

HIV Behavioral Surveillance in the Baltimore-Columbia-Towson Metropolitan Area

**HIV Behavioral Surveillance Community Meeting
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**Colin Flynn, Chief
HIV Surveillance, Epidemiology and Evaluation
Maryland Department of Health
Prevention and Health Promotion Administration**

MISSION AND VISION

MISSION

The mission of the Prevention and Health Promotion Administration is to protect, promote and improve the health and well-being of all Marylanders and their families through provision of public health leadership and through community-based public health efforts in partnership with local health departments, providers, community based organizations, and public and private sector agencies, giving special attention to at-risk and vulnerable populations.

VISION

The Prevention and Health Promotion Administration envisions a future in which all Marylanders and their families enjoy optimal health and well-being.

Definition

Behavioral surveillance, for public health purposes, is the systematic and ongoing collection of data about risk and health-related behaviors with the purpose of correlating trends in behaviors with changes in disease over time.

-Lansky, *et al.* Public Health Reports, 2007.

National HIV Behavioral Surveillance (NHBS)

- CDC funded project
- Data collection began in 2004
- In up to 25 metropolitan areas (has varied over time)
- Major divisions of metropolitan areas with the greatest numbers of AIDS cases in the U.S.

National HIV Behavioral Surveillance (NHBS)

- Funded nationally by the CDC
- Funded locally by MDH
- Based on methods developed in the Young Men's Survey (YMS)
- 2018 – Year 3 of the current 5 year cooperative agreement
- Application for new 5 year funding cycle due in August 2020

NHBS Sites



NHBS – Baltimore

- MDH contract with Johns Hopkins Bloomberg School of Public Health for field operations
 - Dept. of Epidemiology: Frank Sifakis, David Celentano
 - Dept. of Health, Behavior and Society: Danielle German, David Holtgrave
- Collaborative project of CDC, MDH, and JHU

NHBS – Baltimore – BESURE

The BEhavioral SURveillance REsearch Study

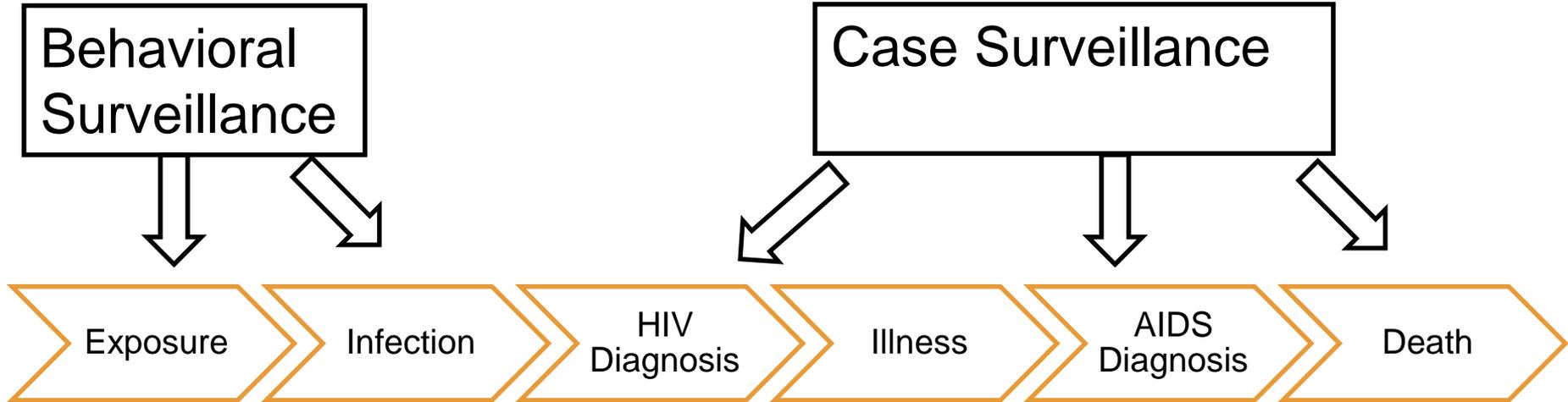
BESURE Logistics



NHBS Objectives

- To assess prevalence of and trends in
 - HIV risk behaviors
 - HIV testing behaviors
 - Exposure to and use of prevention services among persons at high risk for infection
 - HIV prevalence and incidence

HIV Disease Spectrum and Surveillance



Case vs. Behavioral Surveillance

Case Surveillance

- Infected population
- HIV positives
- Mandated reporting
- Data abstracted from medical records
- All diagnosed cases (N \approx 30,000 in Maryland)
- Dozens of demographic and clinical variables

