



National Institute on Drug Abuse

*Drug Using Population and HIV
Within Medical Settings*

Presented By

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Monday, December 11, 2006



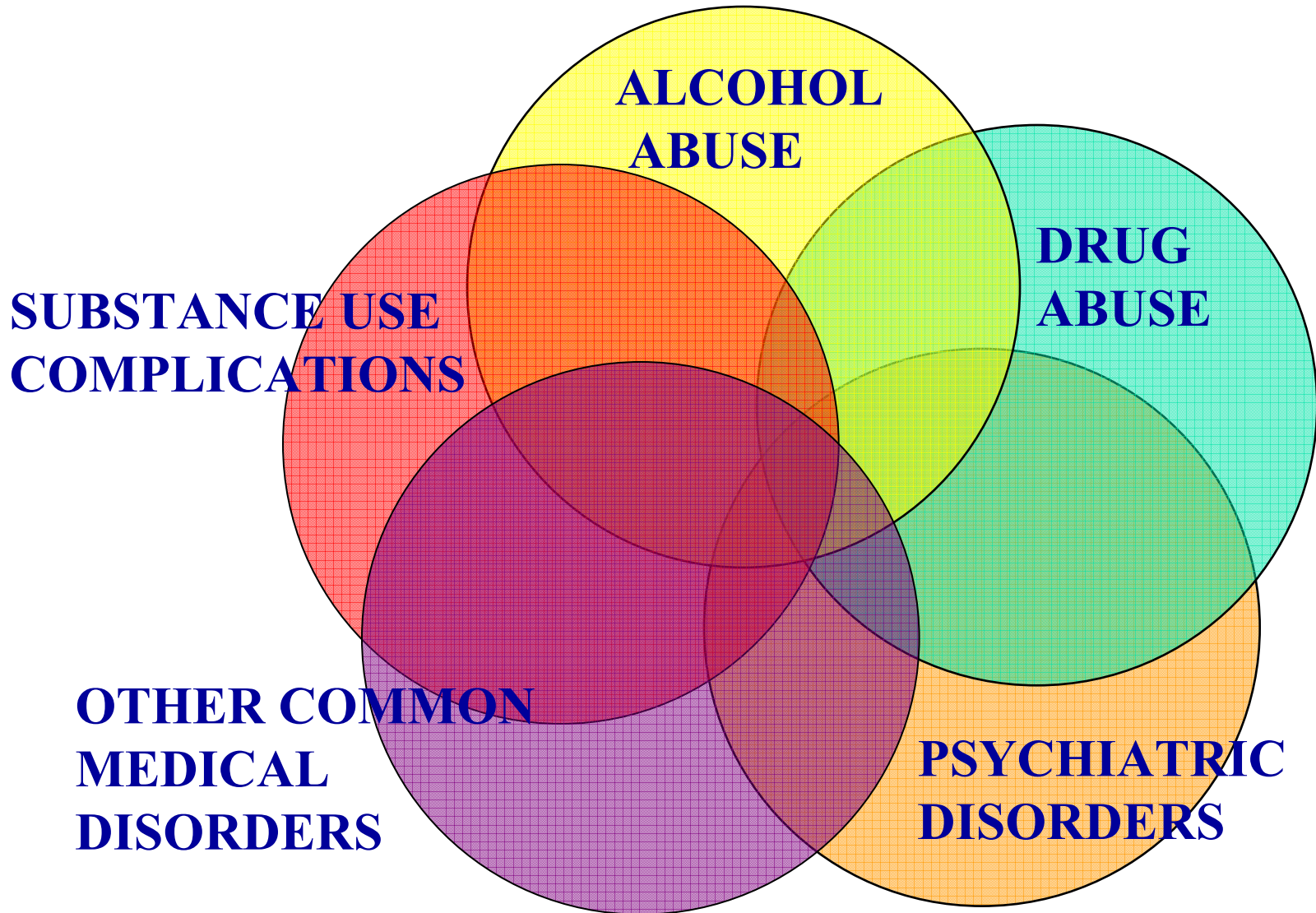
Treatment Expenditures

Natl. Estimates of Expenditures for SA Treatment

- **\$11.9 billion was spent on substance abuse treatment while abuse of alcohol and drugs cost society over \$294 billion**
- **There is no other medical condition for which society would allow so little to be spent on treatment, when treatment saves so much in other costs**



