

# **Provider-Delivered PrEP\* Referrals, Maricopa County STD Clinic**

(\* Pre-Exposure Prophylaxis for HIV Prevention)

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CDC/NCHHSTP/DSTDP

# What is PrEP?

- Another strategy for reducing HIV acquisition
- Utilizes tenofovir/emtricitabine orally
  - FDA approved indication in July 2012
  - Increased protective effect with combination
  - Once daily and generally well tolerated

# Pre-Exposure Prophylaxis (PrEP)

- IPREX, 2010, MSM
- In combination with (1) testing, (2) risk-reduction, and (3) adherence counseling, daily tenofovir/emtracitabine was responsible for 44% reduction in incident infection
- Among MSM with detectable blood levels of this medication, 90% reduction in HIV acquisition
- QD dosing

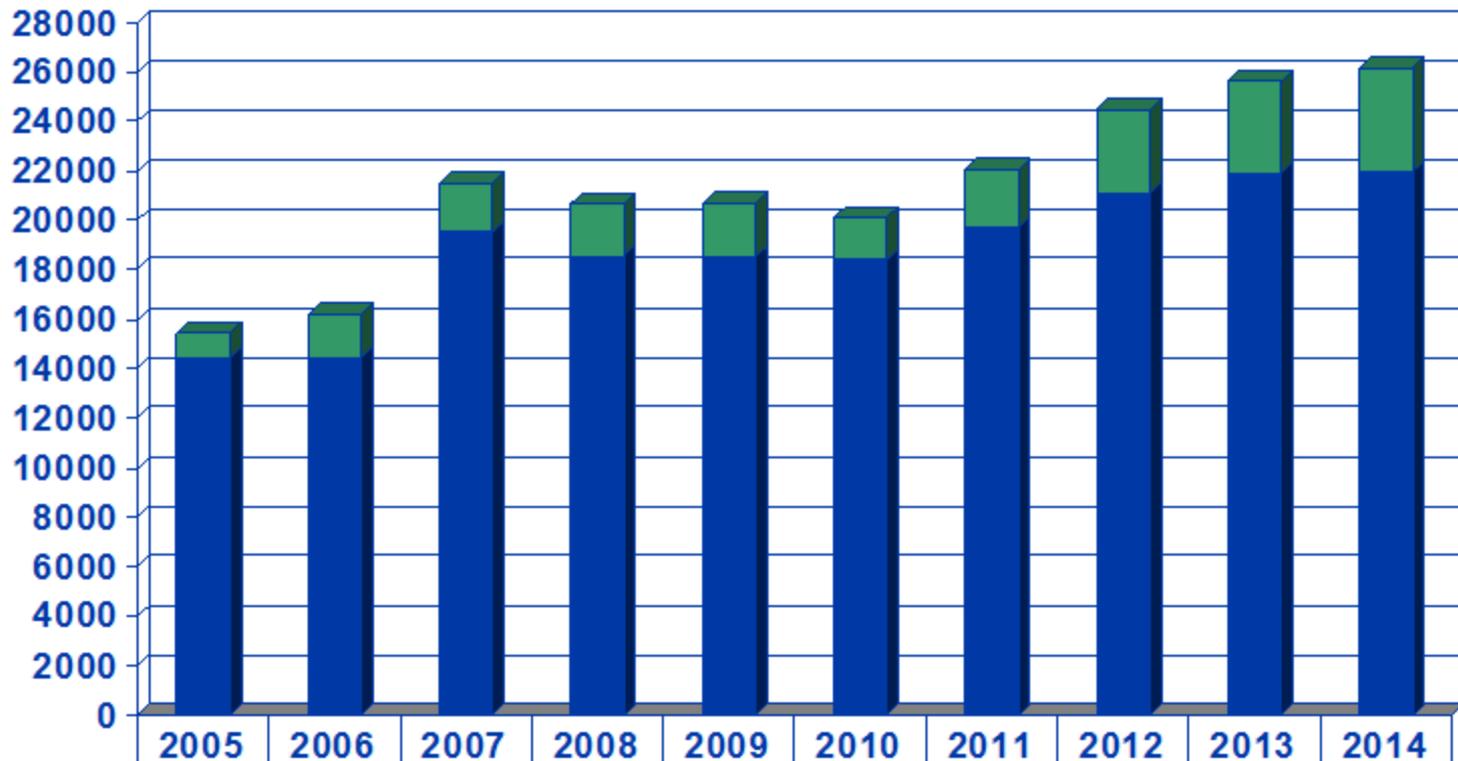
([http://www.cdc.gov/hiv/pdf/prevention\\_PrEP\\_factsheet.pdf](http://www.cdc.gov/hiv/pdf/prevention_PrEP_factsheet.pdf) ).

