

# AIDS at 25: Emerging from the Matrix

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## Disclaimers

- o PACHA association
- o Focus on U.S. Epidemic

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## Why the Matrix?



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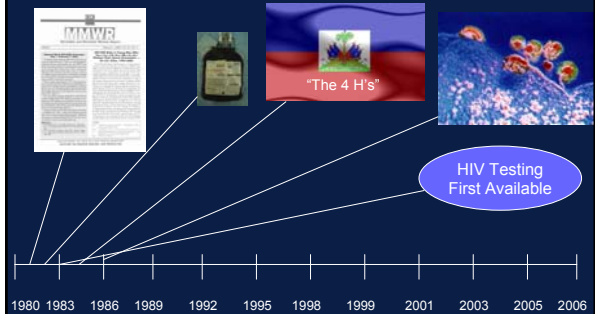
## Agenda

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

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## 25 Year Retrospective

## 25 Years of HIV/AIDS



## 25 Years of HIV/AIDS

A horizontal timeline from 1980 to 2006. Five portraits are placed above the timeline, connected by lines to specific years: a woman in 1981, a man in 1985, a man in 1986, a woman and child in 1991, and a man in 1995.

## 1985

A portrait of a young man with dark hair, wearing a black tuxedo and a white bow tie, set against a dark blue background.

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## 25 Years of HIV/AIDS

A horizontal timeline from 1980 to 2006. Four images are placed above the timeline, connected by lines to specific years: a man in a suit in 1985, a white pill labeled 'AVERT' in 1986, a person in a white shirt in 1991, and a colorful poster in 1995.

## 25 Years of HIV/AIDS

A horizontal timeline from 1980 to 2006. Four images are placed above the timeline, connected by lines to specific years: a woman and child in 1991, a man in a suit in 1995, a person in a white shirt in 1999, and a TIME magazine cover in 2003.

## 25 Years of HIV/AIDS

A horizontal timeline from 1980 to 2006. Four items are placed above the timeline, connected by lines to specific years: a line graph in 1986, a banner for 'The 3 by 5 Initiative' in 1995, a poster for 'XIII INTERNATIONAL AIDS CONFERENCE DURBAN SOUTH AFRICA' in 1999, and a white pill in 2003.

## 25 Years of HIV/AIDS

A horizontal timeline from 1980 to 2006. Three items are placed above the timeline, connected by lines to specific years: a globe in 1995, a document titled 'MMWR' in 1999, and a pink pill in 2003.

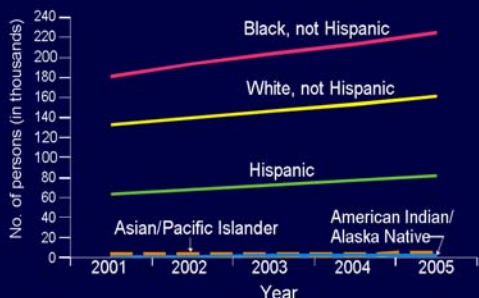
• • • AFTER 25 YEARS....

THERE STILL IS NO CURE

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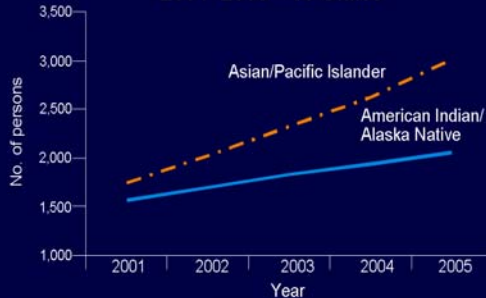
# Current HIV Epidemiology

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



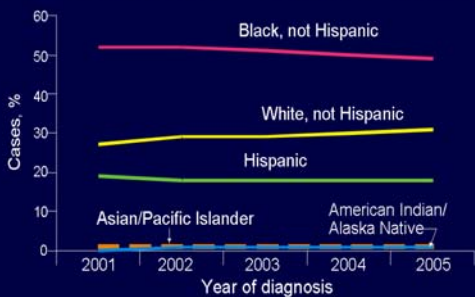
Note: Data include persons with a diagnosis of HIV infection regardless of their AIDS status at diagnosis. Data from 33 states with confidential name-based HIV infection reporting since at least 2001. Data have been adjusted for reporting delays. CDC

