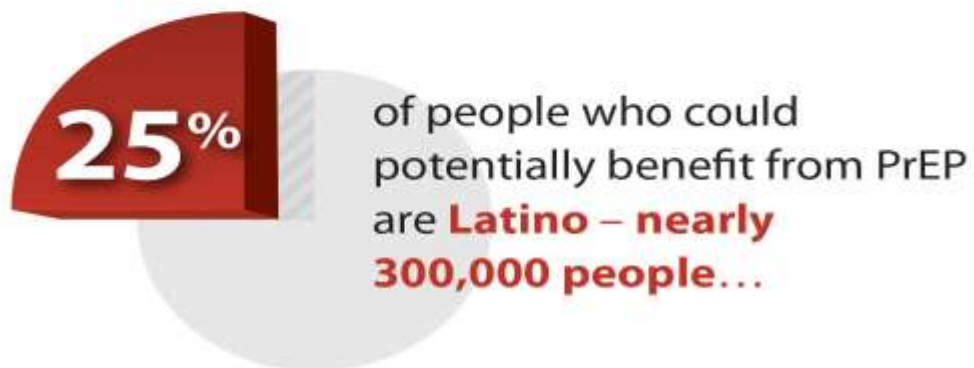
Note. PrEP coverage, reported as a percentage, was calculated as the number who have been prescribed PrEP divided by the estimated number of persons who had indications for PrEP. Race/ethnicity data were only available for 35% of persons prescribed PrEP in 2018. Number prescribed PrEP and PrEP coverage for race/ethnicity reported in the table were adjusted applying the distribution of records with known race/ethnicity to records with missing race/ethnicity. Different data sources were used in the numerator and denominator to calculate PrEP coverage.



HIV prevention pill is not reaching most who could potentially benefit – especially African Americans and Latinos



...but only **1%** of those – **7,000 African Americans** – were prescribed PrEP*

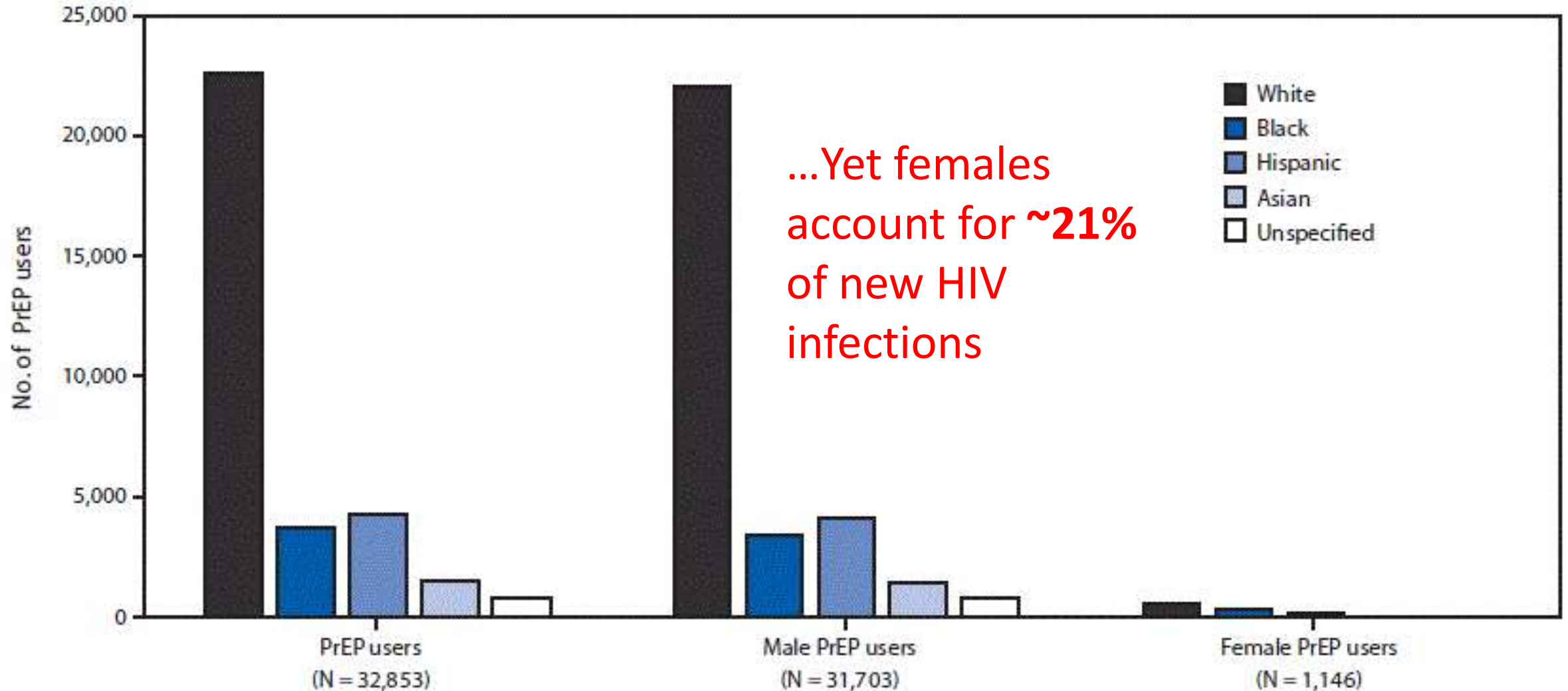


...but only **3%** of those – **7,600 Latinos** – were prescribed PrEP*



*Prescription data in this analysis limited to those filled at retail pharmacies or mail order services from September 2015 – August 2016; racial and ethnic information not available for one-third of the prescription data

FIGURE. Number of PrEP users by sex and race/ethnicity*—IQVIA Longitudinal Prescription Database, United States, 2016



Key actions to help end the HIV epidemic*

HIV tests determine the next prevention step, PrEP or HIV treatment.

