National HIV Behavioral Surveillance (NHBS)
Men Who Have Sex with Men

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NHBS Background

- First funded in 2002
- Sentinel MSAs with high AIDS prevalence
- Eligible: states & directly funded cities
- Follow-up incidence testing in 6 MSAs that participated in YMS
NHBS Objectives

Risk Behaviors
- Assess prevalence of and trends in risk behaviors
  - sexual risk behaviors
  - drug-use risk behaviors

HIV Testing Behaviors
- Assess prevalence of and trends in HIV testing behaviors

Prevention
- Assess exposure to and use of prevention services
- Assess impact of prevention services on behavior
- Identify prevention-service gaps and missed opportunities for prevention
Population

- MSM, IDU, and HET
- Miami-Dade and Broward counties (Palm Beach County residents are eligible but sampling does not target this area)

Sample size: 500 from each county
Overall Strategy

- Will be conducted in 12-month cycles
  - One group per cycle (MSM, IDU, HET)
  - Different sampling methods each cycle/group
  - Formative research done for each cycle
  - Same populations and MSAs over time
- Core Questionnaire
- Consistent eligibility criteria
  - 18 years of age or older
  - Resident of MSA
Data Collection

- Questionnaire
  - Core: Behavioral risks for HIV, HIV testing, exposure to/use of prevention services
  - Local Questions:
    - Awareness/Use of specific prevention programs
    - Any other local topics
Data Collection

- **MSM**
  - Time-space sampling to randomly selected venues
  - Participants in venues are systematically recruited and interviewed

- **IDU**
  - Respondent Driven Sampling
  - Participants recruit each other from within their networks

- **Heterosexuals (Pilot Phase)**
  - Venue Based Sampling
  - Respondent Driven Sampling
Assessing Characteristics of population
In ongoing surveillance
Interviewing Van
NHBS-MSM
NHBS – Miami and Broward Teams
NHBS-MSM Update

Broward:
- Started: January 2004
- Ended: June 2004
- 747 completed surveys
  - 698 MSM

Miami-Dade
- Started: July 2004
- Blood collection started: December 2004
- Ended: April 2005
  - 1,015 completed surveys
    - 842 MSM
  - 312 completed surveys with blood
    - 258 MSM
Definition of MSM

- Self-reported oral or anal sex with a man in the past 12 months
Venues Sampled
We sampled a total of 50 venues in Broward and 46 venues in Miami-Dade

<table>
<thead>
<tr>
<th>Type</th>
<th>Broward County</th>
<th>Miami-Dade County</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-Bars</td>
<td>14</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>C-Café/Restaurant</td>
<td>7</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>D-Dance Club</td>
<td>1</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>F-Fitness</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>O-Social Organizations</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>P-Parks</td>
<td>5</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>R-Retail</td>
<td>8</td>
<td>7</td>
<td>15</td>
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<tr>
<td>S-Street</td>
<td>2</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>X-Sex</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Z-Other</td>
<td>7</td>
<td>1</td>
<td>8</td>
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# Demographic Characteristics of MSM

<table>
<thead>
<tr>
<th></th>
<th>Total (1540)</th>
<th>Broward (698)</th>
<th>Miami (842)</th>
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<tbody>
<tr>
<td>Age (mean)</td>
<td>36.2</td>
<td>39.1</td>
<td>33.8</td>
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<tr>
<td>Race</td>
<td></td>
<td></td>
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<tr>
<td>White</td>
<td>47.9</td>
<td>71.9</td>
<td>28.0</td>
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<tr>
<td>Black</td>
<td>11.7</td>
<td>8.6</td>
<td>14.3</td>
</tr>
<tr>
<td>Hispanic</td>
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<td>14.6</td>
<td>52.1</td>
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<tr>
<td>Other</td>
<td>5.3</td>
<td>5.3</td>
<td>5.4</td>
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</tbody>
</table>

Preliminary Data
Demographic Characteristics of MSM

- Broward MSM have higher education
- Miami MSM more likely to be born outside U.S.
- Few are homeless (Miami more likely to be homeless)
- Most self-identify as gay
- Miami less likely to self-identify as Gay and more likely to self-identify as bisexual
- About 1/5 are depressed (using CES-D 10 scale); more MSM in Miami are depressed
HIV Seroprevalence

- 258 MSM tested using OraQuick rapid test and confirmed by Western blot.
- STARHS was used to assess for recent infection
  - 21% (54) tested HIV+
  - Of these 54, 15% were recent infection
  - Of these 54, 45% did not know they were infected
Health Care Experiences of MSM

- Almost all have seen a health care provider in past 12 months (more in Broward)
- Of those who saw health care provider, less than half received recommendation from provider to get HIV test
- Of HIV+s, almost all have seen HIV provider in past 12 months
- Majority have taken antiretrovirals (more in Broward)
Drugs Used in the Past 12 Months

- Over 1/3 of sample reported marijuana use
- High rates (around 1/5 of sample) of use of amphetamines, cocaine, ecstasy, and poppers (amyl nitrates)
- 18% in Miami and 14% in Broward report amphetamine use; most are high during sex
- Low use of opiates
- Higher rates of stimulant use in Miami
Crystal Meth Local Study

- **Local Question:** How often have you used crystal methamphetamine (Tina, crystal, crank) in the last 12 months?
- **Total meth sample N= 1040**
  - Non meth users n=861 (82.8%)
  - Meth users n=179 (17.2%)
Sexual Risk Behaviors

