#### Thank you for joining:

#### AIDSVu's County-Level PrEP Data & Maps Launch

The webinar will begin at 2:30 pm ET/ 11:30 am PT

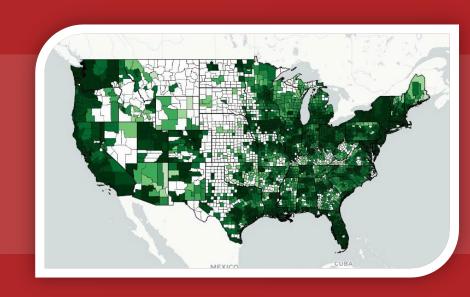


- Join the call via phone or computer by clicking the phone button, computer audio is preferred
- We will <u>not</u> be using webcams for this presentation, turn off your webcam with the camera button
- To submit questions, click the chat icon and type your question before hitting the "enter" key



#### **County-Level PrEP Data**

Patrick Sullivan, DVM, PhD, Professor, Department of Epidemiology, Emory University, Rollins School of Public Health





# Agenda

- 1. AIDSVu Overview
- 2. AIDSVu's PrEP Data Source & Methods
- 3. AIDSVu's PrEP Data Insights
- 4. Other AIDSVu PrEP Data Resources
- 5. Q&A



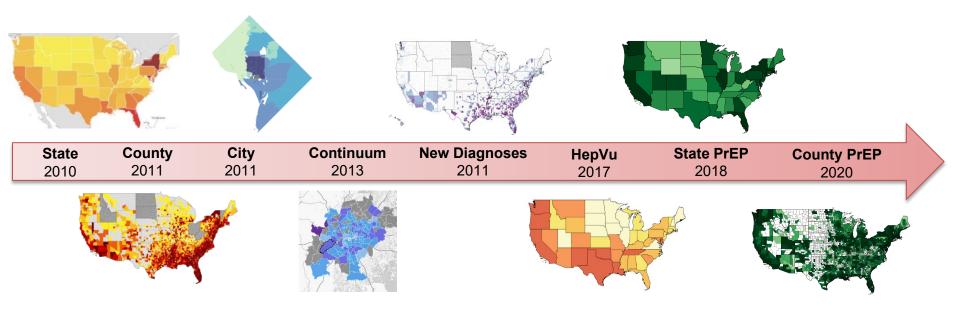
#### AIDSVu's Mission

- Making data widely available, easily accessible and locally relevant to inform public health decision-making
- Partnership since 2010
   between Gilead Sciences
   and Emory University's
   Rollins School of Public
   Health





# AIDSVu's History



# AIDSVu's PrEP Data Source & Methods



#### Background on PrEP

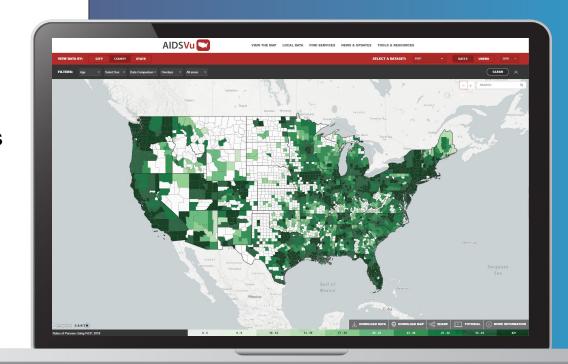
- CDC estimates that approximately 1.1 million people are at high-risk for HIV exposure and could benefit from comprehensive HIV prevention strategies, including PrEP
- Number of PrEP users has increased by more than 1,700% since 2012
- PrEP use varies significantly across different sexes, age groups, races/ethnicities, and geographic regions





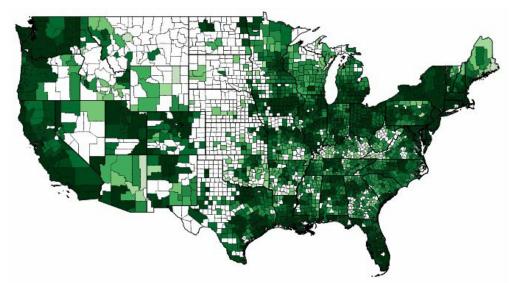
#### PrEP Data on AIDSVu

- In March 2018, AIDSVu released the first-ever statelevel data and interactive maps of PrEP users and rates of PrEP use per 100,000 population ("PrEP Prevalence")
- Now, we are adding the first ever county-level data on PrEP (2012-2018).