# STD/HIV Interaction

- Persons with STDs have a 2-5 times greater risk of HIV acquisition and transmission
- STDs increase HIV viral load
- HIV-infected persons with detectable amounts of virus in their blood are more likely to transmit HIV
- STDs are indicators of HIV transmission and acquisition risk
- High rates of STDs (HIV, syphilis, chlamydia, gonorrhea) occur among men who have sex with men (MSM) in Maricopa County.

# STD Program Testing

## 2004-2014



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
■ Outreach	1032	1759	1946	2096	2151	1698	2374	3417	3738	4138
■ STD Clinic	14436	14455	19580	18555	18522	18418	19682	21077	21905	22013

# Maricopa County STD Clinic Patient Flow

20,000-22,000  
Patient Visits  
per Year

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graph TD; A[20,000-22,000 Patient Visits per Year] --> B[Approximately 50% undergo "lab only" visit]; A --> C[Approximately 50% will have a provider visit];
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Approximately  
50% undergo  
“lab only” visit

Approximately  
50% will have a  
provider visit

## Objective

- ❑ Evaluate standard practice referral of high risk HIV-Negative Men who have Sex with Men (MSM) to community medical care providers for consideration for Pre-Exposure Prophylaxis (PrEP) for HIV Prevention following CDC guidelines [CDC].
- ❑ Period April 1, 2014-April 30, 2015 (13 months)
- ❑ ADHS non-research determination (June 2015)

## **Methods: Patient Eligibility for PrEP Referral**

- ❑ Men who have sex with men (MSM)**
- ❑ HIV-Negative by report or test**
- ❑ Provider Visit during April 1, 2014-April 30, 2015**
  - Contact
  - Symptoms
  - Case investigation referral for screening
  - STD Case
  - High risk sexual activity

## HIV Prevention Referrals (PEP and PrEP)

Arizona Pulmonary Specialists  
Omar Gonzalez, MD  
3330 North 2<sup>nd</sup> Street, Suite 300  
Phoenix, AZ 85012  
Phone 602-443-0184  
<http://www.azpulm.com>

First Family Medical Group  
Ken Fisher, MD  
1444 West Bethany Home Road  
Phoenix, AZ 85013  
Phone: 602-242-4843

Pueblo Family Physicians  
Doug Cunningham, MD  
4350 North 19<sup>th</sup> Avenue #6  
Phoenix, AZ 85015  
Phone: 602-264-9191

Family Practice Specialists  
Kate Montgomery, MD  
4350 E Camelback Rd  
Phoenix, AZ 85018  
Phone: 602-955-8700  
[www.fpsaz.com](http://www.fpsaz.com)

Camelback Mountain Medical Assoc.  
Griffin Cipolla, DO  
120 East Monterey Way  
Phoenix, AZ 85012  
Phone: 602-266-4383

FIT Health Care Clinic  
4312 N. 7<sup>th</sup> Avenue  
Phoenix, AZ 85013  
Phone 602-279-5049  
<http://www.fithealthcareclinic.com/>

Spectrum Medical Group, P.C.  
Thanes Vanig, MD  
52 E. Monterey Way  
Phoenix, AZ 85012  
Phone: 602-604-9500  
<http://spectrummedgroup.com/>

Scottsdale Healthcare  
Randy Gelow, MD  
7301 East 2<sup>nd</sup> Street, Suite 300  
Scottsdale, AZ 85251  
Phone 480-882-7300  
[www.primarycareosborn.org](http://www.primarycareosborn.org)

# Methods: Extracting PREP Referrals in EClinicalWorks®(ECW)

- ❑ **Year 2014 structured PrEP referral field**
  - Patient list abstracted from ECW
  - Referral field accidentally dropped at end of Dec 2014
- ❑ **Year 2015 individual chart review of each MSM with provider visit**
  - 490 chart reviews
    - 100 patients (29%) with prior HIV infection

