



AIDS at 25: Emerging from the Matrix

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The 9th Annual William T. Small, Jr. Keynote Lecture
February 23rd, 2007

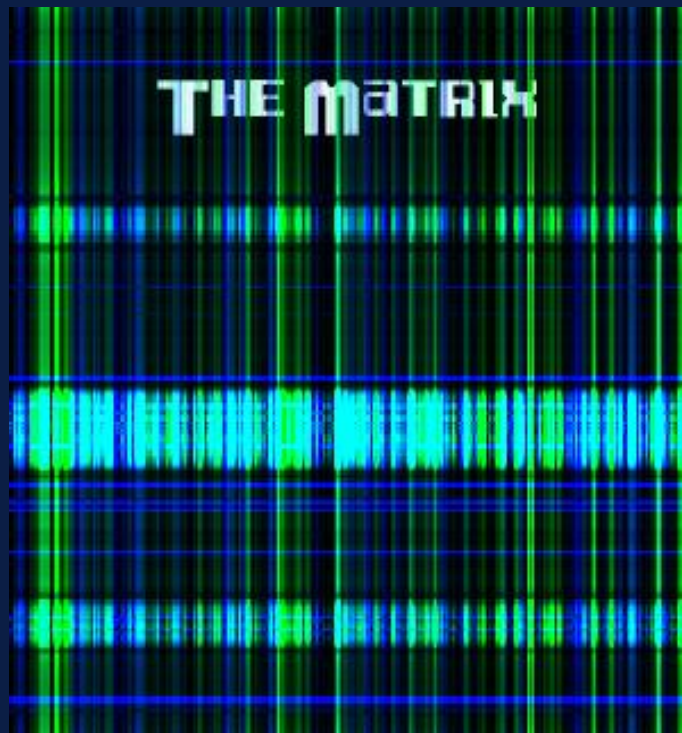


Disclaimers

- PACHA association
- Focus on U.S. Epidemic



Why the Matrix?





Agenda

- 25 Year retrospective
- Current HIV Epidemiology in the U.S.
- Testing & Treatment Update
- Sociocultural Dynamics of the Epidemic
 - Native Americans
 - Asian Pacific Islanders
 - Hispanics
 - Black Americans
- Future Directions/Challenges



25 Year Retrospective

25 Years of HIV/AIDS

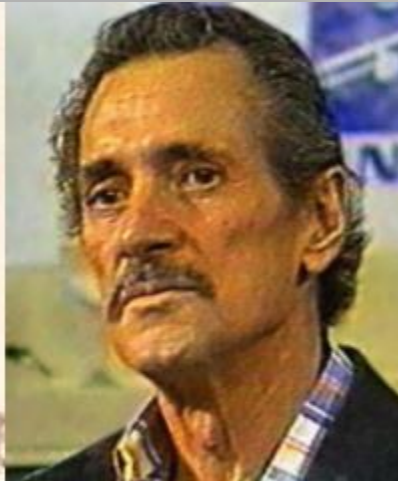


HIV Testing
First Available



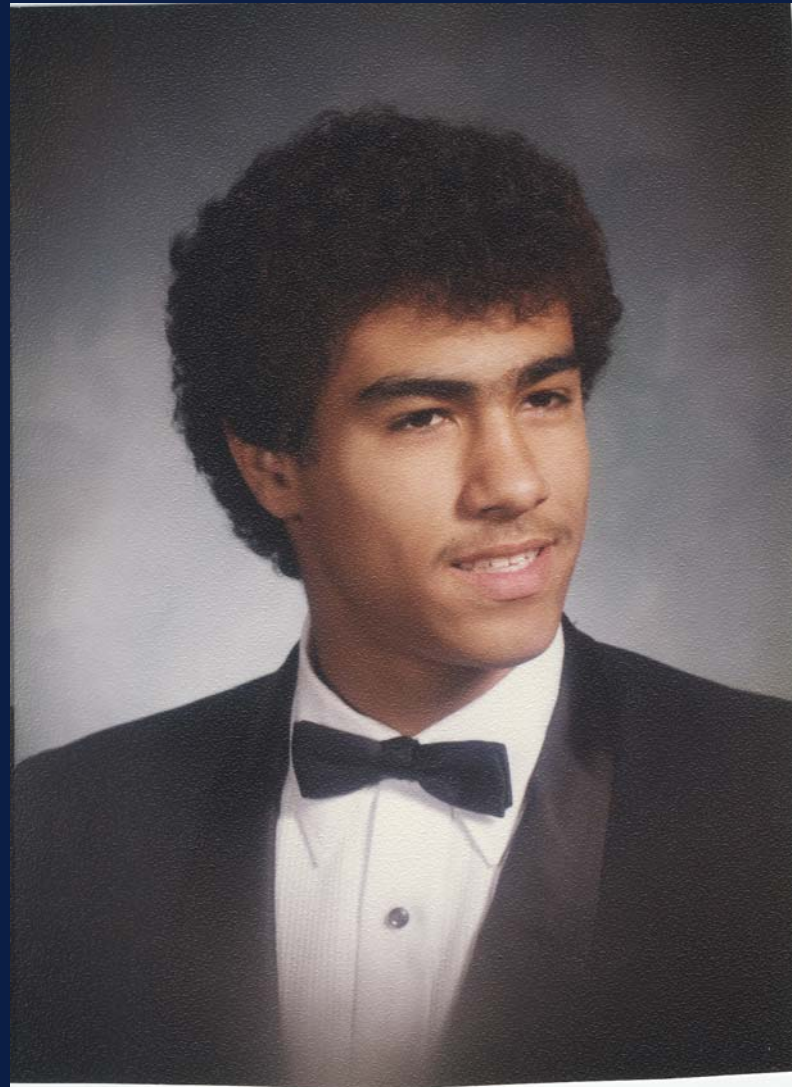


25 Years of HIV/AIDS



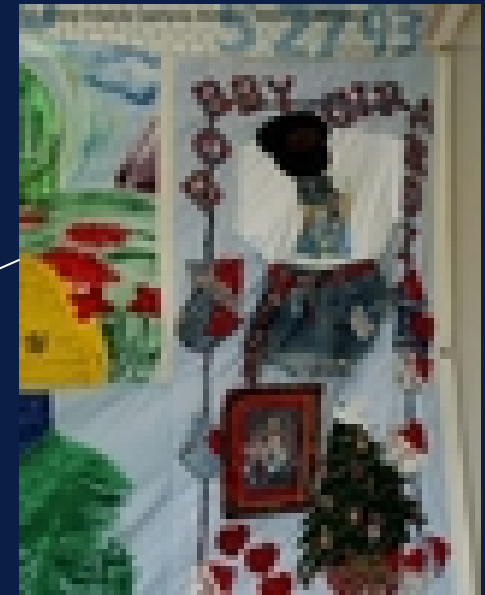
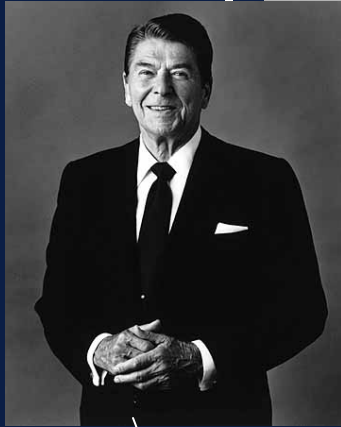