#### PrEP Data on AIDSVu



Rates of Persons Using PrEP, per 100,000 population, 2018



# County-level maps and datasets include:

- PrEP Users and Rate of PrEP Use
- Yearly data 2012 to 2018
- Overall, by sex, and by age
- Available alongside social determinants of health



#### **Data Source**

- First of its kind data release agreement: Data obtained from Symphony Health with the support of Gilead Sciences, Inc., and compiled by researchers at the Rollins School of Public Health at Emory University
- No single entity collects data on all users of PrEP in the U.S. The exact number of PrEP users is unknown
- Data on AIDSVu derived from a single data source (Symphony Health) open sample of commercially available data from more than 54,000 pharmacies, 1,500 hospitals, 800 outpatient facilities, and 80,000 physician practices
- Validated algorithm excludes use for HIV treatment, post-exposure prophylaxis, and off-label treatment of chronic Hepatitis B before state-specific weights were applied
- Data suppression rules were applied



#### **Data Methods**

- Represent a reliable and consistent metric for PrEP users at the county- and state-level in the U.S. by year
- The actual number of PrEP users is likely higher
  - Dataset does not contain all TDF/FTC prescriptions in the U.S. for example, dataset does not include data from closed healthcare systems and other entities that do not share their data with Symphony Health.
- Well suited to be used for public health research and planning purposes
  - Monitor progress, trends, and disparities in PrEP use at the county- and state-level and among specific age groups or sexes
  - Compare relative levels of PrEP use among counties, states, and regions
  - Support research to investigate questions related to PrEP awareness, access, and use
  - Inform public health planning



#### Data Methods, Continued

- The data start as ZIP3, but ZIP3 do not always line up with county lines
- A validated allocation algorithm was applied using the 2010 U.S.
   Census ZIP Code Tabulation Area (ZCTA5) to County Relationship file,
   known as "Crosswalk"
- PrEP users residing in ZIP3's were distributed into overlapping counties according to population weights to obtain the number of PrEP users at the county-level
- Adjusted with state-specific weights, accounting for missing clinical data



#### PrEP Data Available on AIDSVu

#### Raw PrEP Data

- Consistent, conservative, and minimum number of PrEP users
- Available for download at county-level
- Prior AIDSVu PrEP maps utilized this method

#### **Adjusted PrEP Data**

- Adjusted with statespecific weights to estimate the number of PrFP users
- Accounts for missing clinical data
- Reliable and consistent metric for PrEP users
- Used for interactive maps and local data profiles
- Available for download at national-, regional-, state-, and county-level

#### **Best Estimate PrEP Data**

- Weighted to account for national estimate that 20% of all PrEP prescriptions are filled at nonparticipating pharmacies to provide a best estimate number of PrEP users
- Accounts for missing pharmacy data
- Available for download at county-level

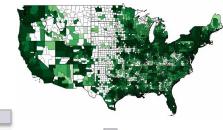


# PrEP Data Available as Maps & Datasets

Symphony Health Data Set Algorithm determines PrEP script

Crosswalk Zip3 to County + Missing clinical data (weight by state)

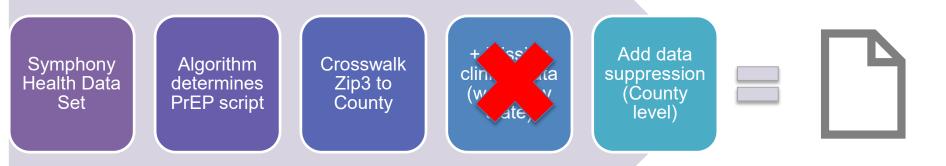
Add data suppression (County level)