## Methods: Phone Survey (8 Questions)

1. Do you remember receiving the referral for Pre-Exposure Prophylaxis (PrEP) for HIV prevention during your visit to the STD Clinic? (Yes/No)
2. Did you make an appointment with one of the providers on the referral list to be evaluated for PrEP? (Yes/No)
3. Did you attend the appointment to be evaluated for Pre-Exposure Prophylaxis (PrEP)? (Yes/No)
4. Did your provider talk to you about Pre-Exposure Prophylaxis (PrEP) for HIV prevention?
5. Did the provider prescribe the medication used for Pre-Exposure Prophylaxis (PrEP)? (Yes/No)
6. Did you take the medication used for Pre-Exposure Prophylaxis (PrEP)? (Yes/No)
7. How long did you take the medication used for Pre-Exposure Prophylaxis (PrEP)?
8. If you did not take PrEP, would you like us to mail referral information to you? (Yes/No)

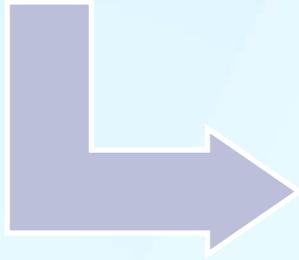
# Results (1)

## April 1, 2014-April 30, 2015 (13 months)

- ❑ 5,543 unique male client provider visits
- ❑ 1,225 unique MSM visits (22%)
  - 214 Express visits
  - Estimated 20% HIV infected (Based on 2015 chart review)
- ❑ 809 estimated eligible for PrEP referral
- ❑ 176 (22%) received PrEP referral
- ❑ 109 (62%) men were reached by I H S Pharmacy Resident

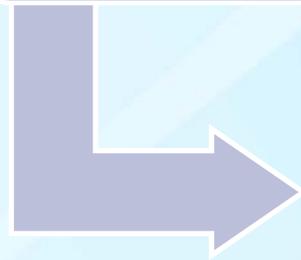
-5,543 male  
provider visits  
-1,225 MSM  
Provider visits  
(22%)

- Male visits

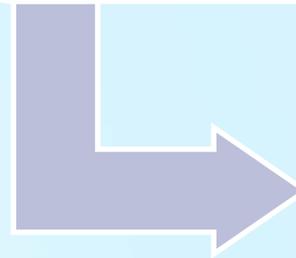


-214 Express Visits  
-est. 202, (20%) of  
males with  
prior/new HIV

- Not  
Eligible



809 eligible  
for PrEP  
referral



176 (22%)  
received  
PrEP referral

# PrEP Referrals, April 1, 2014-April 30, 2015 Maricopa County STD Clinic (N = 176)

## PrEP Referrals by Month



# Phone Survey Results

## N = 109 (62% response rate)

	Yes #(% )	Notes
Remember Referral?	78 (72%)	
Attended Appointment?	9 (12%)	6 with PCP not on referral list
Provider Offer PrEP?	9 (100%)	
Provider Prescribe PrEP?	7 (78%)	
Took Medication?	5 (71%)	
How Long?		Range 3-10 mos
Would like information sent	20 (18%)	Information sent July 2015
<b>Percent of total patients referred and contacted for survey that started PrEP</b>	<b>5/109 (5%)</b>	

## Top Reasons for Not Seeking PrEP Appointment Following Referral (N = 74)

- ❑ Not interested (14)
- ❑ Not insured (12)
- ❑ Need more information (8)
- ❑ Does not remember why (6)
- ❑ Busy (5)
- ❑ Changed lifestyle (4)
- ❑ Cost (3)
- ❑ Not covered by insurance (3)
- ❑ Not at risk (3)

# Conclusions

- ❑ **Few (22%) eligible MSM clients were referred for PrEP**
  - 3/5 providers had no recorded PrEP referrals
- ❑ **Few referred clients remembered the referral**
- ❑ **Only a small number (N = 9) of clients sought PrEP following a referral**
- ❑ **Even fewer (N = 5) actually took the medication**
- ❑ **Many clients were not interested in taking PrEP**

## Limitations

- ❑ Sample size limited our ability to evaluate correlates of PrEP use
- ❑ Survey followup closer to the time of visit for some patients may have improved recall
- ❑ Complex data abstraction with EClinicalWorks may have missed some referred clients
- ❑ Providers may have referred but not documented referral
- ❑ Response rate was moderate