1985



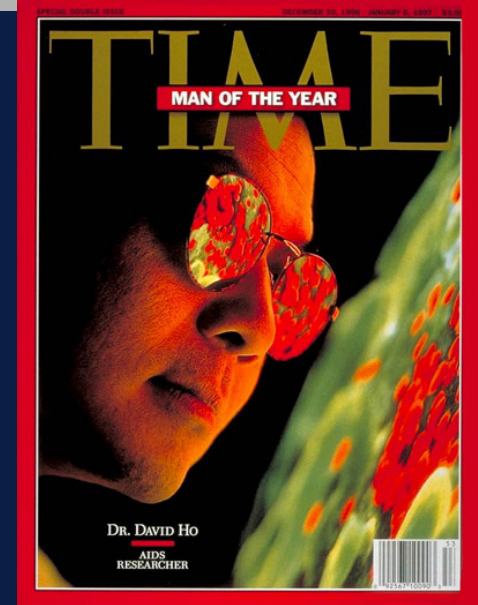


25 Years of HIV/AIDS



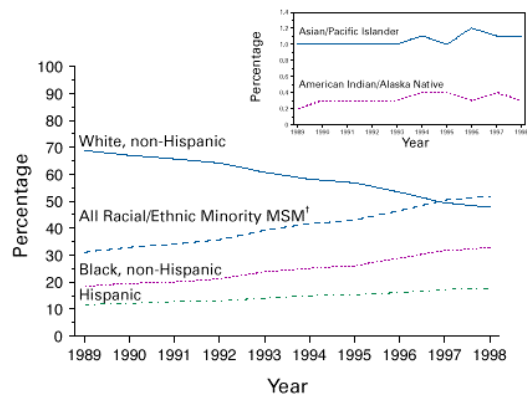


25 Years of HIV/AIDS



25 Years of HIV/AIDS

FIGURE 1. Proportion of AIDS cases* among men aged ≥ 13 years who have sex with men (MSM), by race/ethnicity and year of diagnosis — United States, 1989–1998



*Estimated number of AIDS diagnoses adjusted for delays in reporting of AIDS cases and anticipated redistribution of cases initially reported with no identified risk; data reported to CDC through June 1999.
[†]Defined as non-Hispanic black, Hispanic, American Indian/Alaska Native, and Asian/Pacific Islander MSM.

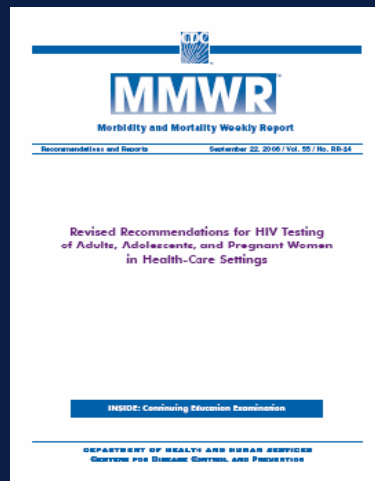




25 Years of HIV/AIDS



The United States President's
Emergency Plan for AIDS Relief





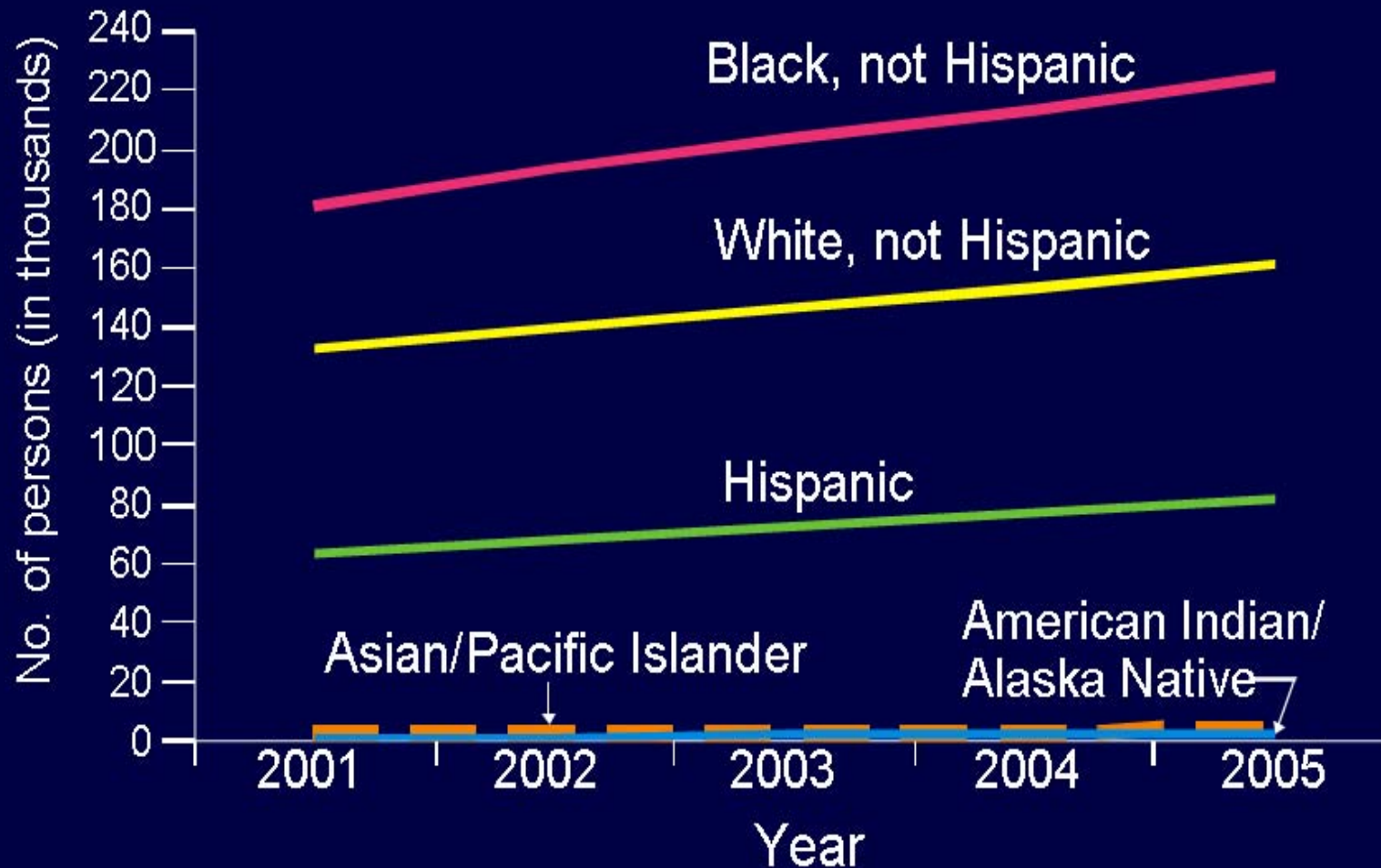
AFTER 25 YEARS....