MULTIPLE MORBIDITIES





Co-Morbidity: The Multiple Presentation of Disease

- **Drug and Alcohol Abuse**
- **Mental Illness**
- **Primary Health Care Problems**
- **AIDS and AIDS-Related Diseases**




OTI Comprehensive Care Model

- **Screening and Treatment for Tb and other Infectious Diseases**
- **Primary and Preventive Health Care**
- **Prenatal and Perinatal Services for Pregnant and Postpartum Women**
- **HIV/AIDS Testing, Counseling, and Prevention**
- **Psychiatric and Psychological Services**
- **Basic Addiction Counseling**




CSAT's vision of Treatment and Recovery

“There will be a time when individuals in treatment and recovery are no longer stigmatized, when society recognizes that our efforts are dedicated toward the demise of alcohol and drug problems and not the individuals who have succumbed to these problems... [and] when treatment and recovery services are provided in environments that are conducive to human dignity – for both recovering individuals and the clinicians, practitioners, and advocates who support them”



CSAT Comprehensive Care Model

- **Also Included in the Comprehensive Treatment Milieu are:**
 - **Family Counseling**
 - **Life and Social Skills Development**
 - **Food/Shelter/Welfare/Transportation Services**
 - **Legal Services**
 - **Vocational Rehabilitation**
 - **Educational Counseling**
 - **Day Care Services**