## Implications/Future Directions

- ❑ **Opportunities to increase PrEP referrals by STD providers**
  - Provider education/advocacy/monitoring
  - Repeat referrals may also improve follow up for PrEP
- ❑ **PrEP education and advocacy needed in the MSM community**
- ❑ **Evaluation for client follow-up for attendance at PrEP appointment needed especially for clients with repeat STD infections**

## Acknowledgements

- ❑ Carlos Gonazalez, PharmD (FDA)
- ❑ Seema Sewell, MS (MCDPH)
- ❑ Tom Mickey, BS (MC STD Program Director)
- ❑ Clinicians at Maricopa County STD Clinics

[MDT7@cdc.gov](mailto:MDT7@cdc.gov)

[www.STDaz.com](http://www.STDaz.com)





CHECK FOR SORES. SYPHILIS CAN LEAD TO HIV.

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**CYA: CHECK  
YOURSELF AFTER**

**+ STDAZ.COM**



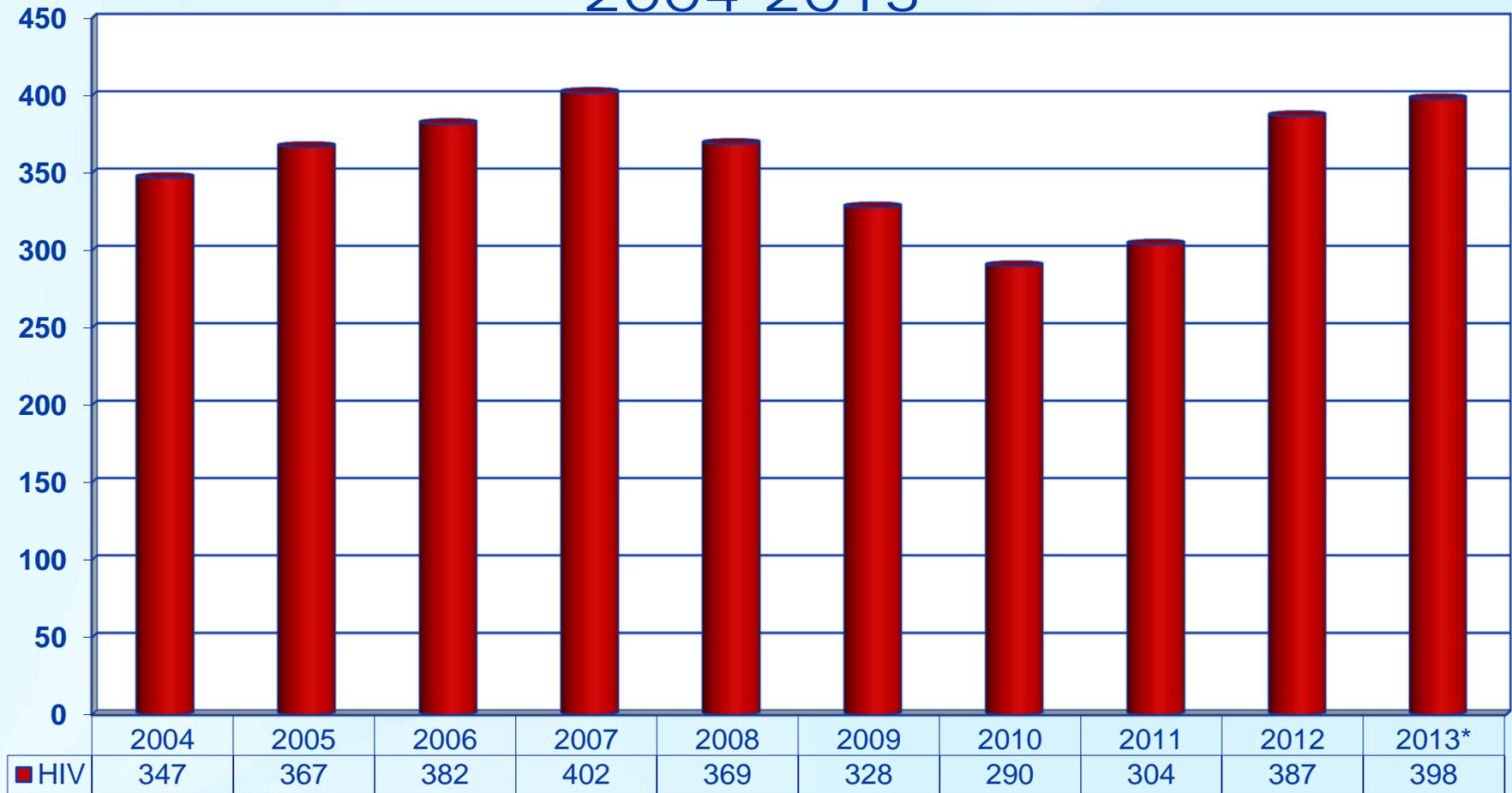
# EXTRA SLIDES



## MSM Reason for Visit (N = 1,225)

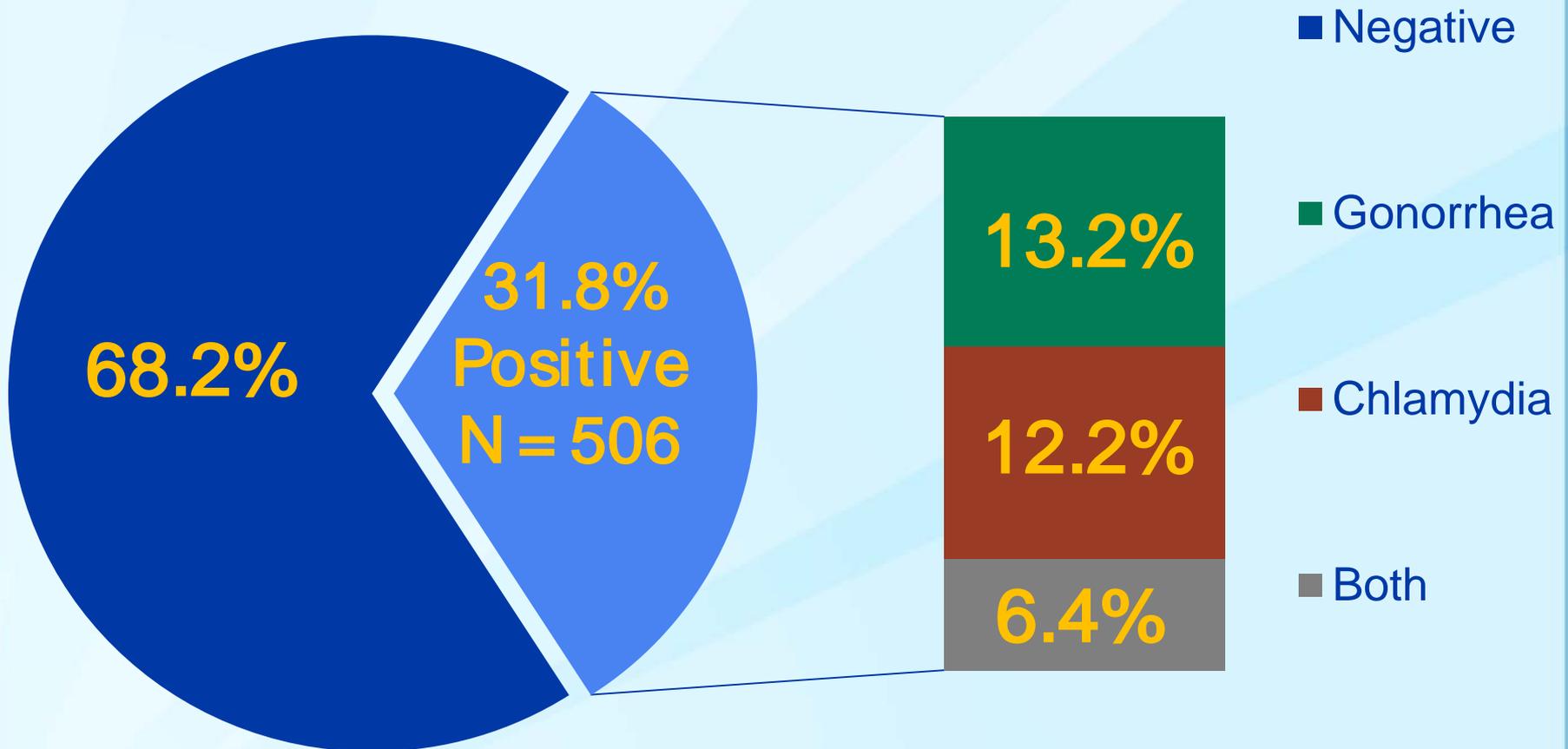
Code for Visit	N	Percent
Urethritis	249	20%
Contact	227	19%
High-Risk Screening	272	22%
Syphilis	100	8.1%
Gonorrhea	93	7.6%
Chlamydia	14	0.1%
(Missing)	214	(17.5%) (Express)