TEST FOR HIV



86% of people with HIV know they have it.
TARGET: 95%

PREVENT

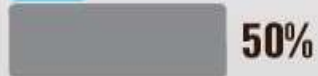
People without HIV, but at risk for it, can take PrEP as prescribed to prevent getting HIV.



HAVE PREP PRESCRIPTION



TARGET



HAVE HIV UNDER CONTROL



TARGET



TREAT

People who know they have HIV should take medicine daily to control the virus.



* The 4th pillar of Ending the HIV Epidemic, Respond, is not a part of these Vital Signs data.

SOURCE: MMWR December, 2019

Vital^{CDC}signsTM



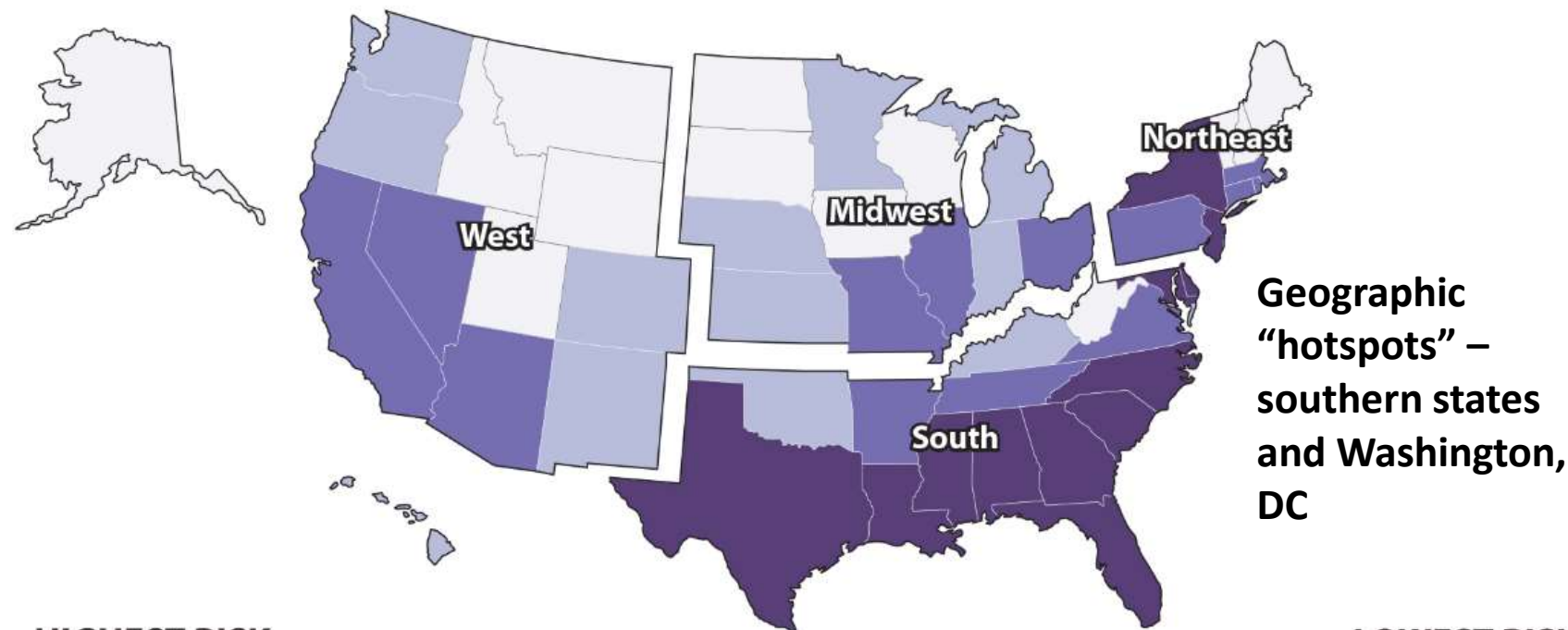
Want to learn more?

www.cdc.gov/vitalsigns/test-treat-prevent





Lifetime Risk of HIV Diagnosis by State



HIGHEST RISK

LOWEST RISK

State	One in “n”	State	One in “n”	State	One in “n”	State	One in “n”
District of Columbia	13	Nevada	98	Michigan	167	West Virginia	302
Maryland	49	Illinois	101	Oklahoma	168	Wisconsin	307
Georgia	51	California	102	Kentucky	173	Iowa	342
Florida	54	Tennessee	103	Indiana	183	Utah	366
Louisiana	56	Pennsylvania	115	Washington	185	Maine	373
New York	69	Virginia	115	Colorado	191	Alaska	384
Texas	81	Massachusetts	121	New Mexico	196	South Dakota	402
New Jersey	84	Arizona	138	Hawaii	202	New Hampshire	411
Mississippi	85	Connecticut	139	Oregon	214	Wyoming	481
South Carolina	86	Rhode Island	143	Minnesota	216	Vermont	527
North Carolina	93	Ohio	150	Kansas	262	Idaho	547
Delaware	96	Missouri	155	Nebraska	264	Montana	578
Alabama	97	Arkansas	159			North Dakota	670