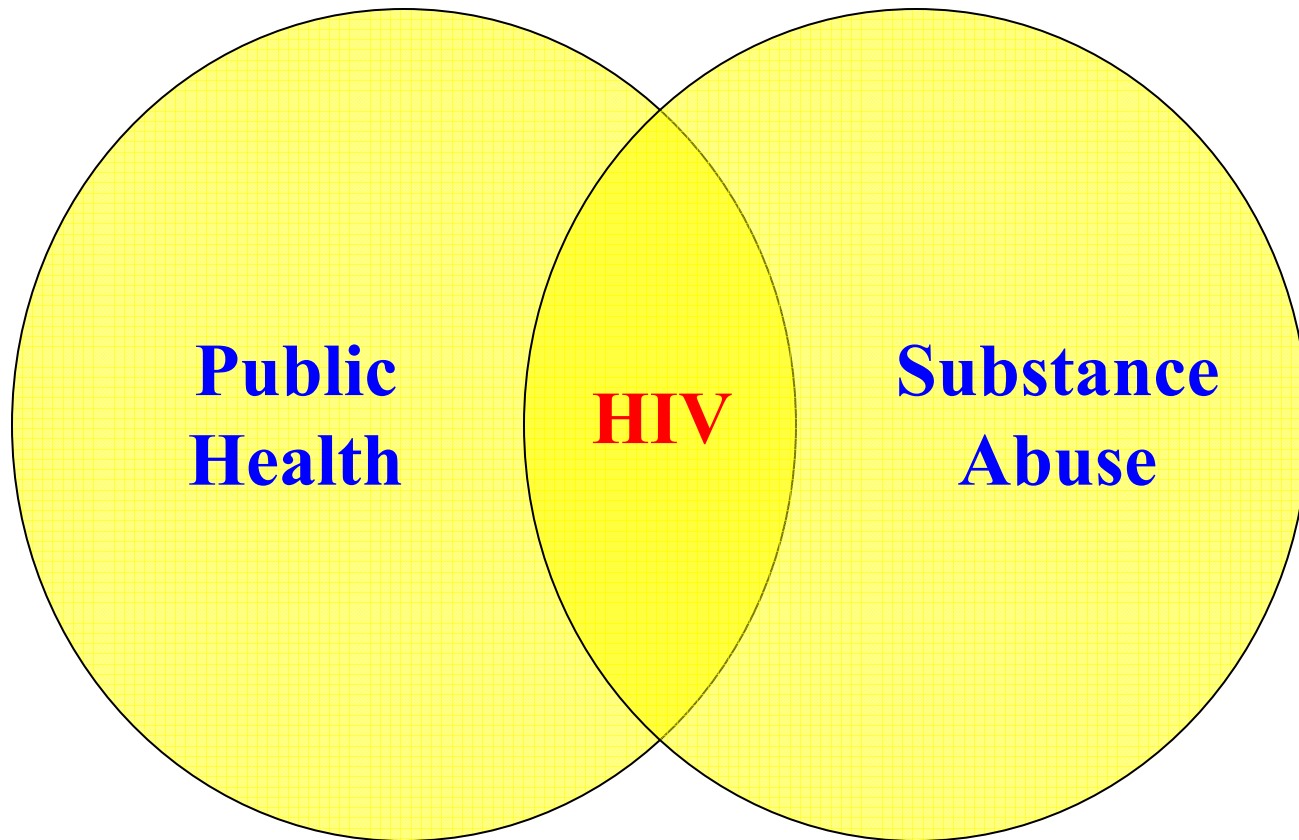
**ADDICTION CAN NOT BE TREATED
IN ISOLATION!**



DRUG ABUSE TREATMENT

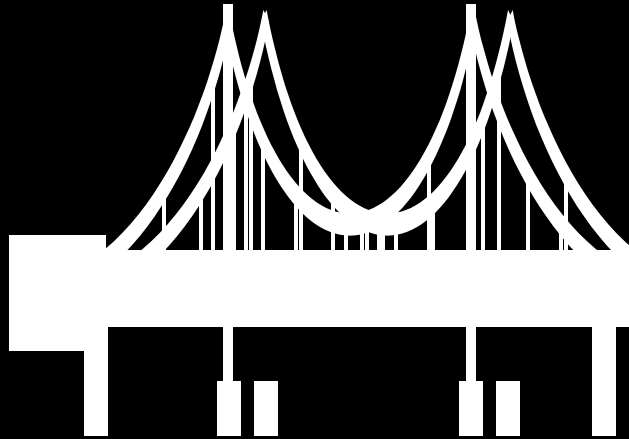
MUST BECOME PART OF THE

MAINSTREAM OF MEDICINE

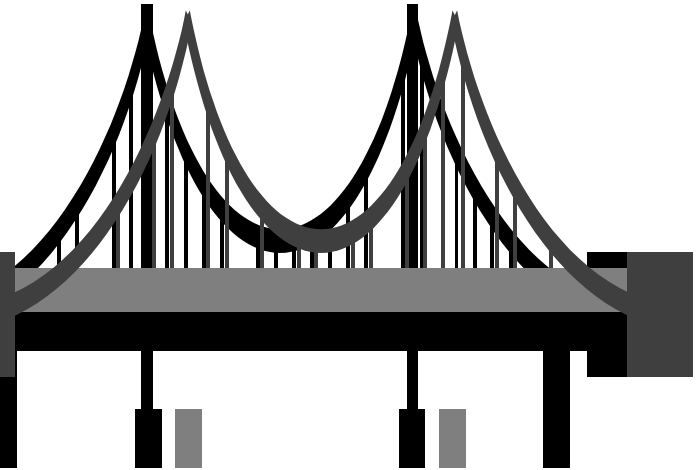


PRIMARY CARE + SUBSTANCE ABUSE

Mental Health



LINKAGE



INITIATIVE

Setting an agenda for Healthcare in this Millennium and beyond



Historical & Societal Factors

- **Legacy of slavery**
- **Abuse of medical experimentation**
- **Unequal access to care**
- **Unequal treatment in health care system**
- **Higher death rates for cancer, AIDS, and other chronic illnesses**



UNEQUAL TREATMENT

CONFRONTING RACIAL AND ETHNIC
DISPARITIES IN HEALTH CARE

INSTITUTE OF MEDICINE

2002



IOM: “Unequal Treatment”

The Institute of Medicine (IOM) Report; Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare (March 2002), concluded that “although myriad sources contribute to these disparities, some evidence suggests that bias, prejudice, and stereotyping on the part of healthcare providers may contribute to differences in care.”