# Maricopa County HIV Cases Newly Diagnosed 2004-2013



\* Preliminary case numbers

# Men Undergoing Rectal Testing (N = 1,591)

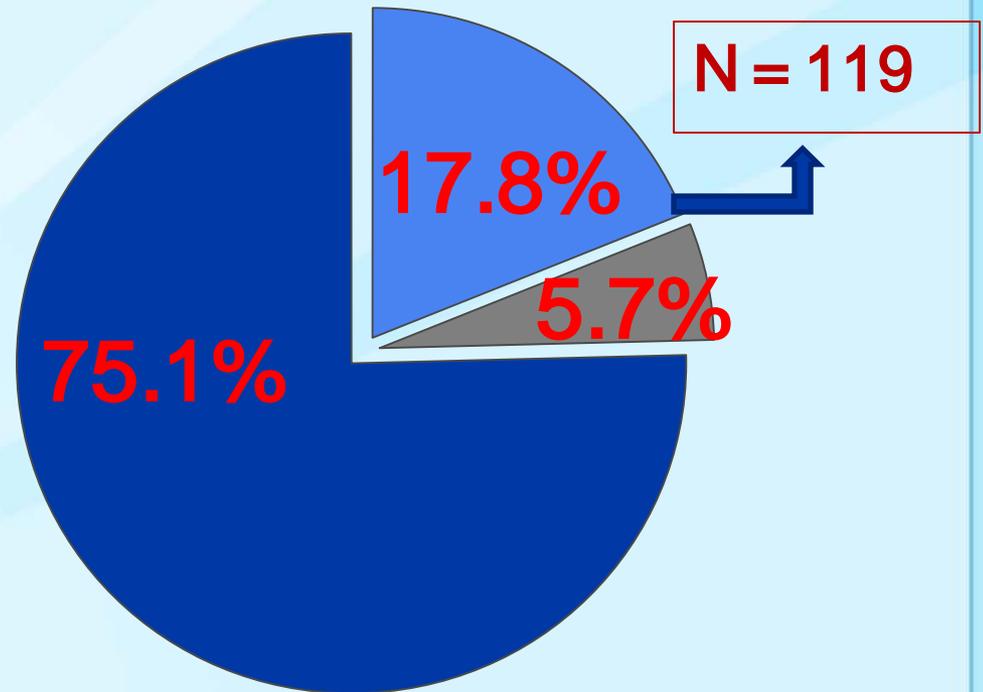


Taylor MM, Newman DR, Gonzalez J, Skinner J, Khurana R, Mickey T. HIV Status and Viral Loads among Men Testing Positive for Rectal Gonorrhea and Chlamydia, Maricopa County, Arizona, 2011-2013. *HIV Medicine*. 2014. 16 (4): DOI: 10.1111/hiv.12192.

# HIV Status of Men with Rectal CT or GC Infection

N = 506

- Prior HIV
- New HIV Dx
- HIV Negative



Taylor MM, Newman DR, Gonzalez J, Skinner J, Khurana R, Mickey T. HIV Status and Viral Loads among Men Testing Positive for Rectal Gonorrhea and Chlamydia, Maricopa County, Arizona, 2011-2013. *HIV Medicine*. 2014. 16 (4):DOI: 10.1111/hiv.12192.

# Why isn't PrEP more widely utilized?

- Need provider able to perform baseline screening
- Need provider to perform every 2-3 month appropriate follow-up
- Estimated annual cost of \$11,740
  - Excluded from most insurance coverage

# Indications for PrEP

- High risk of HIV acquisition
  - MSM
  - Regular partner with HIV
- Serodiscordant couples
  - No data on additional protective benefit above treating the source patient
- Will have regular medical follow-up
- Will adhere to daily treatment