- 9/2020: 3,459 PLWHA in Delaware
- ~1/2 cases from Wilmington Metropolitan Area (2018)
 - 70% male (~48% state population)
 - 58.4% African American (~22%)
 - 31% White
 - 8% Hispanic
 - <3% Other

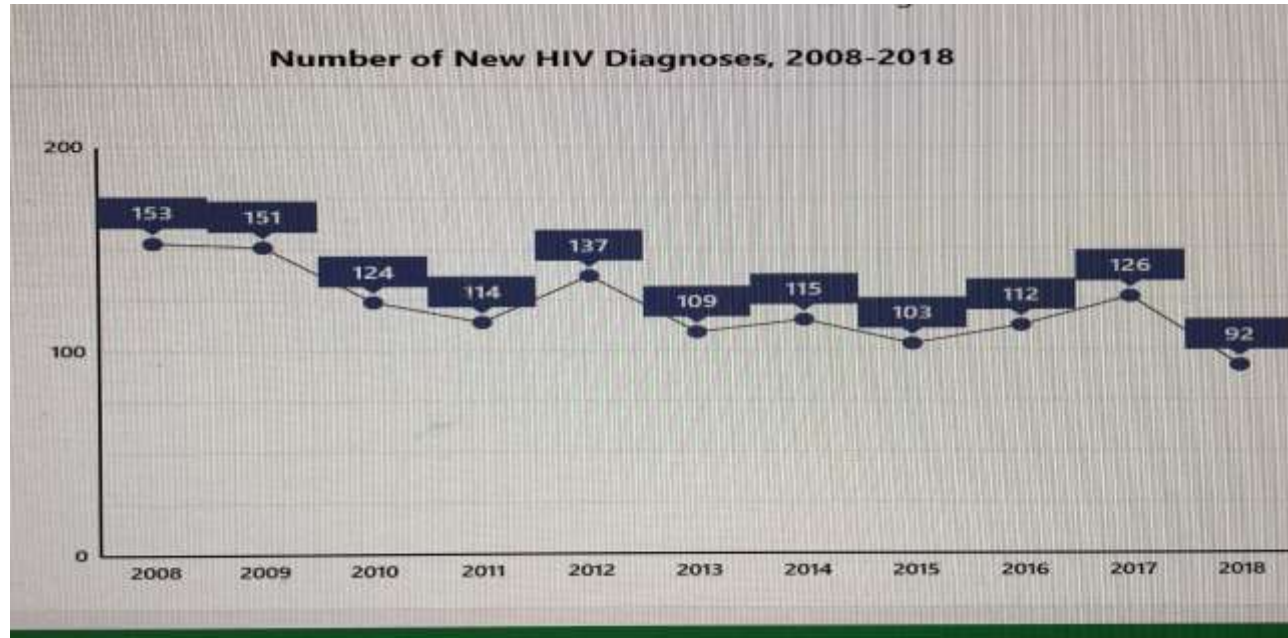
<https://www.delawarehiv.org/wp-content/uploads/2020/07/HIV-Update-06292020.pdf>

<https://www.delawarehiv.org/wp-content/uploads/2020/10/Monthly-Surveillance-Report-Through-September-2020.xls.pdf>

<https://aidsvu.org/local-data/united-states/south/delaware/>

<https://www.delawarehiv.org/delaware-prep/prescribers/>

Newly Diagnosed HIV Infections in Delaware



- 2018 - 92
- 2019 - 93



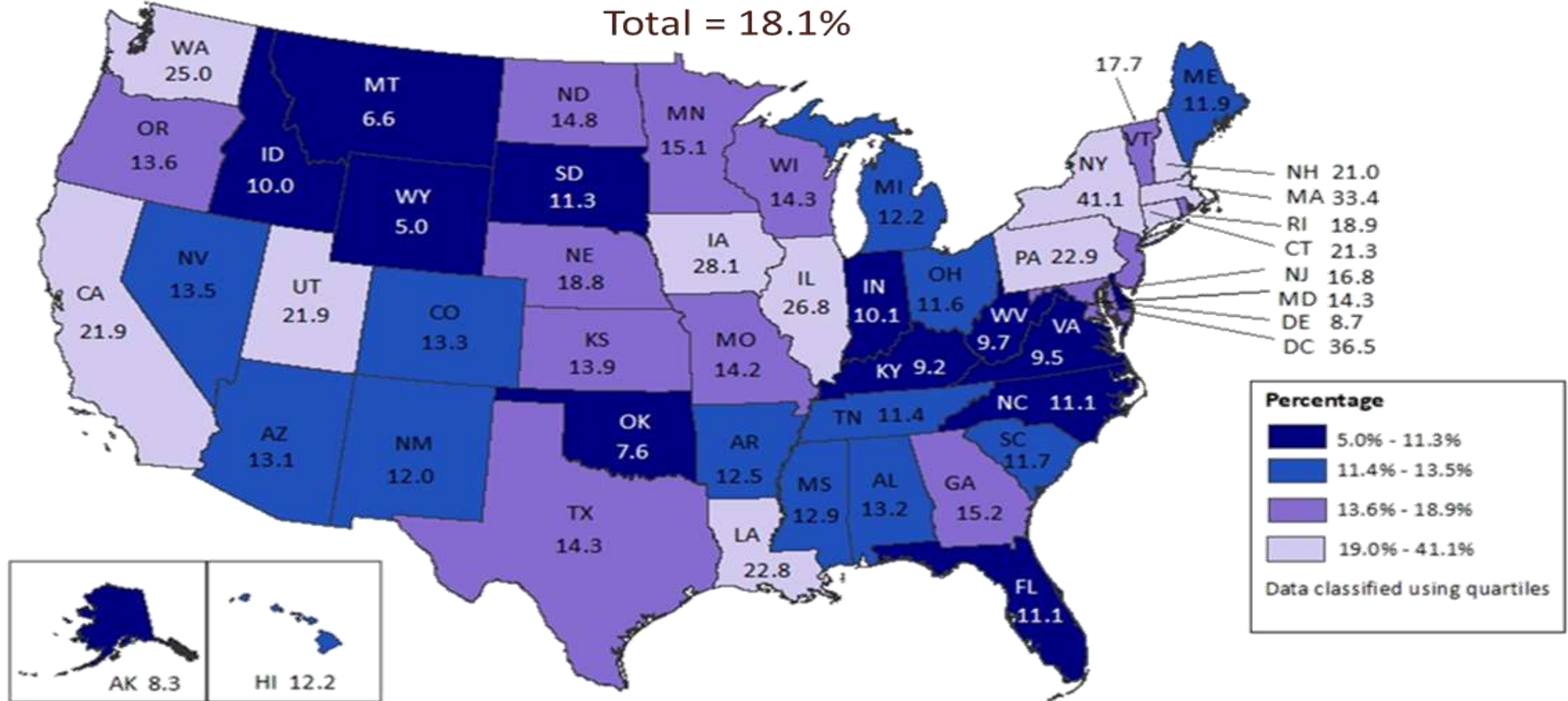
- ❖ MSM 58%
- ❖ Heterosexual 26%
- ❖ PWID 6%
- ❖ Unknown 11%