#### PrEP Data Available as Datasets



#### PrEP Data Available as Datasets

+ Missing +20% Algorithm Add data Symphony Crosswalk clinical missing determines suppression Health Zip3 to data pharmacy PrEP (County Data Set County (weight by data level) script (national) state)

## Annals of Epidemiology

- Sullivan et al.'s article in Annals of Epidemiology, Methods for County-Level Estimation of Pre-exposure Prophylaxis Coverage and Application to the U.S. Ending the HIV Epidemic Jurisdictions
- Siegler et al.'s article in Annals of Epidemiology, Policy and County-Level Associations with HIV Pre-exposure Prophylaxis Use, United States, 2018

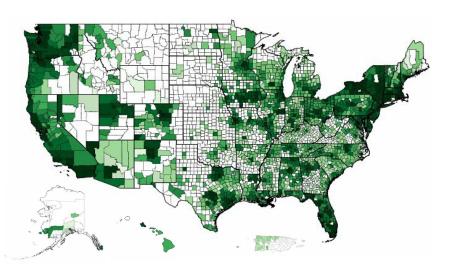


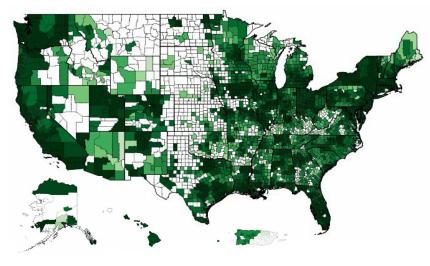


# AIDSVu's PrEP Data Insights



2017 2018



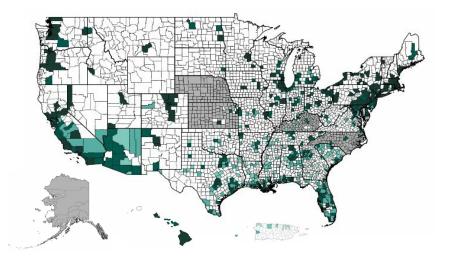


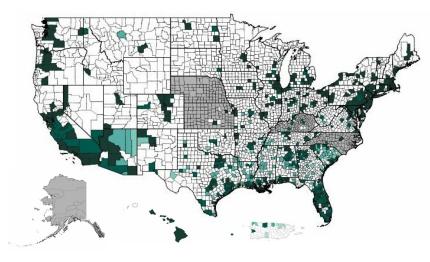
Rates of Persons Using PrEP, per 100,000 population, 2017 vs 2018