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



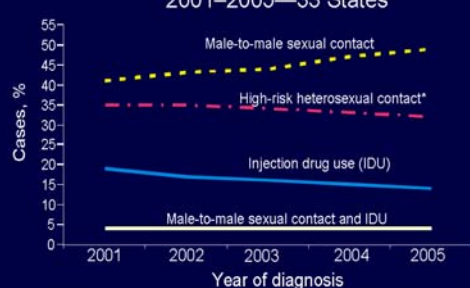
Note: Data include persons with a diagnosis of HIV infection regardless of their AIDS status at diagnosis. Data from 33 states with confidential name-based HIV infection reporting since at least 2001. Data have been adjusted for reporting delays. CDC

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

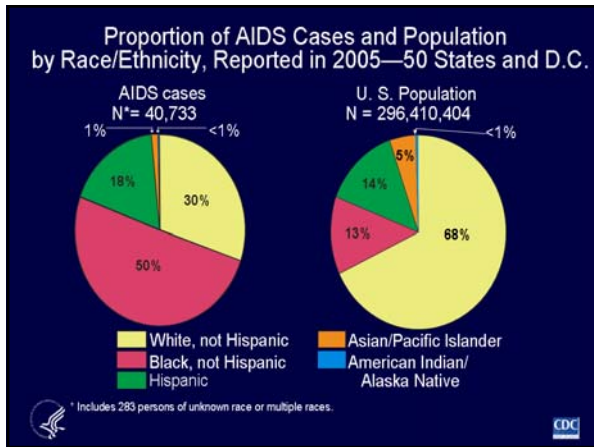
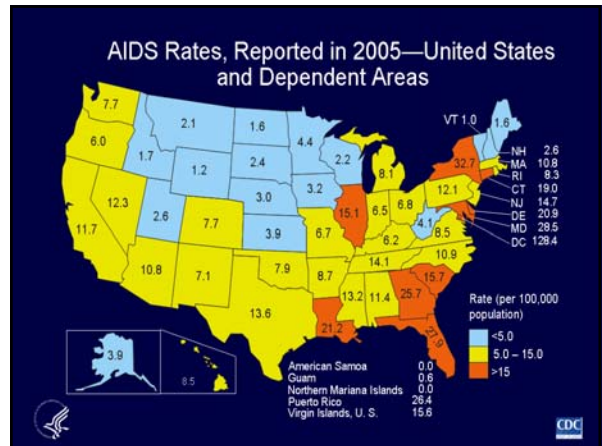
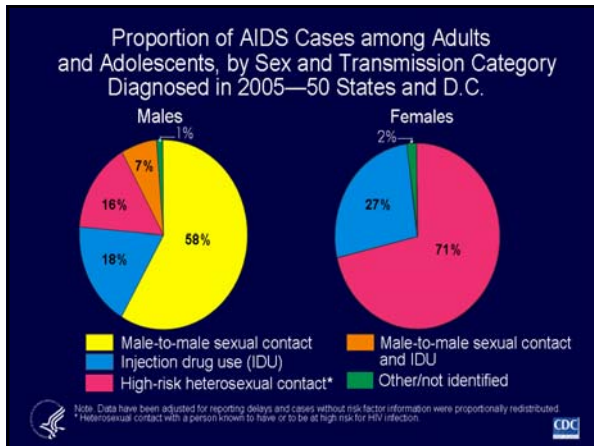


Note: Data include persons with a diagnosis of HIV infection regardless of their AIDS status at diagnosis. Data from 33 states with confidential name-based HIV infection reporting since at least 2001. Data have been adjusted for reporting delays. CDC

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. CDC



## Testing and Treatment Update

## CDC Testing Recommendations, 2006

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## 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

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## 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" \*\*

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## 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



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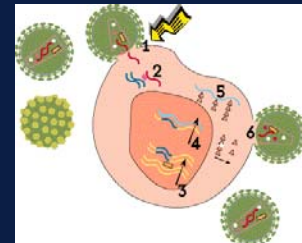
## Pros and Cons – Routine HIV Testing

- 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

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## Medications

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



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## Future treatment options...

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

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## Successes

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

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## Sociocultural Dynamics of the Epidemic



## HIV & Native Americans

- Comprise < 1% of total HIV/AIDS cases
- Trauma, IVDU & ↑ Risk among women<sup>1</sup>
- ↑ Alcohol use predicts risky sexual behavior<sup>2</sup>
- AIDS cases ↑ 900% from 1990-2001<sup>3</sup>
- Incomplete knowledge and misconceptions among women<sup>4</sup>
- Unemployment predicts IVDA risk<sup>5</sup>

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

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## HIV & Asian Pacific Islanders

- Acculturation & sexual risk behavior<sup>1</sup>
- College students & alcohol use<sup>1</sup>
- MSM social stressors and HIV risk behavior<sup>2-4</sup>
- Class dynamics and sexual risk in massage parlors<sup>5</sup>
- Male-to-Female Transgendered Women and HIV risk<sup>6</sup>