THERE STILL IS NO CURE



Current HIV Epidemiology

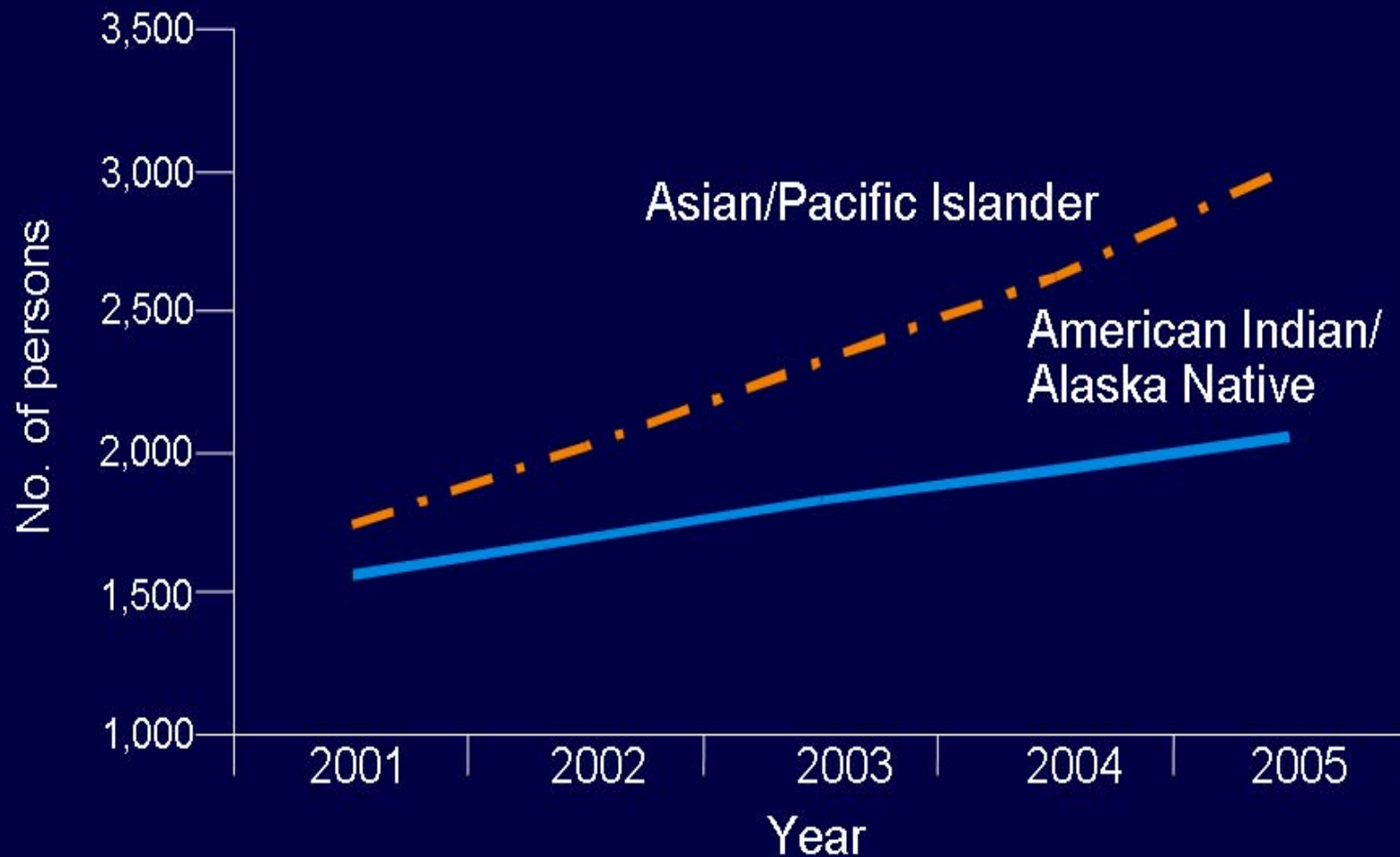
Estimated Number of Persons Living with HIV/AIDS, by Race/Ethnicity, 2001–2005—33 States



Note. Data include persons with a diagnosis of HIV infection regardless of their AIDS status at diagnosis. Data from 33 states with confidential name-based HIV infection reporting since at least 2001. Data have been adjusted for reporting delays.