0-5 6-9 10-12 13-16 17-19 20-22 23-26 27-32 33-41 42+



2017 2018

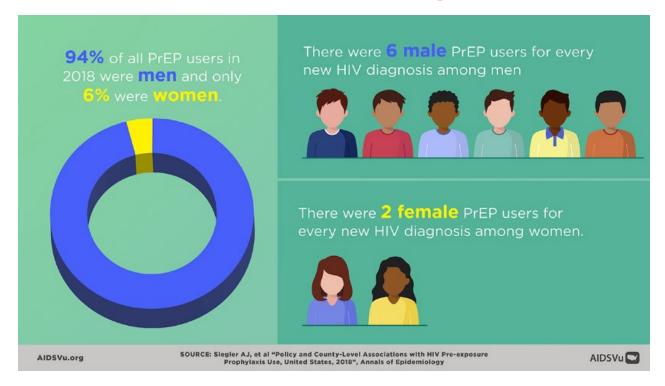


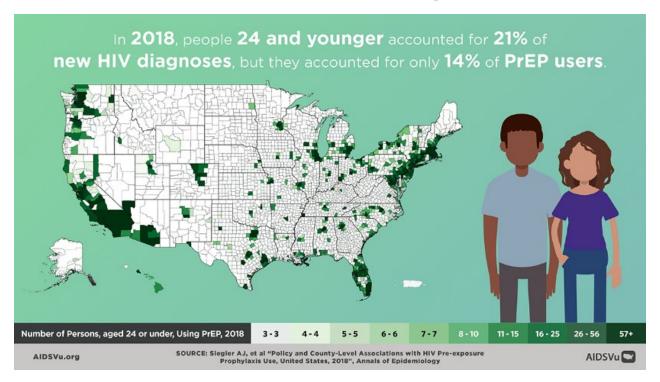


PrEP-to-Need Ratio (PnR, or the number of PrEP users to the number of people newly diagnosed with HIV), 2017 vs 2018

0.00 - 0.60 0.61 - 1.17 1.18 - 2.05 0.42.06 - 3.86 (Shee Map Imp 3.87+ is map

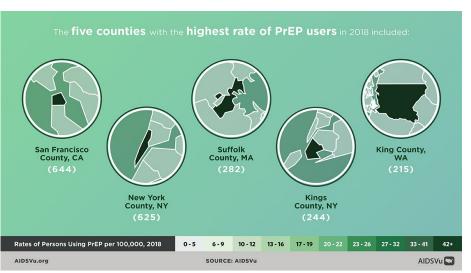


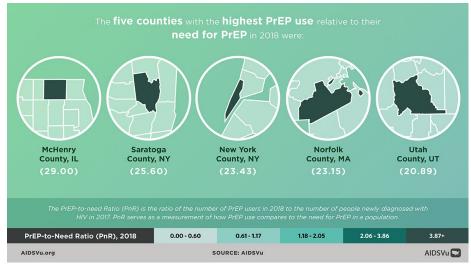








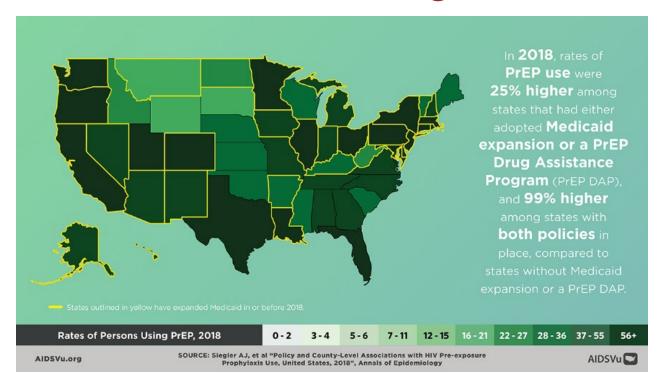




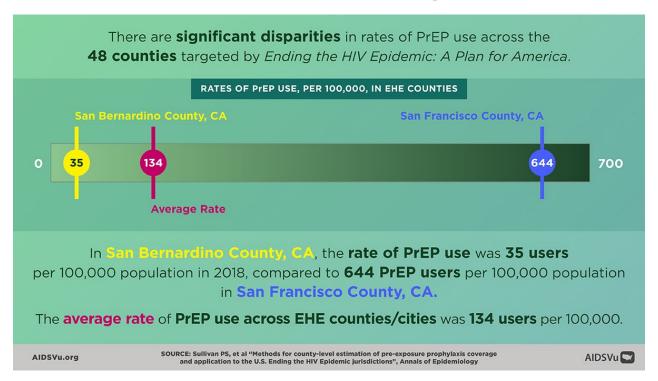


Counties with higher concentrations of **Black** residents, higher levels of uninsured residents, or lower levels of education had lower levels of PrEP use relative to their need for PrEP. Black Population, 2018 Percent of Population Lacking Health Insurance, 2016 Percent of Population with a High School Education, 2016 0% - 10% 10% - 20% 20% - 30% 0 - 7.0 7.1 - 10.5 0-81.5 81.6 - 87.0 30% - 40% 10.6 - 14.0 87.1 - 90.5 SOURCE: Siegler AJ, et al "Policy and County-Level Associations with HIV Pre-exposure Prophylaxis Use, AIDSVu 🖾 AIDSVu.org United States, 2018", Annals of Epidemiology, U.S. Census ACS, 2012 and 2018 5-year Estimates