<sup>1</sup>So et al., 2005; <sup>2</sup>Poon & Ho, 2002; <sup>3</sup>Yoshikawa et al., 2004; <sup>4</sup>Wilson & Yoshikawa, 2004; <sup>5</sup>Nemoto et al., 2005; <sup>6</sup>Operano & Nemoto, 2005

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## HIV & Hispanics<sup>1</sup>

- “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

<sup>1</sup>National Council of La Raza, 2006

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## The Racial Disparity among Black MSM<sup>1</sup>

- 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

<sup>1</sup> Millett, Peterson, Wolitski & Stall, 2006

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## The Racial Disparity among Black MSM<sup>1</sup>

- 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

<sup>1</sup> 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

Adimora 2002; Wecsberg et al 2005; Korfe et al 2004; Turner 2002; Schwartz 1997; Halperin 1999; Arriola 2006.



## 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

McCombe et al 2004; Myron 2004; Korfe et al 2004; Lane et al 2006; Ferguson et al 2003; Adimora 2002; Manavi et al 2004.



## Common threads with HIV...

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

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## Deliver What?<sup>1</sup>

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.*

<sup>1</sup>www.dictionary.com

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## Deliver What?<sup>1</sup>

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

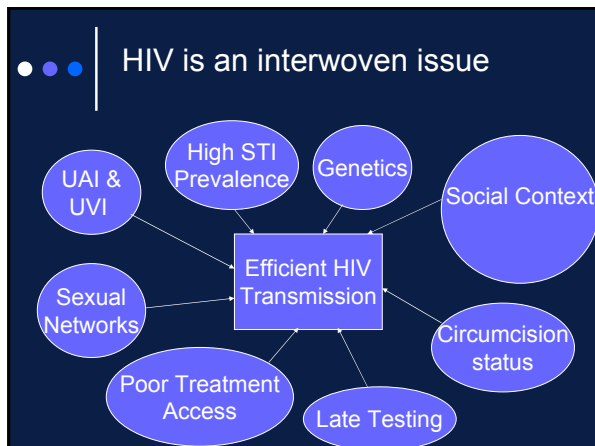
<sup>1</sup>www.dictionary.com

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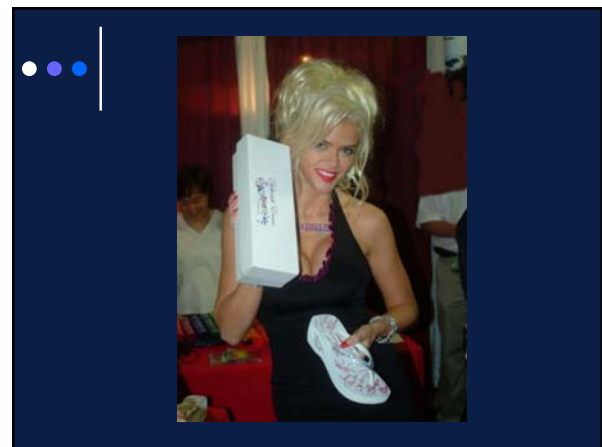
## To Deliver...





- ### Future Directions/Challenges - General
- o Remember where we've come from...
  - o Learn from previous mistakes (categorizing by "risk group," etc.)
  - o Pay attention to diversity within ethnic groups (including "White" and "Black")
  - o Stop with mutually exclusive approaches
  - o Address heterosexuals (men too!)
  - o Change our frame of reference
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- ### Future Directions/Challenges - Prevention
- o Testing/Treatment by itself is not prevention (think syphilis)
  - o More upstream interventions
  - o Gender/cultural social empowerment initiatives
  - o Addressing mental
  - o ABCs – not mutually exclusive
  - o Redefining families and social networks as interventions
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- ### Future Directions/Challenges - Research
- o More "Anna Nicole" coverage
  - o Heterosexuals & HIV in the U.S.
  - o Immune susceptibility to HIV infection
  - o Relationship of social context to immune susceptibility
  - o Circumcision as an intervention in U.S.
  - o Vaccines/Microbicides \*\*
  - o Involvement in clinical studies
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- ### Future Directions/Challenges - Treatment
- o Funding, Funding, Funding
  - o Resistance & side effects issues
  - o Chronic disease management
  - o Genetics-guided treatment
  - o Medical providers representing populations impacted by HIV
  - o National HIV initiative needed (like PEPFAR)
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## Final Thoughts...

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

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