- As of 9/2020 – 66 (78 this time last year)

<https://www.delawarehiv.org/wp-content/uploads/2020/10/Monthly-Surveillance-Report-Through-September-2020.xls.pdf>

<https://aidsvu.org/local-data/united-states/south/delaware/>

PrEP Coverage among Persons Aged ≥16 Years, by Area of Residence, 2018—United States



Abbreviation: PrEP, preexposure prophylaxis.

Note. PrEP coverage, reported as a percentage, was calculated as the number who have been prescribed PrEP divided by the estimated number of persons who had indications for PrEP. Different data sources were used in the numerator and denominator to calculate PrEP coverage.



PrEP (Pre-Exposure Prophylaxis)

Number of PrEP users, 2018

470

Rate of PrEP users per 100,000 population, 2018

57

Percent of PrEP users, by Sex, 2018

93.0% male | 7.0% female

Percent of PrEP users, by Age, 2018

10.4% aged 13-24 | 39.1% aged 25-34 | 24.5% aged 35-44 | 14.3% aged 45-54 | 11.9% aged 55+

Number of PrEP Users, 2012-2018



PrEP-to-Need (PNR)

The 2018 PrEP-to-Need Ratio (PNR) is the ratio of the number of PrEP users in 2018 to the number of people newly diagnosed with HIV in 2017. PNR serves as a measurement for whether PrEP use appropriately reflects the need for HIV prevention. A lower PNR indicates more unmet need.

PNR, 2018
3.79

PNR, by Sex, 2018
4.86 male | 0.97 female

PNR, by Age, 2018
1.81 aged 13-24 | 5.75 aged 25-34 | 3.59 aged 35-44 | 3.53 aged 45-54 | 4.00 aged 55+

PNR, 2012-2018



DELAWARE

PrEP-to-Need (PNR) 3.79

Overall behind national PNR average
Lagging in female, adolescent and 35-44yoa PrEP coverage