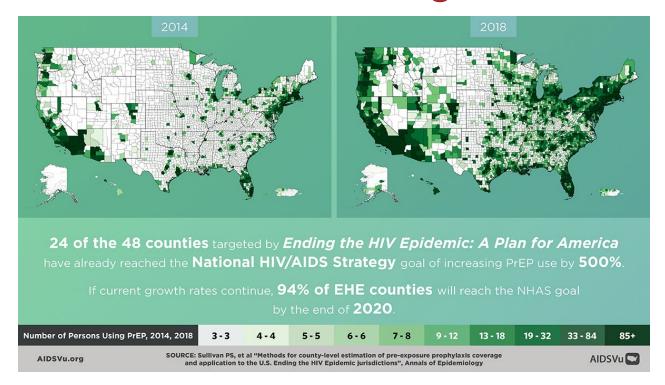








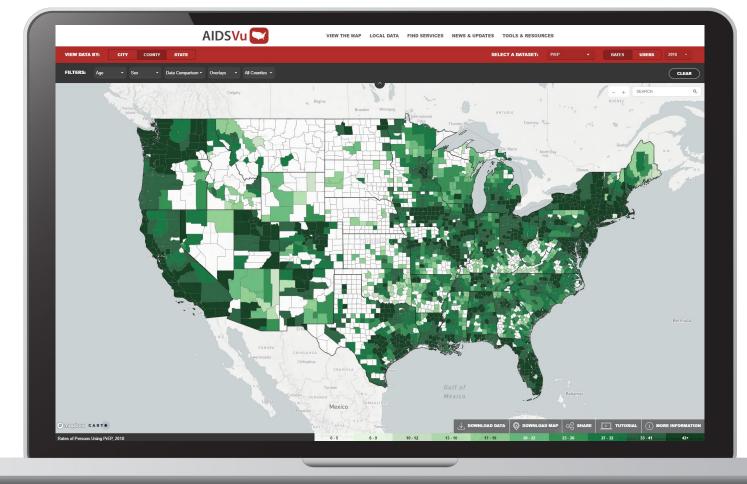






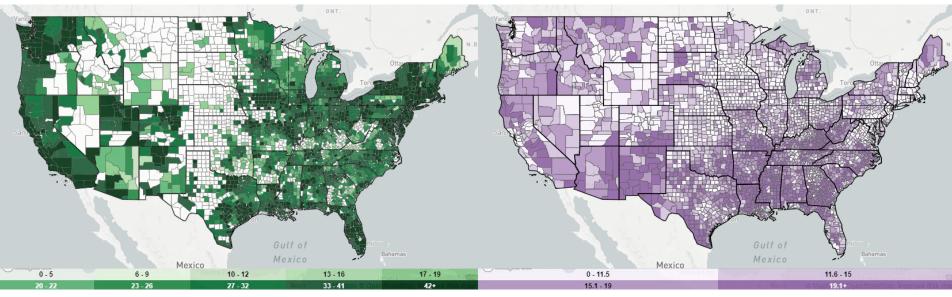
# Other AIDSVu PrEP Data Resources







## PrEP Users & SDOH Data Comparisons



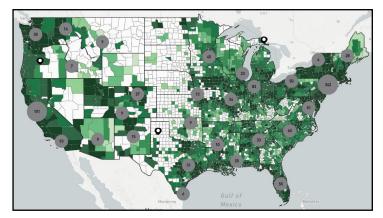
Rates of Persons Using PrEP, 2018

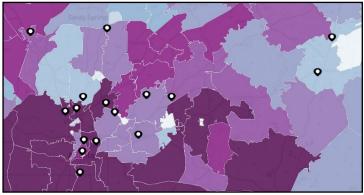
Percent of Population Living in Poverty, 2016