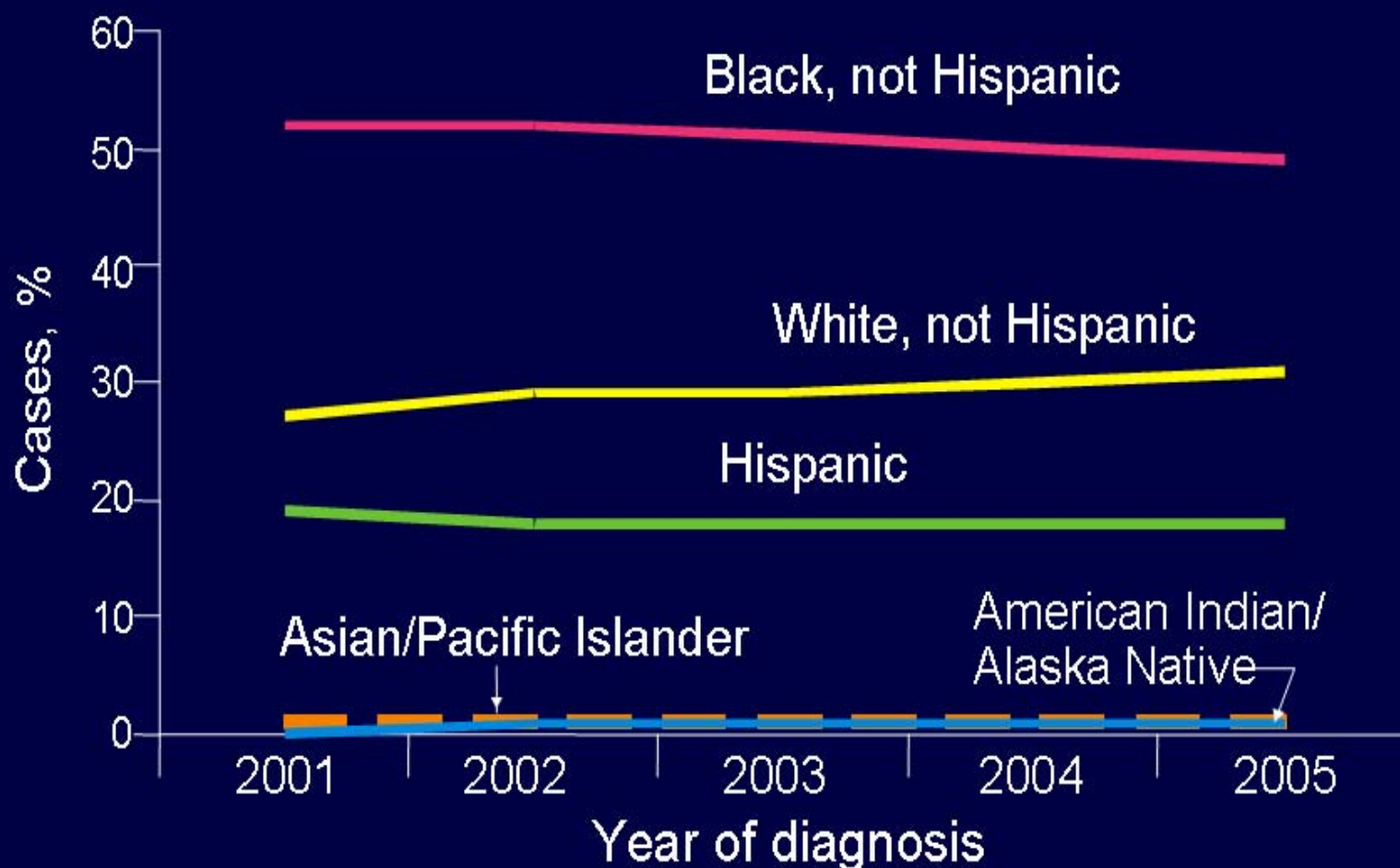
Estimated Number of Asians/Pacific Islanders and of American Indians/Alaska Natives Living with HIV/AIDS 2001–2005—33 States



Note. Data include persons with a diagnosis of HIV infection regardless of their AIDS status at diagnosis. Data from 33 states with confidential name-based HIV infection reporting since at least 2001. Data have been adjusted for reporting delays.



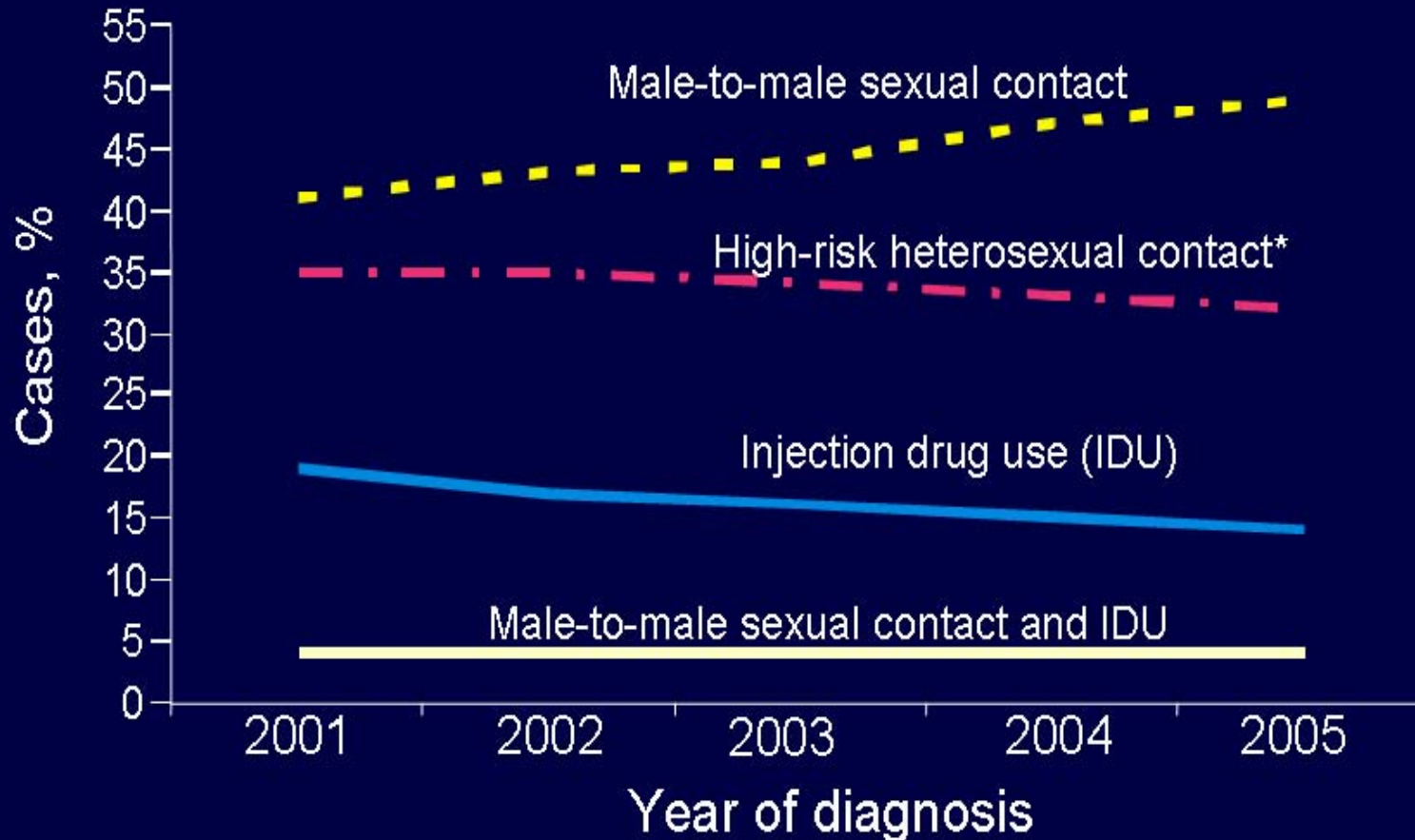
Proportion of HIV/AIDS Cases among Adults and Adolescents, by Race/Ethnicity, 2001–2005—33 States



Note. Data include persons with a diagnosis of HIV infection regardless of their AIDS status at diagnosis. Data from 33 states with confidential name-based HIV infection reporting since at least 2001. Data have been adjusted for reporting delays.