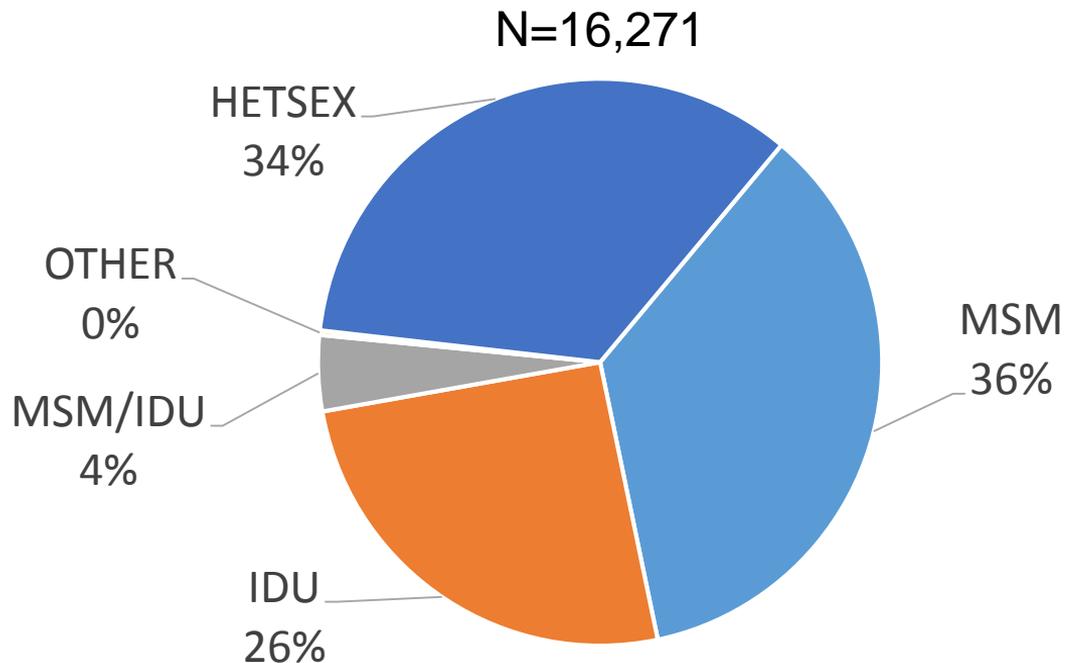
Behavioral Surveillance

- Population at risk
- HIV negatives and positives
- Research study
- Data from participant interviews and blood tests
- 500 sampled participants per population per year
- Hundreds of behavioral variables

NHBS Target Populations

- Men who have sex with men (MSM)
- Injection drug users (IDU)
- Heterosexuals at risk for HIV (HET)

Living Adult/Adolescent HIV Cases on 12/31/16, by Exposure Category, Baltimore-Columbia-Towson MSA



Using data as reported through 6/30/2017

Multiple imputation was used to estimate and adjust for missing exposure category.

NHBS Recruitment Methods

- Venue-based sampling (VBS)
- Respondent-driven sampling (RDS)

Venue Identification

- An area, location, or building, within the target geographic area, where men can be approached and recruited to participate in the survey.
- Public or private locations attended by men for any purpose EXCEPT: receiving medical/mental health care, HIV/STD testing/prevention services or social services to HIV+ men

Venue-Based Sampling (VBS)