#### PrEP Locator

- National directory of HIV PrEP Providers in the U.S.
- Developed by Emory
   University with funding from M•A•C AIDS Fund, now managed by CDC NPIN
- Overlay PrEP providers with AIDSVu maps, or search for provider near you

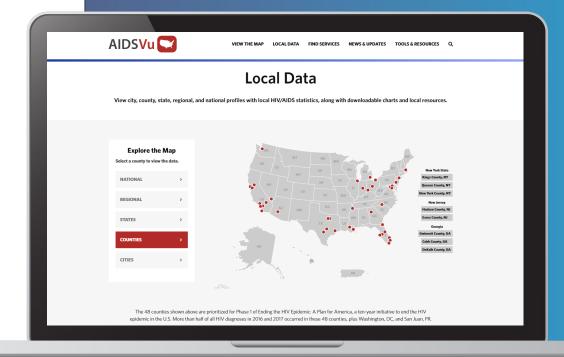






#### **Local Data Profiles**

- PrEP & PnR data included on local data profiles at the national-, regional-, state-, and county-level
  - Number of PrEP users
  - Rate of PrFP users
  - Percent of PrEP users by sex
  - Percent of PrEP users by age
  - Number of PrEP users over time from 2012-2018
  - PnR overall, by sex, by age, and over time from 2012-2018

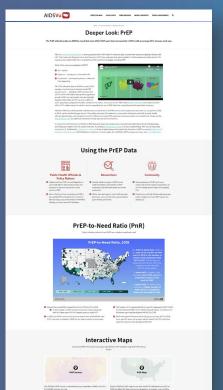


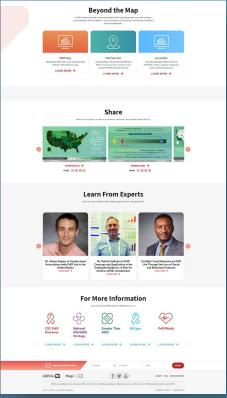


## Deeper Look: PrEP

# Comprehensive Resource for PrEP on AIDSVu

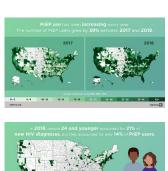
- Maps and Service Locator
- Infographics & Video
- Why it Matters
- Guest Blogs
  - Dr. Aaron Siegler
  - Dr. Bisola Ojikutu
  - Dr. Yusuf Ransome







# Infographics & Video



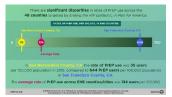






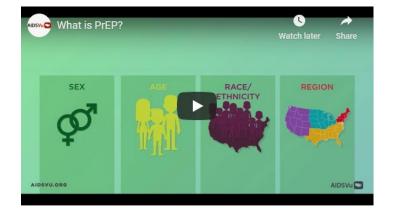






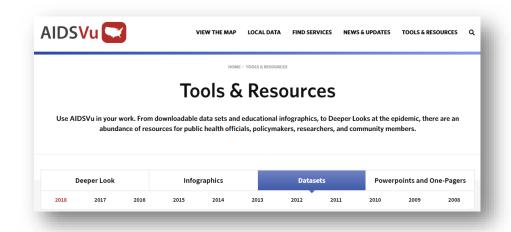






#### Downloadable PrEP Data Sets

- Downloadable PrEP datasets at the national-, regional-, state-, and county-level for Adjusted PrEP Data
- Downloadable PrEP datasets at the county-level for Raw PrEP Data and Best Estimate PrEP Data
- These datasets can be used by researchers, health departments, or others for their own analyses





## Help Us Share!

- Forward the eBlast's to your colleagues and networks
- Encourage them to watch the recorded public webinar
- Share the infographics and Q&As via social
- Use county-level PrEP data and maps in your work
- Let us know how you've used AIDSVu's PrEP data in your work
- Reach out to us to see how AIDSVu can support your efforts





# **Thank You! Questions?**





