Women, Girls and HIV: Updates and New Science

Jacqueline Rurangirwa, MPH

Iris House 9th Annual Women as the Face of AIDS Summit May 5, 2014 New York City Department of Health and Mental Hygiene

Bureau of HIV/AIDS Prevention and Control



Outline

- National Trends
 - Overview of Epidemiology
- HIV in NYC
 - -Brief overview of Epidemiology
- HIV Prevention
- Addressing the HIV Continuum of Care
- Biomedical Interventions



NATIONAL TRENDS



Diagnoses of HIV Infection among Adults and Adolescents, by Sex, 2008–2011—United States and 6 Dependent Areas



In 2011, an estimated 50,007 adults and adolescents were diagnosed with HIV infection; of these, 79% of diagnoses were among males and 21% were among females.

Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.





In 2011, among adult and adolescent males, an estimated 78% of diagnosed HIV infections were attributed to MSM. Among adult and adolescent females, 86% of diagnosed HIV infections were attributed to heterosexual contact

Diagnoses of HIV Infection among Adult and Adolescent Females, by Race/Ethnicity and Transmission Category 2011—United States and 6 Dependent Areas



Blacks/African Americans had the highest percentage of diagnosed HIV infections attributed to heterosexual contact, while infections attributed to injection drug use was highest among whites.



Diagnoses of HIV Infection among Adult and Adolescent Females, by Race/Ethnicity, 2008–2011— United States and 6 Dependent Areas



From 2008 though 2011, among females aged 13 years and older, black/African American females accounted for the largest estimated numbers of diagnoses of HIV infection

Rates of Diagnoses of HIV Infection among Adult and Adolescent Females, 2011—United States and 6 Dependent Areas



In 2011, diagnosis rates were highest in the District of Columbia, the U.S. Virgin Islands, Maryland, Louisiana, and Florida.

38- 8)

Current Trends in NYC



Trends in HIV/AIDS: NYC, 1981-2012





New Diagnoses and Incidence Estimates NYC, 2008-2012



The number of new HIV diagnoses is stable or declining in all demographic and major HIV transmission risk groups. Citywide, estimated HIV incidence declined significantly between 2008 and 2012.



*2012 incidence data are preliminary.

¹Estimates generated September 2013, by the CDC Stratified Extrapolation Approach (SEA). SEA combines results from the Serologic Testing Algorithm for Recent Seroconversion (STARHS) with data on demographic characteristics, risk factor, initial diagnosis date, testing and treatment history from the HIV surveillance registry. Unknown risk factor was imputed using the Multiple Imputation procedure in SAS v9.2.

HIV Diagnosis Rates¹ among Males and Females in NYC by race/ethnicity², 2012

Black males had a diagnosis rate over 1.5 times higher than the rate among Hispanic males and over 2 times higher than the rate among white males. Black females had a diagnosis rate over 3 times higher than the rate among Hispanic females and over 12 times higher than the rate among white females.





Males

Health

Data as reported to NYC DOHMH by June 30, 2013.

API=Asian/Pacific Islander

¹Includes diagnoses of HIV without AIDS and HIV concurrent with AIDS.

²Native American and multiracial groups not shown because of small numbers.

HIV/AIDS in Females in NYC, 2012 Basic Statistics

- 647 new HIV diagnoses
 - Includes 136 (21%) HIV concurrent with AIDS diagnoses
 - Females comprise 53% of the NYC population and 21% of new HIV diagnoses
- 497 new AIDS diagnoses

lealt

- Includes 27% (n=136) concurrent HIV/AIDS diagnoses
- 32,500 females living with HIV/AIDS
 - 0.8% of the NYC female population
- **493 deaths among females with HIV/AIDS** (15.1 deaths per 1,000 females with HIV/AIDS*)

*Death rate is age-adjusted to the citywide population of PWHA at the end of 2012. As reported to the New York City Department of Health and Mental Hygiene by June 30, 2013.

Percentage of New HIV Diagnoses in Females by Race/Ethnicity in NYC, 2012



Blacks accounted for the majority of new HIV diagnoses in females (64%) in 2012.



As reported to the New York City Department of Health and Mental Hygiene by June 30, 2013.

Number of New HIV Diagnoses in Females by Race/Ethnicity and Age in NYC, 2012



Among black females, those aged 40-49 comprise the largest proportion of new HIV diagnoses.



As reported to the New York City Department of Health and Mental Hygiene by June 30, 2013.

HIV/AIDS in Females by Age in NYC, 2012





As reported to the New York City Department of Health and Mental Hygiene by June 30, 2013.

Percentage of New HIV Diagnoses in Females by Transmission Category in NYC, 2008-2012



In 2012, 95% of new HIV diagnoses among females with known risk were attributed to heterosexual transmission.



*Unknown transmission risk not included in the total N's. As reported to the New York City Department of Health and Mental Hygiene by June 30, 2013.



Rates of new HIV diagnoses among females are highest in High Bridge– Morrisania, East Flatbush–Flatbush, and Central Harlem–Morningside Heights.



As reported to the New York City Department of Health and Mental Hygiene by June 30, 2013.



The neighborhoods with the highest HIV/AIDS prevalence among females are High Bridge–Morrisania, Crotona–Tremont, and Hunts Point–Mott Haven.



As reported to the New York City Department of Health and Mental Hygiene by June 30, 2013.

