Women, Girls and HIV: Updates and New Science

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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
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.
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.
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.
From 2008 through 2011, among females aged 13 years and older, black/African American females accounted for the largest estimated numbers of diagnoses of HIV infection.
In 2011, diagnosis rates were highest in the District of Columbia, the U.S. Virgin Islands, Maryland, Louisiana, and Florida.
Current Trends in NYC

Data as reported to NYC DOHMH by June 30, 2013.
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 Rates\(^1\) among Males and Females in NYC by race/ethnicity\(^2\), 2012

**Males**

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.

**Females**

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.

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

API=Asian/Pacific Islander

\(^1\)Includes diagnoses of HIV without AIDS and HIV concurrent with AIDS.

\(^2\)Native 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**
  – 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.
Blacks accounted for the majority of new HIV diagnoses in females (64%) in 2012.
Among black females, those aged 40-49 comprise the largest proportion of new HIV diagnoses.
HIV/AIDS in Females by Age in NYC, 2012

HIV/AIDS primarily affects females in their 40s.

As reported to the New York City Department of Health and Mental Hygiene by June 30, 2013.
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.
The neighborhoods with the highest HIV/AIDS prevalence among females are High Bridge–Morrisania, Crotona–Tremont, and Hunts Point–Mott Haven.
Percentage of New HIV Diagnoses among Foreign-born 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.

*Data for 2012 are incomplete due to reporting lag.
Data reported as reported to NYC DOHMH by August 2013.
HIV PREVENTION
Maximizing a Combination Approach for HIV/AIDS

- **Treatment of STIs**
  - Grosskurth H, Lancet 2000

- **Behavioral positive prevention**
  - Fisher J, JAIDS 2004

- **PrEP**
  - Grant R, NEJM 2010 (MSM)
  - Baeten J, 2011 (Couples)
  - Paxton L, 2011 (Heterosexuals)

- **Post Exposure prophylaxis (PEP)**
  - Scheckter M, 2002

- **HIV Testing**
  - Coates T, Lancet 2000

- **Linkage & Retention**

- **Condoms**

Note: PMTCT, Screening transfusions, Harm reduction, Universal precautions, etc. have not been included – this is focused on reducing sexual transmission.
NYC Condom Availability Program (NYCAP), in 2013:

- 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

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

- Estimated HIV-infected: 37,791 (100%)
- Ever HIV-diagnosed: 86% of infected
- Ever linked to HIV care: 75% of infected, 87% of diagnosed
- Retained in HIV care in 2012: 58% of infected, 77% of linked to care
- Presumed ever started on ART: 54% of infected, 94% of retained in care
- Suppressed viral load (≤200 copies/mL) in 2012: 42% of infected, 78% of started on ART

Engagement in HIV care: Females in NYC, 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.

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

- 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
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
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

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

Calls to action will be modified.
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Questions?