Proportion of HIV/AIDS Cases among Adults and Adolescents, by Transmission Category 2001–2005—33 States

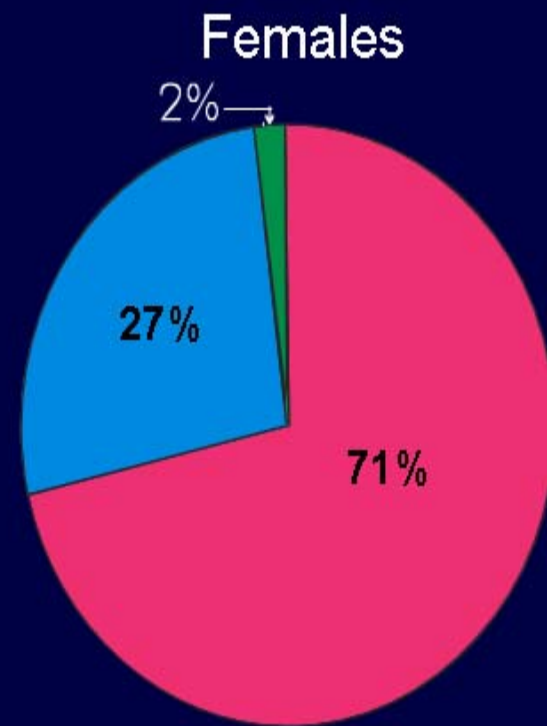
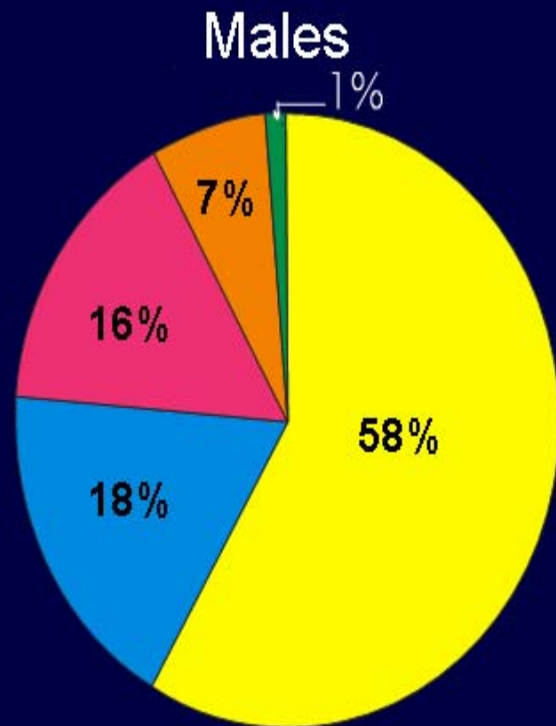


Note. Data include persons with a diagnosis of HIV infection regardless of their AIDS status at diagnosis. Data from 33 states with confidential name-based HIV infection reporting since at least 2001. Data have been adjusted for reporting delays and cases without risk factor information were proportionally redistributed.

* Heterosexual contact with a person known to have or to be at high risk for HIV infection.



Proportion of AIDS Cases among Adults and Adolescents, by Sex and Transmission Category Diagnosed in 2005—50 States and D.C.



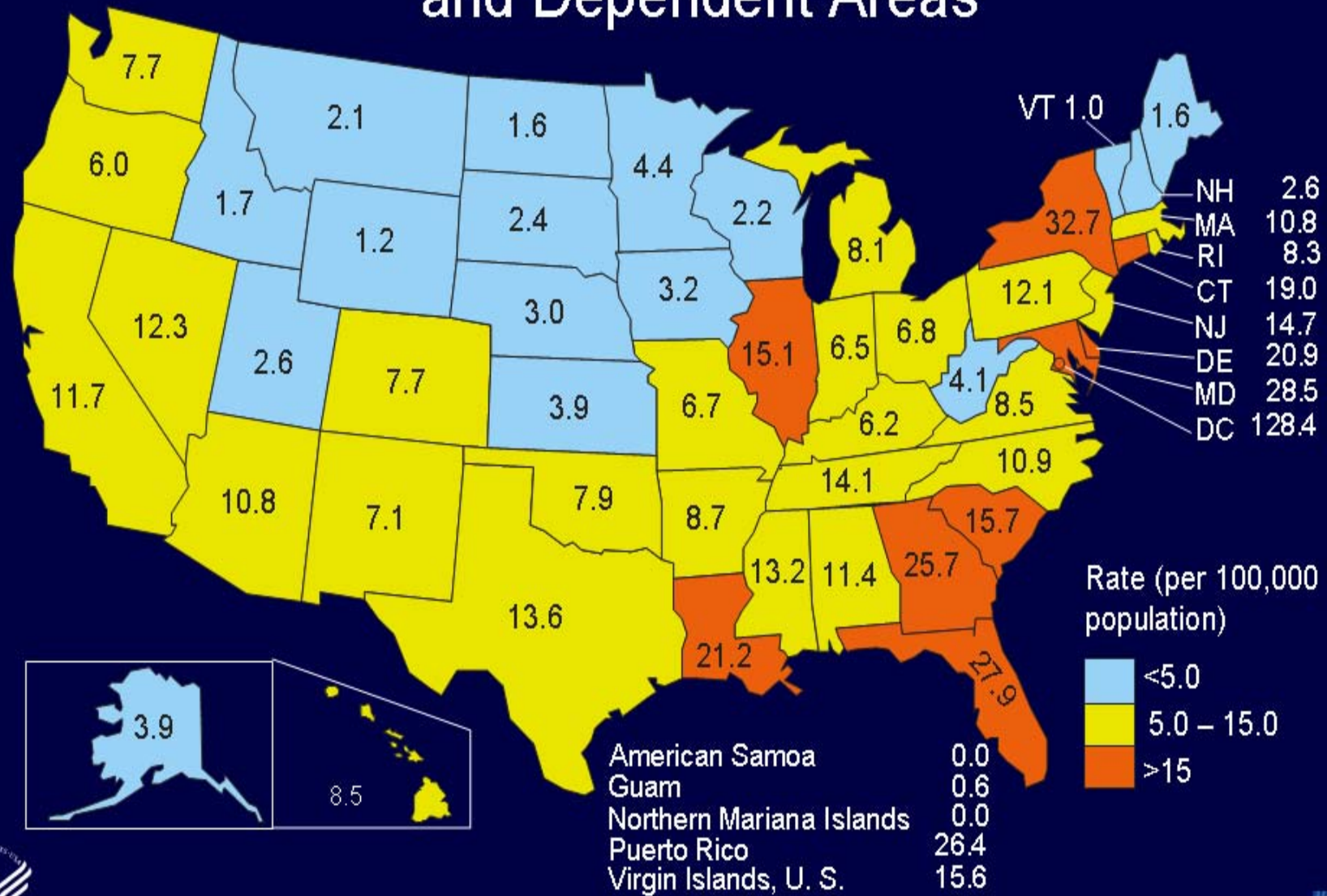
- Male-to-male sexual contact
- Injection drug use (IDU)
- High-risk heterosexual contact*
- Male-to-male sexual contact and IDU
- Other/not identified