Percentage of New HIV Diagnoses among Foreignborn Females by Region of Birth in NYC, 2012

Among all new 2012 HIV diagnoses in females, 38% occurred among foreign-born. Of those, females born in the Caribbean* and Africa accounted for 76% of new diagnoses.





*Excludes Puerto Rico and the US Virgin Islands. As reported to the New York City Department of Health and Mental Hygiene by June 30, 2013.

Age-adjusted* Death Rates by Sex in NYC, 2012



The death rate among persons with HIV/AIDS was higher in females (15.1 deaths per 1,000 PWHA) than in males (12.9).



*Death rates are age-adjusted to the citywide population of PWHA at the end of 2012. As reported to the New York City Department of Health and Mental Hygiene by June 30, 2013.

Age-adjusted* Death Rates by Race/Ethnicity in Females in NYC, 2012



Among female PWHA, the death rate in blacks was the highest at 15.6 per 1,000 persons.

*Death rates are age-adjusted to the citywide population of PWHA at the end of 2012.



Rates based on numerators ≤10 are marked with an asterisk () and should be interpreted with caution. As reported to the New York City Department of Health and Mental Hygiene by June 30, 2013.

An Important Precedent in New York: Reduction in MTCT



In NYC, the number of perinatally HIV-infected infants peaked in 1990 (N=337), and was followed by a steep decline in the annual number of new infections. During 2007-2011, there were 34 perinatally-infected infants born in NYC.



HIV PREVENTION



Maximizing a Combination Approach for HIV/AIDS



Note: PMTCT, Screening transfusions, Harm reduction, Universal precautions, etc. have not been included – this is focused on reducing sexual transmission

Normalizing Condom Use for a New Generation of New Yorkers

NYC Condom Availability Program (NYCAP), in 2013:



NYC

- Participated in >600 community events – Reached >25,000 New Yorkers.
- Over 38 million condoms were distributed
- Updated the wrapper and larger-sized condom were developed
 - Result of community feedback provided at these events
 - Refreshed with a new color to re-invigorate brand, features more prominent LifeStyles[®] branding
 - *Coming soon*...both the NYC KYNG and new NYC Condom
 - Debut later this year.



HIV Testing in NYC











Addressing the HIV Continuum of Care



Number and Percentage of HIV-Infected Persons Engaged in Stages of the Continuum of Care, 2011 United States



Source: Centers for Disease Control and Prevention. Vital Signs: HIV prevention through care and treatment—United States. MMWR 2011;60(47):1621.

Of all persons living with HIV in the United States, only about 28% have suppressed viral loads.



Number and Proportion of Females Diagnosed with HIV in New York City Engaged in Selected Stages of the Continuum of Care at the End of 2012



As reported to the NYC DOHMH by June 30, 2013. For definitions of the stages of the continuum of care, see Appendix (2).

Timely initiation of HIV-related medical care among persons newly diagnosed with HIV, NYC 2008–2012

The proportion of persons newly diagnosed with HIV with timely initiation of care increased between 2008 and 2012.

31

CD4 count or HIV viral load value reported to DOHMH as part of routine surveillance considered to be a proxy for receipt of HIV-related medical care. Timely initiation of care is defined as first CD4 or VL drawn within 3 months (91 days) of HIV diagnosis, following a 7-day lag. As reported to the NYC DOHMH by June 30, 2013.

Viral suppression* within 6 and 12 months of diagnosis, 2007-2011

*Viral suppression is defined as an HIV RNA level of <400 copies/mL following HIV diagnosis. Data as reported to the NYC DOHMH by June 30, 2013. Biomedical Interventions: PrEP and PEP

What are PrEP and PEP?

Pre-Exposure Prophylaxis (PrEP)

- A newly FDA approved prevention option for people who are at high risk of getting HIV
- It's meant to be used consistently, as a pill taken every day

Post Exposure Prophylaxis (PEP)

 The emergency use of antiretroviral medicines after a single high-risk event, taken within 3 days of a possible HIV exposure, to reduce the chance of becoming HIV-positive

http://www.cdc.gov/hiv/basics/index.html

NYC DOHMH Activities

- HIV 201: PEP, PrEP and Other Biomedical Interventions
 - 1-day training about, and how to deliver messages relating to, these biomedical interventions
 - Target Audience: Non-clinical service providers
- PEP and PrEP Awareness Social Marketing Activities

PEP/PrEP Awareness Social Marketing Activities

Rationale:

 To increase awareness and clinically appropriate use of emergency Post-Exposure Prophylaxis (PEP) and everyday Pre-Exposure Prophylaxis (PrEP) - among New York City residents at high risk of HIV infection

PEP/PrEP Awareness Social Marketing Activities cont.

Target Populations

- Primary:
 - Gay men
 - Other men who have sex with men
 - in particular young men and black and Latino men
 - Groups with high incidence of HIV infection and low awareness of PEP and PrEP

Secondary populations:

- Anyone whose primary sexual partner is living with HIV
- People who inject drugs
- Transgender women who have sex with men

Creative Strategy

- Digital/New Media
 - DOH-hosted webpage
 - Mobile banner ads
 - Mobile application pop-ups
- Traditional
 - 2-sided postcard
 - pamphlet
 - Posters

Calls to action ____ will be modified

This messaging + image concept very well liked by internal focus group

Acknowledgments

Stacey Wilking Adriana Andaluz Graham Harriman Blayne Cutler BHIV Program Staff

Thank You!

Questions?