Many Patients who Suffer From Addiction Also Have Need of Other Services



ONE STOP SERVICE SHOPPING



Supermarket of Services

- **An Intake and Assessment Protocol**
- **Same Day Intake**
- **Documented Case**
- **Primary Medical Care**
- **Testing for STD's and other Infectious Diseases**
- **Provision of Appropriate Pharmacotherapeutic Interventions**



Supermarket of Services

- **Individual and Group Counseling of HIV and AIDS Patients**
- **Certified Counseling**
- **Life Skills Training and Counseling**
- **Nutritional and Health Education**
- **Peer Support**
- **Liaison with Criminal Justice System, Legal Aid and Immigration**



Supermarket of Services

- **Social and Athletic Activities**
- **Continuum of Care Treatment**
- **Housing**
- **Aftercare and Follow-up Services**
- **Ongoing need for Evaluation**



The Goals of the Comprehensive Care Model

- **Reduce the rates of Patient Relapse**
- **Reduce Overall Patient Morbidity**
- **Increase Patients SES Functioning**
- **Reduce the Social Costs of Addiction**



Treatment Works

Better if it is

Comprehensive



Comprehensive Treatment
COMPREHENSIVE TREATMENT

is
is

Cost Effective
COST EFFECTIVE

The Dark and Deadly Path of Drug Abuse and the Sex Industry



From left: Molly Jean Dilts, 20; Barbara V. Breidor, 42; Tracy Ann Roberts, 23; and Kimberly Raffo, 35. Each of them came to Atlantic City to escape, but friends and relatives say each fell into crack and prostitution. Only two had even been reported missing when their bodies were found.



NEW ERA
BAPTIST CHURCH

AIDS IS GOD'S
CURSE ON A
HOMOSEXUAL LIFE

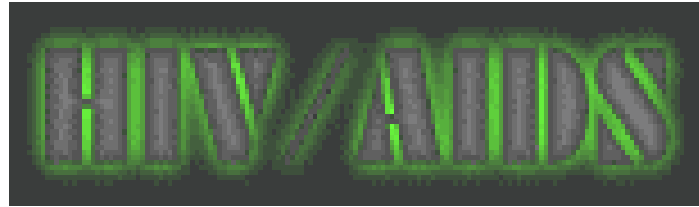
MEMBER OF THE
SOUTHERN BAPTIST CHURCH

5 Cotton Ave. SW
Birmingham, Al 35211
March 3, 2004



Sexually Transmitted

Diseases



**“AIDS:
Another Way
Drugs Can Kill”**



There is an estimated 2.3 million prisoners in the U.S. – The largest number of any country

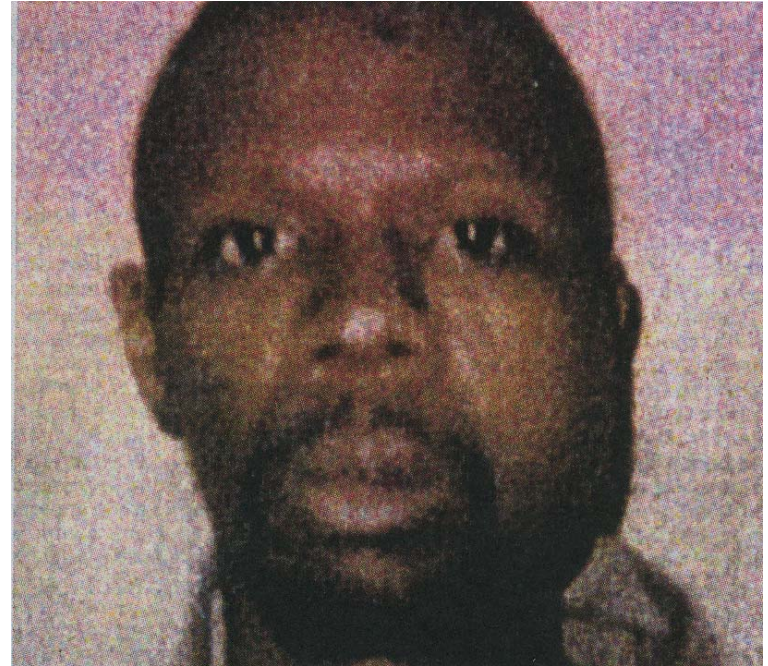
Cost \$25,000 – \$40,000 per year to house each inmate