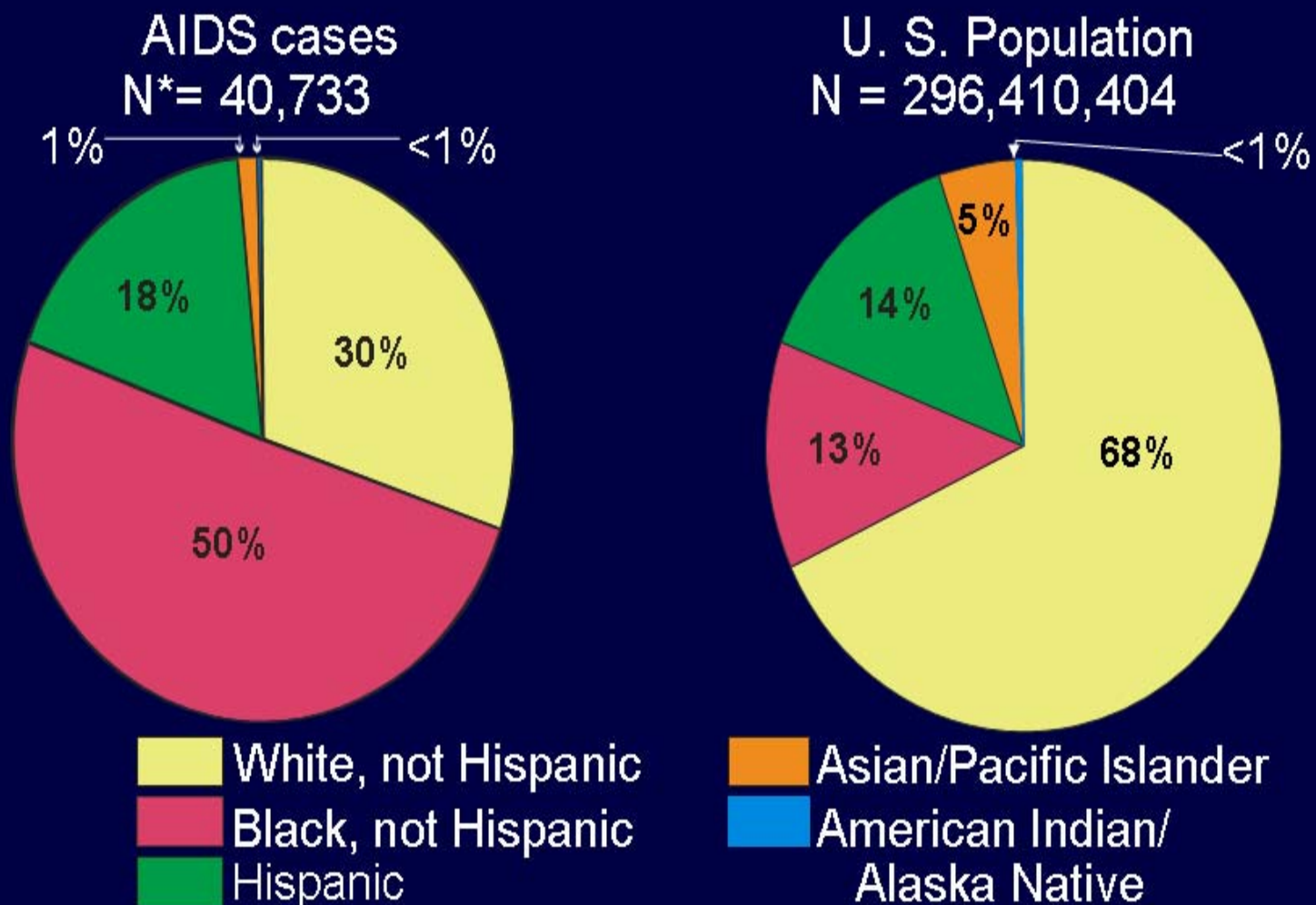
Note. Data have been adjusted for reporting delays and cases without risk factor information were proportionally redistributed.
 * Heterosexual contact with a person known to have or to be at high risk for HIV infection.



AIDS Rates, Reported in 2005—United States and Dependent Areas



Proportion of AIDS Cases and Population by Race/Ethnicity, Reported in 2005—50 States and D.C.



* Includes 283 persons of unknown race or multiple races.

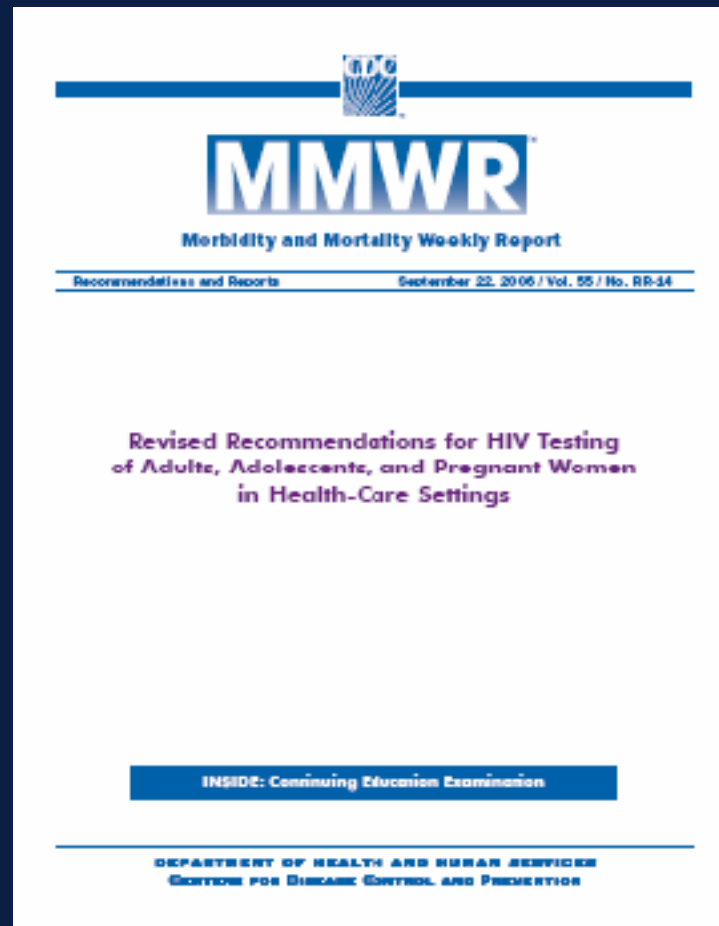




Testing and Treatment Update



CDC Testing Recommendations, 2006





Rationale for New Recommendations

- Effectiveness of risk group-based testing diminished
- Universal HIV screening strategies effective
- Lack of progress decreasing sexual transmission
- Routine prenatal HIV testing works
- Low perceived risk and disclosure
- Providers often preferred for HIV testing