- The majority of MSM had more than 1 male sex partner in the past 12 months
- Almost 1/4 of MSM in Miami reported having sex with both men and women
- The majority of MSM reported having anal sex with men
- Of those having anal sex, over 1/2 of MSM in Broward and Miami-Dade counties reported having unprotected anal sex with men

Preliminary Data
Knowledge of Sex Partners’ Serostatus

- 67% of MSM had a main partner
- 15% of MSM did not know the serostatus of their main partner at last sex
- 76% of MSM had a non-main partner
- 64% of MSM did not know the serostatus of their non-main partner at last sex
Main Partner: Sexual Risk Behavior with Most Recent Sex Partner

- Almost 1/2 of MSM reported having unprotected anal sex with MAIN partner
- Almost 1/5 of HIV+ MSM report having unprotected INSERTIVE anal sex with MAIN partner
- Almost 1/5 of HIV- MSM report having unprotected RECEPTIVE anal sex with MAIN partner
- Broward MSM had high rates of unprotected anal sex with MAIN partner
Non-Main Partner: Sexual Risk Behavior with Most Recent Sex Partner

- Almost 1/5 of MSM reported having unprotected anal sex with NON-MAIN partner
- Almost 1/5 (in Broward) of HIV+ MSM report having unprotected INSERTIVE anal sex with NON-MAIN partner
- Few HIV- MSM report having unprotected RECEPTIVE anal sex with NON-MAIN partner
- Broward MSM had high rates of unprotected anal sex with NON-MAIN partner
What factors are independently associated with high-risk sexual behavior? Multivariate Analysis

- Miami MSM **less** likely to engage in high-risk behavior
- Black MSM **less** likely to engage in high-risk behavior
- MSM who have tested for HIV in past 12 months **less** likely to engage in high-risk behavior
- MSM arrested in past 12 months **more** likely to engage in high-risk behavior
- MSM crystal meth users **more** likely to engage in high-risk behavior
- MSM Ecstasy users **more** likely to engage in high-risk behaviors
HIV Testing Experiences

- Almost all (94%) MSM in both counties have been tested in their lifetime.
- Over 2/3 (70%) have been tested in the past 12 months.
GOOD NEWS

- Recently published MMWR article on HIV testing results in 5 cities (Baltimore, LA, Miami, NYC, and San Francisco) showed that Miami had the highest percentage of MSM tested in the past 12 months!
Use of Prevention Services

- Almost all MSM reported receiving free condoms in the past 12 months
  - Most often they received them from HIV/AIDS CBOs
  - Majority reported using free condoms
  - Majority reported free condoms increased likelihood of use during sex

Preliminary Data
Receipt of Free Condoms by MSM

- MSM least likely to receive free condoms include:
  - MSM over 50
  - MSM with less than high school education
  - MSM whose HIV status is unknown
  - Homeless MSM
  - MSM crack users
Receipt of Individual-Level Intervention (ILI)

- Only 14% of MSM reported receiving individual-level interventions (ILI)
  - Most frequent sources of ILI were HIV/AIDS CBOs, community health clinics and “Other” organizations
  - ILI most frequent topics included:
    - Ways to talk to a partner about safer sex
    - Ways to effectively use condoms
  - Over half reported talking with a sex partner differently about safer sex as a result of ILI
  - Very little attention to safer injection practices

Preliminary Data
Receipt of Individual-Level Interventions (ILI)

- MSM least likely to receive ILI include:
  - MSM over 40
  - White MSM
  - MSM with less than high school education
  - Homeless MSM
  - MSM arrested in past 12 months
Receipt of Group-Level Intervention (GLI)

- Only 7% of MSM reported receiving group level-interventions (GLI)
  - Most frequent sources of GLI were HIV/AIDS CBOs, Gay/Lesbian/bisexual CBOs and “Other” organizations
  - GLI most frequent topics included:
    - Ways to talk to a partner about safer sex
    - Ways to effectively use condoms
  - Over half reported talking with a sex partner differently about safer sex as a result of GLI
  - Very little attention to safer injection practices
Receipt of Group-Level Intervention (GLI)

- MSM least likely to receive GLI include:
  - MSM over 50
  - White MSM
  - MSM with less than a high school education
  - Homeless MSM
Receipt of Either ILI or GLI – What factors are independently associated with receipt of prevention services?

- MSM over 30 less likely to receive prevention services
- Black MSM more likely to receive prevention services (compared with white MSM)
- HIV-positive MSM more likely to receive prevention services (compared with HIV-negative MSM)
Areas of Concern – Risk Behaviors

- High percentage of men who tested positive who DID NOT KNOW they were infected
- High percentage of men who do not know the serostatus of their NON-MAIN casual sex partner
- High rates of unprotected anal sex by MSM
- High rates of drug use (including crystal meth use) among MSM and their association with high-risk sexual behavior

Preliminary Data
Areas of Concerns – Prevention Services

- Only a small percentage of MSM are receiving prevention services beyond the receipt of free condoms
- Older MSM and white MSM are receiving the least amount of prevention services
Limitations

- Data are preliminary
- Data are predominantly self-reported and subject to recall bias
- Data are cross sectional and time order cannot be established
- Findings can only be generalized to the population meeting eligibility criteria who attended venues on the sampling frame
Next steps.…

- Share data with Broward and Miami health departments, CBOs, ASOs, community partnerships, etc.
- What are your recommendations???????
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