U.S. Prison Population sets Record

- **A record 7 million people – one in every 32 adults – were behind bars, on probation or on parole by the end of 2005**
- **Of those, 2.2 million were in prison or jail an increase of 2.7% over the previous year**
- **More than 4.1 million were on probation and 784,208 were on parole at the end of 2005**
- **From 1995 to 2003, inmates incarcerated in federal prisons for drug offenses have accounted for 49% of total prison population**
- **The study found that racial disparities among prisoners persist. In the 25-29 age group, 8.1% of Black men – about one in 13 – are incarcerated, compared with 2.6% Hispanic men and 1.1 White men**
- **By the end of 2005, black women were than twice as likely as Hispanics and more than three times as likely as White women to be in prison**

In City Jails, A Question of Force



Michael Joseph, left and Charles Paige, an inmate in a lawsuit filed by the Legal Aid Society, claim they suffered facial injuries because city correction officers used excessive force. Mr. Joseph sustained eye socket fractures in 2002. Mr. Paige Suffered a fractured cheekbone in 2001.



Recidivism

- **700,000 Inmates will be discharged in 2006**
 - **66% of the released will be rearrested within 3 years**
- **The rate is higher for particular crimes committed**

| | |
|--|--------------|
| ■ Robberies | 70.2% |
| ■ Burglars | 74% |
| ■ Larcenist | 74.6% |
| ■ Car Thieves | 78.8% |
| ■ Possessing or selling stolen property | 77.4% |
| ■ Selling illegal weapons | 70.2% |
- **5-10% are infected with HIV, many have a disruption of their antiretroviral therapy at discharge**



Condoms are provided to inmates in some State Prisons and Jails

Jails in:

- **Los Angeles**
- **New York**
- **Philadelphia**
- **San Francisco**
- **District of Columbia**

Prisons:

- **Mississippi**
- **Vermont**




Conclusions

- **Prior to incarceration and following prison release, a significant proportion of HIV-infected former inmates engage in behaviors with high risk of transmitting HIV.**
- **Such behaviors may play a significant role in the transmission of the virus within the communities to which these former inmates return.**
- **Incarceration provides an opportunity for HIV transmission risk reduction interventions, Treatment, and the treatment of Substance Abuse Disorders.**