HIV Testing Recommendations for Adults

- Screening performed routinely for all patients aged 13-64 years
- No screening unless prevalence of undiagnosed HIV infection $\leq 0.1\%$
- All patients starting treatment for TB
- All patients seeking treatment for STIs
- Repeat screening at least annually for persons at “high risk” **



HIV Testing Recommendations for Adults

- Screening should be VOLUNTARY
- Oral or written notification of HIV testing unless they decline *
- Informational materials available
- Documentation if patient declines testing



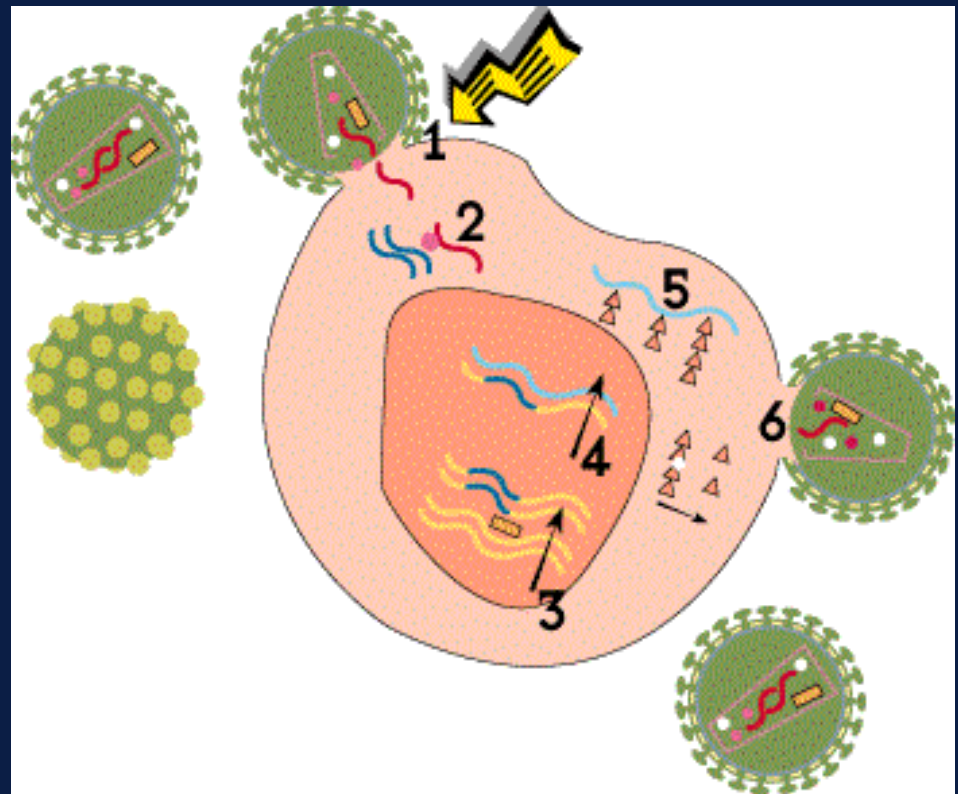


Pros and Cons – Routine HIV Testing

- No screening by “risk groups”
- Decreasing stigma of test & testing process
- Knowledge of HIV status = decreased sexual risk behavior
- Bypasses pre-test & post-test counseling
- Lack of insight & infrastructure for increased treatment needs

● ● ● Medications

- 20 FDA-approved medications
- 5 additional combination medications
- Once-daily therapy standard now
- Over 60 meds in clinical trials





Future treatment options...

- Gene therapies
- CXCR4/CCR5 receptor blockers
- Integrase inhibitors
- Maturation inhibitors
- Maintenance/induction ARV approach
- Protease Inhibitor monotherapy



Successes

1. Highly active antiretroviral therapy (HAART)
2. Prevention of opportunistic infections
3. Reduction in vertical transmission



Sociocultural Dynamics of the Epidemic



HIV & Native Americans

- Comprise < 1% of total HIV/AIDS cases
- Trauma, IVDU & ↑ Risk among women¹
- ↑ Alcohol use predicts risky sexual behavior²
- AIDS cases ↑ 900% from 1990-2001³
- Incomplete knowledge and misconceptions among women⁴
- Unemployment predicts IVDA risk⁵

¹Simoni et al., 2004; ²Baldwin et al., 2000; ³Mitchell et al., 2004; ⁴Morrison-Breedy et al., 2001; ⁵Reynolds et al., 2000



HIV & Asian Pacific Islanders

- Acculturation & sexual risk behavior¹
- College students & alcohol use¹
- MSM social stressors and HIV risk behavior²⁻⁴
- Class dynamics and sexual risk in massage parlors⁵
- Male-to-Female Transgendered Women and HIV risk⁶

¹So et al., 2005; ²Poon & Ho, 2002; ³Yoshikawa et al., 2004; ⁴Wilson & Yoshikawa, 2004; ⁵Nemoto et al., 2005; ⁶Operario & Nemoto, 2005



HIV & Hispanics¹

- “Machismo” and sexual risk behavior
- Access & literacy issues
- Issues with migrant worker populations
- Immigration status/Acculturation
- Sexual education barriers
- Latino MSM unique issues
- Women and gender role dynamics

¹National Council of La Raza, 2006



The Racial Disparity among Black MSM¹

- Known contributors:
 - High prevalence of STIs
 - Late or undiagnosed HIV infection
 - Late Testing
- Probable contributors:
 - Sexual networks
 - Lower rates of circumcision
 - CCR5 Delta 32 Deletion

¹ Millett, Peterson, Wolitski & Stall, 2006



The Racial Disparity among Black MSM¹

- Conflicting Data:
 - Access to healthcare
 - Incarceration
 - Substance use/abuse
- Non-contributory:
 - Higher rates of UAI
 - Number of male sexual partners
 - Commercial sex work
 - Non-gay identity/non-disclosure

¹ Millett, Peterson, Wolitski & Stall, 2006



Factors Influencing Sexual Risk Among Black Women

o Social

- Shallow pool of available men
- Incarceration rates of Black men
- Sexual concurrent relationships
- Situational sex (exchange for drugs, money)
- Violence/gender power dynamics
- Childhood sexual abuse



Factors Influencing HIV Sexual Risk Among Black Women

o Behavioral

- Douching and enema use (bacterial vaginosis)
- Anal sex rates
- High rates of sexually transmitted infections (STIs) and inadequate treatment
- Late HIV testing practices

McCoombe et al 2004; Myron 2004; Korte et al 2004; Lane et al 2006; Ferguson et al 2003; Adimora 2002; Manavi et al 2004.