NATIONALLY

4.89

PNR, by Sex, 2018

5.69 male | 1.62 female

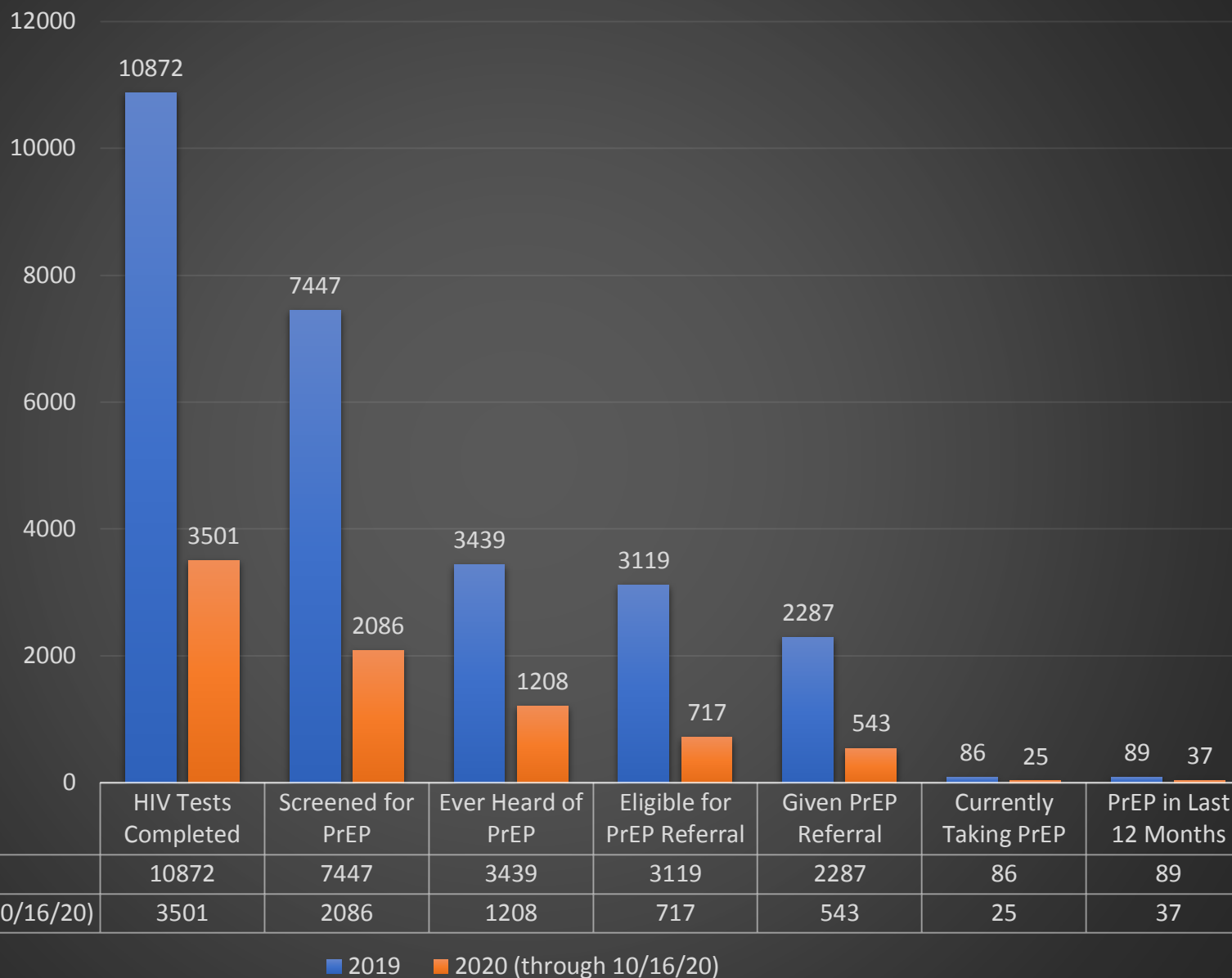
PNR, by Age, 2018

3.29 aged 13-24 | 5.60 aged 25-34 |

6.06 aged 35-44 | 5.34 aged 45-54 |

3.62 aged 55+

2019 & 2020 DE DHSS PrEP Care Continuum



- **Opportunities for improvement at every part of the continuum**
- **Limited community PrEP knowledge**
- **Extremely low levels of PrEP uptake**
- **Situation exacerbated in 2020**