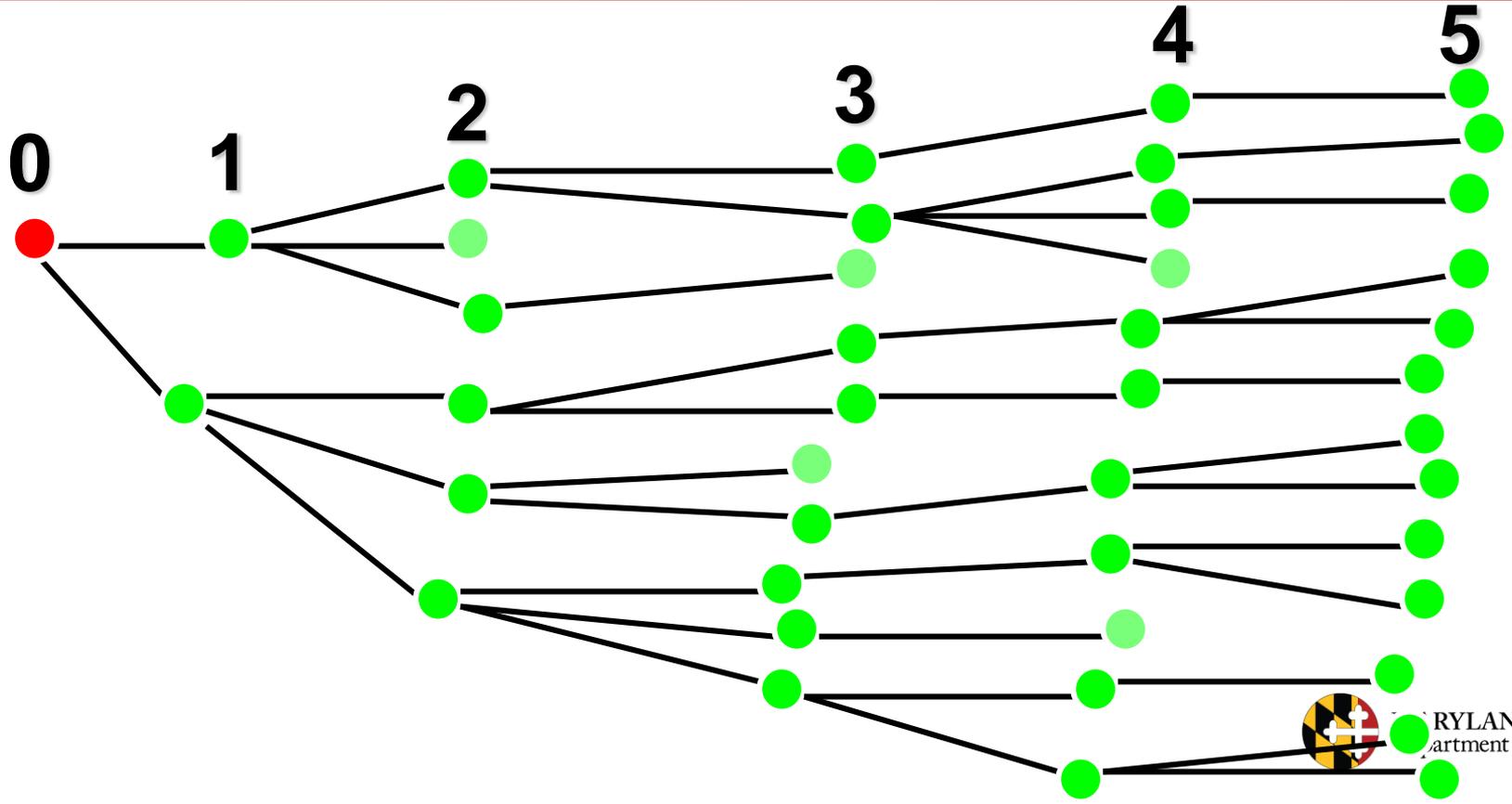
- Formative research identifies public/ private venues and days/times of attendance
- Venue-Day-Times (VDT) enumerated for eligibility and viability
- Sampling frame consists of VDTs
- Random selection of VDTs to construct sampling event calendar
- Individuals systematically recruited at sampling events

Respondent-Driven Sampling (RDS)

- Type of chain referral sampling to reach hidden populations
- Begin with a set of non-randomly selected seeds
- Seeds recruit peers, who recruit peers, etc.
- Each seed is given a set number of recruitment coupons
- Recruits are linked by coupons with unique identifying numbers
- Incentives provided for participation and for each successful recruit



Recruitment Waves



NHBS Cycles

	MSM	IDU	HET
Wave 1	VBS 2004-2005	RDS 2006	VBS and RDS 2007
Wave 2	VBS 2008	RDS 2009	RDS 2010
Wave 3	VBS 2011	RDS 2012	RDS 2013
Wave 4	VBS 2014	RDS 2015	RDS 2016
Wave 5	VBS 2017	RDS 2018	RDS 2019

NHBS Data Reports

- MMWR and other CDC publications (16)
- Journal articles (21 national, 20 local)
- Conference presentations
- Planning group presentations
- MSM/SGL Response Team presentations
- MDH website

Recent Local Publications

- Kasaie P, Pennington J, Shah MS, Berry SA, German D, Flynn CP, Beyrer C, Dowdy DW (2017). The impact of pre-exposure prophylaxis among men who have sex with men: An individual-based model. *Journal of Acquired Immune Deficiency Syndrome*, 75(2):175-183.
- Raifman J RG, Flynn C, & German D (2017). Healthcare provider contact and pre-exposure prophylaxis in Baltimore men who have sex with men. *American Journal of Preventive Medicine*, 52(1):55-63.
- Fallon SA, Park JN, Ogbue CP, Flynn C, & German D (2016). Awareness and acceptability of pre-exposure HIV prophylaxis among men who have sex with men in Baltimore. *AIDS and Behavior*, 21(5):1268-1277.
- Maragh-Bass AC, Ogbue CP, Park J, Flynn C, & German D (2016). Sociodemographic and access-related correlates of healthcare utilization among African-American injection drug users in Baltimore. *Journal of Ethnicity in Substance Use*, 16(3):344-362.
- Poteat T, German D, & Flynn C (2016). The conflation of gender and sex: Gaps and opportunities in HIV data among transgender women and MSM. *Global Public Health*, 11(7-8):835-848.



Maryland Department of Health
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<https://phpa.health.maryland.gov/OIDEOR/CHSE>

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