Common threads with HIV...

- Men primarily through MSM
- Women primarily through heterosexual contact
- Acculturation an issue
- Youth disconnect
- Gender roles
- Language and literacy an issue
- Country of origin & geographic differences
- Poverty & Substance abuse
- Discrimination
- Risk perception issues



Deliver What?¹

1. to carry and turn over: *to deliver mail*
2. to give into another's possession or keeping; surrender
3. to give forth in words; utter or pronounce: *to deliver a speech.*
4. to strike or throw: *to deliver a blow.*
5. to set free or liberate: *The Israelites were delivered from bondage.*



Deliver What?¹

1. to release or save: *Deliver me from such tiresome people!*
2. to assist or give birth to
3. to disburden (oneself) of thoughts, opinions, etc.
4. to make known; assert. *–verb (used without object)*
5. to provide a delivery service for goods and products

¹www.dictionary.com

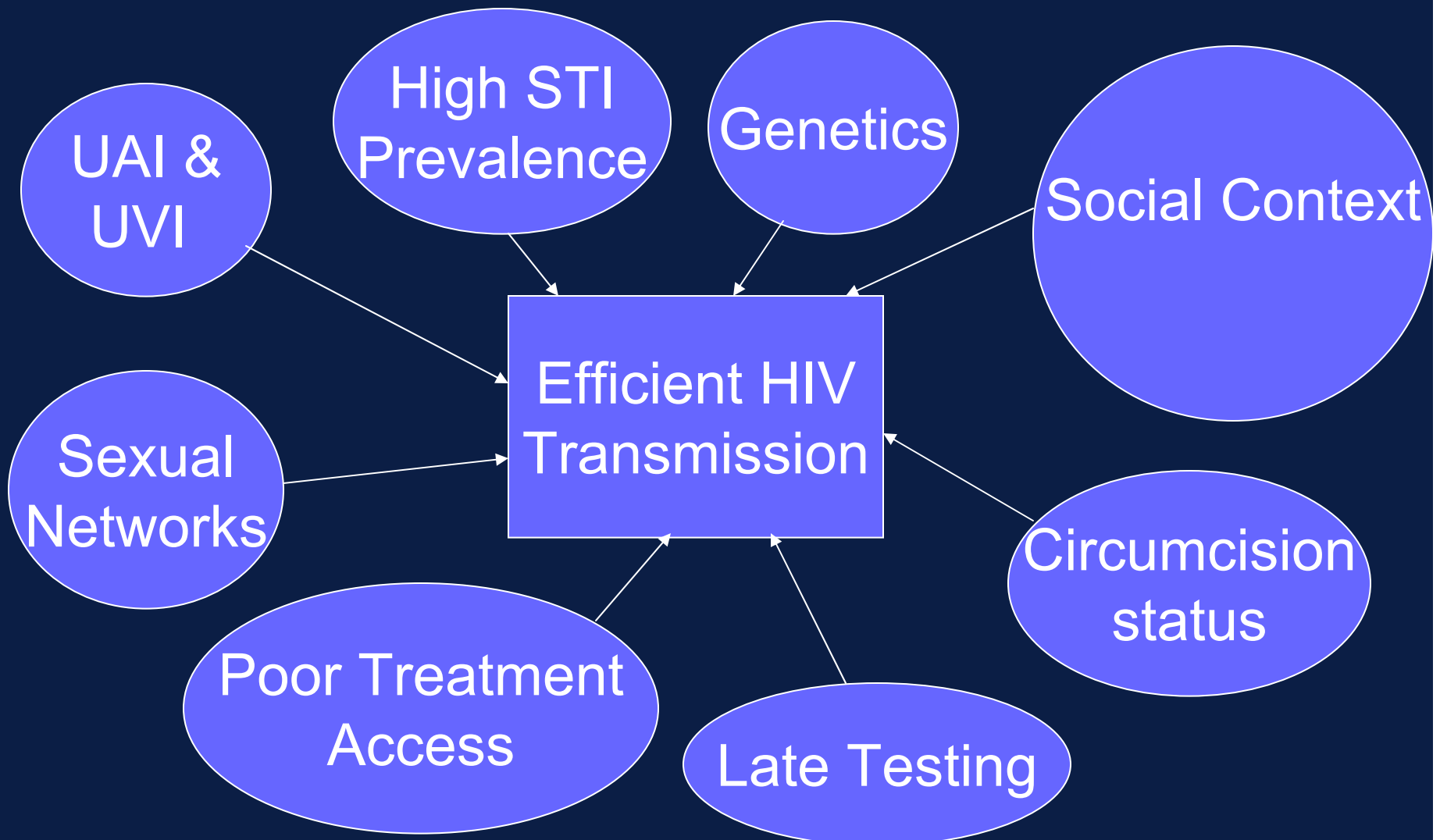


To Deliver...





HIV is an interwoven issue





Future Directions/Challenges

- General

- Remember where we've come from...
- Learn from previous mistakes (categorizing by “risk group,” etc.)
- Pay attention to diversity within ethnic groups (including “White” and “Black”)
- Stop with mutually exclusive approaches
- Address heterosexuals (men too!)
- Change our frame of reference



Future Directions/Challenges

- Prevention

- Testing/Treatment by itself is not prevention (think syphilis)
- More upstream interventions
- Gender/cultural social empowerment initiatives
- Addressing mental
- ABCs – not mutually exclusive
- Redefining families and social networks as interventions





Future Directions/Challenges

- Research

- More “Anna Nicole” coverage
- Heterosexuals & HIV in the U.S.
- Immune susceptibility to HIV infection
- Relationship of social context to immune susceptibility
- Circumcision as an intervention in U.S.
- Vaccines/Microbicides **
- Involvement in clinical studies



Future Directions/Challenges

- Treatment

- Funding, Funding, Funding
- Resistance & side effects issues
- Chronic disease management
- Genetics-guided treatment
- Medical providers representing populations impacted by HIV
- National HIV initiative needed (like PEPFAR)



Final Thoughts...

- Less Beyonce, more critical thinking
- Step away from crisis-based approach to public health
- Focus on improving fundamental causes
- The Global Epidemic is here!