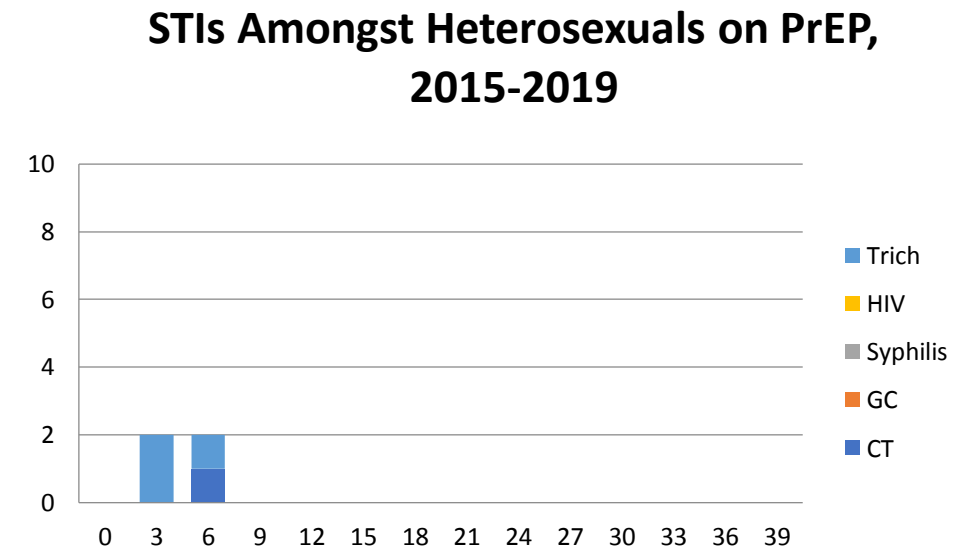
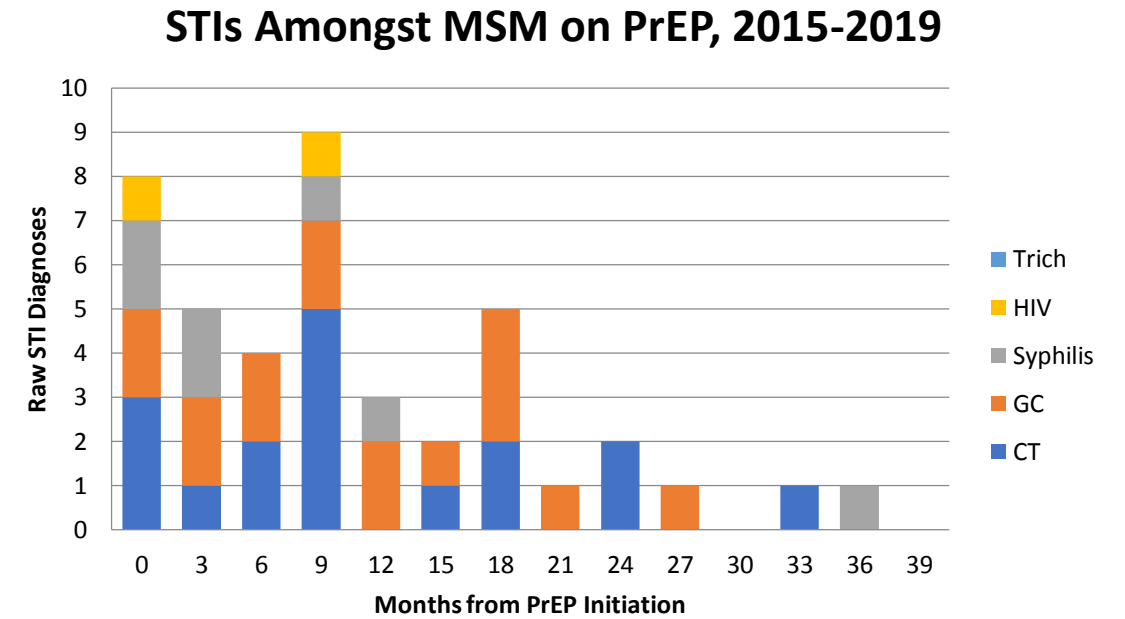
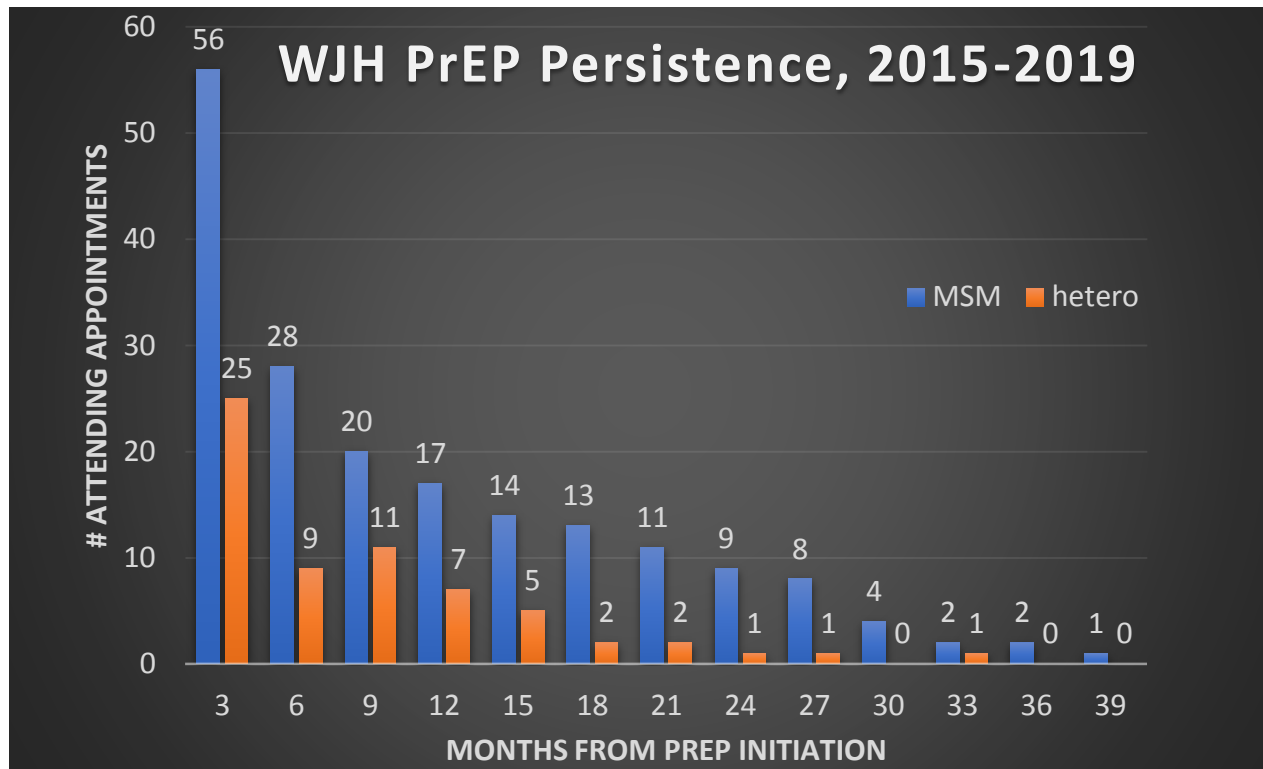
William J Holloway Community Program



- Only Ryan-White funded HIV clinic in the state
- Clients distributed through multiple sites throughout the state
- Patient population includes: PLWHA, HCV, PrEP, PEP
- Flagship site in Gateway/Wilmington Hospital - ~730 active PLWHA
- Multi-disciplinary care team model with MD/NP, RN, MA, OA, SW, Pharm, LCSW, mental health, ob-gyn, renal, primary care capacity

WJH – Nested PrEP Program

- 2015: Started to evaluate patients for PrEP
- Initially, many PrEP appointments were sero-discordant sexual partners of known clinic patients with HIV, particularly patients with newly diagnosed or uncontrolled HIV
- To date: > 80 people evaluated to date for PrEP at flagship site
 - Predominately male, 73%
 - 44% White, 41% African American, 12% Hispanic
 - Identified HIV Risk Factor(s): 60% MSM, 38% Heterosexual, 8% PWID
- Program-wide annual PrEP visits:
 - 2017-126 total visits
 - 2018-174
 - 2019-175
 - 2020-104 YTD



PrEP-Engaged or PrEP Curious?: A Characterization and Comparison of Initial PrEP Appointment Attenders Versus Non-Attenders

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Background:

Human immunodeficiency virus (HIV) pre-exposure prophylaxis (PrEP), with adequate adherence, is highly effective prevention of HIV-1 infection amongst high-risk individuals. While over 1 million individuals are PrEP-eligible in the U.S., those at highest risk for HIV, specifically young non-white men who have sex with men (MSM), represent some of the least penetrated groups to benefit from PrEP. No published data exists to characterize individuals with unattended initial PrEP appointments.

Methods:

Our program, an urban Ryan White funded HIV clinic that also provides HCV and PrEP care, prospectively collected demographic data on all patients with an attended initial PrEP appointment between November 2015 and March 2019. We retrospectively abstracted the same data for individuals with unattended initial PrEP appointments (including cancellations and no shows) during the same period. Descriptive statistical analyses used Student's t-test for continuous data (age) and Chi-squared tests for categorical data (all other variables).

Table: Characteristics of HIV PrEP Seekers Compared by Appointment Attendance

	Appointment Attendance			
Characteristic	Total (n=103)	Attended (n=69, 67%)	Did Not Attend (n=34, 33%)	p-Value
Sociodemographics				
Age, yrs, mean (standard deviation)	37 (11)	38 (11)	34 (12)	0.01
Sex, n (%)				0.19
Male	75 (73%)	53 (77%)	22 (65%)	
Female	28 (27%)	16 (23%)	12 (35%)	
Race/Ethnicity, n (%)				0.22
White	41 (41%)	31 (45%)	10 (32%)	
African American	44 (44%)	26 (38%)	18 (58%)	
Hispanic	12 (12%)	9 (13%)	3 (10%)	
Asian	3 (3%)	3 (4%)	0 (0%)	
(missing, n=3)				
Insurance, n (%)				<0.05
Private	47 (47%)	37 (54%)	10 (32%)	
Non-private*	53 (53%)	32 (46%)	21 (68%)	
(missing, n=3)				
HIV Risk Factors**				
Men who have sex with men, n (%)				<0.01
No	36 (40%)	20 (29%)	16 (73%)	
Yes	55 (60%)	49 (71%)	6 (27%)	
(missing, n=12)				
High Risk Heterosexual, n (%)				<0.01
No	55 (62%)	49 (71%)	6 (30%)	
Yes	34 (38%)	20 (29%)	14 (70%)	
(missing, n=14)				
Person who injects drugs, n (%)				0.21
No	67 (92%)	64 (93%)	3 (75%)	
Yes	6 (8%)	5 (7%)	1 (25%)	
(missing, n=30)				

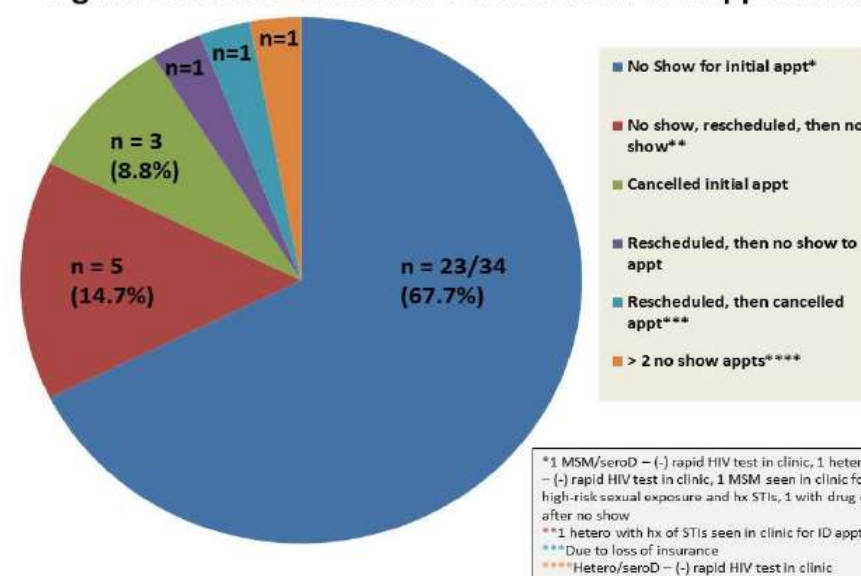
*Non-private insurance includes Medicaid, Medicare and uninsured

**There were 10 individuals with unattended initial PrEP appointments with no identified HIV risk factors. There was no individual with intravenous drug use identified as a sole HIV risk factor.

Results:

33% (34/103) of all individuals did not attend an initial appointment (Table). Younger age and non-private insurance were the 2 sociodemographic variables that were significantly associated with unattended versus attended initial appointments. Amongst those whose HIV risk factors were known, MSM were more likely to attend their appointment compared to non-MSM. 77% (26/34) of individuals with unattended initial appointments did not reschedule (Figure). Notably, 12% (4/34) PrEP-eligible individuals previously presented to the clinic yet did not re-present for dedicated PrEP evaluation.

Figure: Characterization of Unattended PrEP Appointments



*1 MSM/seroD - (-) rapid HIV test in clinic, 1 hetero/seroD - (-) rapid HIV test in clinic, 1 MSM seen in clinic for PEP s/p high-risk sexual exposure and hx STIs, 1 with drug overdose after no show
 **1 hetero with hx of STIs seen in clinic for ID appt
 ***Due to loss of insurance
 ****Hetero/seroD - (-) rapid HIV test in clinic

Conclusions/Discussion:

A significant proportion of individuals schedule but do not attend initial PrEP appointments. This cohort, particularly younger patients and those with non-private insurance, represents a distinct population - with a "near" yet incomplete engagement in care - for whom HIV prevention efforts and concerted outreach should be focused. Same day, rapid PrEP starts deserve serious consideration in order to capitalize on patient engagement when the opportunity presents. The paucity of data highlights the need for research of those who are PrEP-interested but not fully PrEP-engaged.

2015: William
J Holloway
PrEP Protocol

- PrEP Clinical Toolkit
- Dissemination from flagship to additional WJH program sites

2016: PrEP
Summit

- Engaging DE providers & health care professionals
- >22 PrEP prescribing sites in DE



Internal
ChristianaCare
Partnerships

- CC Family Medicine (>30-40 active PrEP)
- CC Primary Care Practices
- CC Residency Programs
- TJU/Sidney Kimmel College of Medicine

External
ChristianaCare
Partnerships

- AETC
- DHSS
- AIDS Delaware
- Delaware HIV Consortium
- BCCS
- Westside Family HealthCare
- Pharmaceutical Industry

- ☐ Creativity
- ☐ Collaboration
- ☐ Relationships
- ☐ Revision
- ☐ Bright Spots
- ☐ Barriers & Challenges
- ☐ Sharing Knowledge

Why Are We Not Engaging More Individuals at Risk for HIV ?

- Stigma
- Distrust of the healthcare system
- Healthcare/PrEP deserts
- Client awareness- knowledge of PrEP, perceived risk
- Prescriber knowledge or discomfort or lack of time/resources
- Unideal framing: risk > benefit
- Lack of/inadequate health insurance
- Concerns about disclosure (youth/minors)
- Competing priorities
- Covid-19
- Inadequate client support – not meeting clients where they ARE ...

PrEP Navigation



- *An intervention employed in chronic and infectious disease management to improve health outcomes by addressing patient- and systems-level barriers to care and treatment*
- Particularly effective in high-need populations including low-income and minority populations
 - HIV, HCV, PrEP
- Embraces meeting clients “where they’re at” in the moment

Coyle C, Viner K, Hughes E, et al. Identification and linkage to care of HCV-infected persons in five health centers-Philadelphia, Pennsylvania, 2012-2014. *MMWR Morb Mortal Wkly Rep* 2015; 64:459-63.

Kattakuzhy S, Gross C, Emmanuel B, et al. Expansion of treatment for hepatitis C virus infection by task shifting to community-based nonspecialist providers: a nonrandomized clinical trial. *Ann Intern Med* 2017; 167(5):311-8.

Morano JP, Zelenev A, Lombard A, Marcus R, Gibson BA, Altice FL. Strategies for hepatitis C testing and linkage to care for vulnerable populations: point-of-care and standard HCV testing in a mobile medical clinic. *J Comm Health* 2014; 39:922-34

Challenges for PrEP Patients & Programs

Reaching high risk individuals

Gaining trust

Navigating insurance challenges

Adherence to PrEP & appointments

PrEP persistence

Psychosocial instability

Stigma

Adequate clinical resources

Adapting to the times – Covid19, telehealth

Data holes/gaps



“Bright Spots” for PrEP Patients & Programs

- Identified need to get PrEP out there more
- Local increase in PrEP # patients on PrEP, Rxs, prescribers
- Vision & buy-in from the ground up (patients to staff to C-suite)
- Widely available, clear, up-to-date PrEP protocols
 - Patient education
 - Background/data
 - Provider checklist (covers 12-month cycle)
- Multidisciplinary team: OA, SW, Pharm, RN, MA, MD/NP
- Increasing resources to support PrEP
- Seeing PrEP move more into the primary care arena
- New technology (EMR, personal tech) and PrEP delivery systems on the horizon
- Make the change ... see the difference
- See people come off PrEP when they are no longer at risk

PrEP YOURSELF ... Be Part of the Difference



PrEP Resources



- William J Holloway Community Program – 6th floor Gateway – Wilmington Hospital
 - Deborah Kahal – deborah.kahal@christianacare.org
 - 302-320-1300
- Delaware HIV Consortium @ delawarehiv.org, <https://www.delawarehiv.org/delaware-prep/>
- AIDS Delaware @ aidsdelaware.org
- Ready, Set, PrEP @ <https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/prep-program>
- Preexposure Prophylaxis for the Prevention of HIV Infection in the United States – 2017 Update. Centers for Disease Control and Prevention (CDC). <https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2017.pdf>
- Preexposure Prophylaxis for the Prevention of HIV in the United States – 2017. Clinical Providers' Supplement. CDC. <https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-provider-supplement-2017.pdf>
- CDC PrEP Training for Clinicians. <https://www.cdc.gov/actagainstaids/campaigns/prescribe-hiv-prevention/clinician-training/index.html>
- New York State Department of Health Clinical Guidelines on PrEP and PEP
- UCSF CCC (Clinician Consultation Center) PrEPLine - 855-448-7737, 11am – 6pm EST
- Patient PrEP Experiences:
 - MyPrEPExperience.org, Projectinform.org, PrEPFacts.org

Acknowledgements

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<https://www.maaetc.org/>