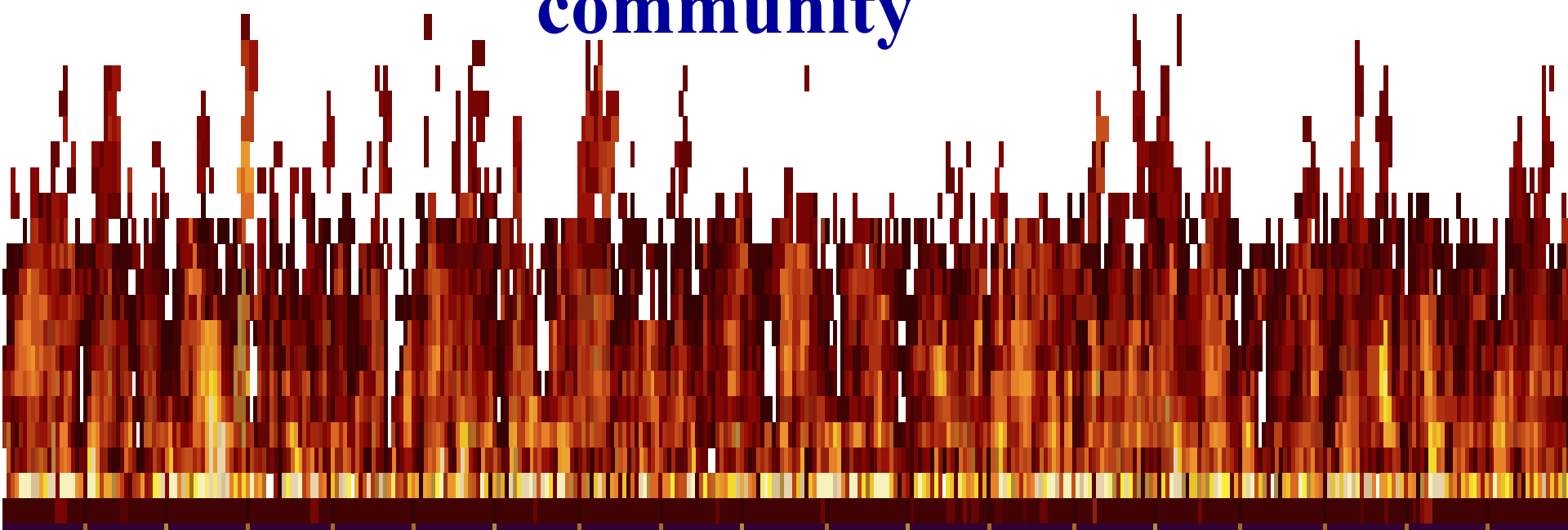



Conclusions

- **Development of interventions to reduce HIV transmission risk behaviors of HIV-infected releasees may impact HIV transmission in communities in which HIV and incarceration are both endemic.**



**Prisoners
and ex-prisoners contribute to
the fuel that keep the fires of
HIV/AIDS and Substance Abuse
burning in the African American
community**





Pathways by Which Drug Use May Alter the Course of HIV Infection

- **Biological – direct or indirect effects of drugs on viral replication or the immune response to HIV**
- **Impeding treatment – detrimental effects of drug use on the optimal treatment of HIV**



What Are the Epidemiologic Data on How Drug Use Affects HIV Disease Progression?

- **Pre-HAART studies are most relevant in examining potential direct biologic effects**
- **HIV-infected IDUs have substantially higher non-AIDS mortality than other infected groups**
 - **Homicide/suicide**
 - **Overdose**
 - **Bacterial infections, hepatitis C, etc.**



Some Studies Find IDU Not Associated With CD4 Cell Decline Over Time

- **CD4 cell rate of decline similar in IDU cohort (ALIVE) and MSM cohort (MACS)**
- **CD4 decline over 6 months not significantly associated with:**
 - **Active vs. inactive injection drug use**
 - **Frequency of injection**
 - **Type of drug used (heroin, cocaine, or both)**
 - **Withdrawal episodes**



Barriers to Optimal HIV Care in Drug Users

- **Constricted vision of addiction**
- **Poverty/low SES**
- **Unstable housing**
- **Poor social support network**
- **Depression**
- **Low educational status/job skills**
- **Other medical issues**
 - **Nutrition**
 - **Hepatitis C**
 - **Bacterial infections**
 - **STDs**
 - **Violence**
- **Relationship with medical providers**



Differential Effects of IDU by Treatment Era

- **Pre-HAART era – therapy is minimally effective**
- **HAART era – therapy highly effective**
 - **It pays to be a compulsive medication taker**
 - **IDU lifestyle inconsistent with adhering to a complex daily regimen**



Integrated Models of Care Delivery

- **Multiple modalities under one roof**
 - **HIV / medical**
 - **Substance abuse**
 - **Social work / case management**
 - **Psychiatry**
- **Patient-focused rather than provider focused**
- **Permits greater collaboration of subspecialties that are typically separate**
- **Select for medical providers that are “comfortable” with drug users**
- **Two general approaches**
 - **Bring medical care to substance abuse treatment program**
 - **Bring substance abuse treatment to medical clinic**



Levels of Treatment in a Methadone Maintenance Program

Random Assignment

6 Months

Level 1* (N=29)

Level 2 (N=34)

Level 3 (N=36)

Methadone @ \geq 60mg.

Methadone@ \geq 60mg.

Methadone@ \geq 60mg.

Weekly Urine/Breath

Weekly Urine/Breath

Weekly Urine/Breath

Emergency Counseling

Emergency Counseling

Emergency Counseling

Regular Counseling

Regular Counseling

Employment Counseling

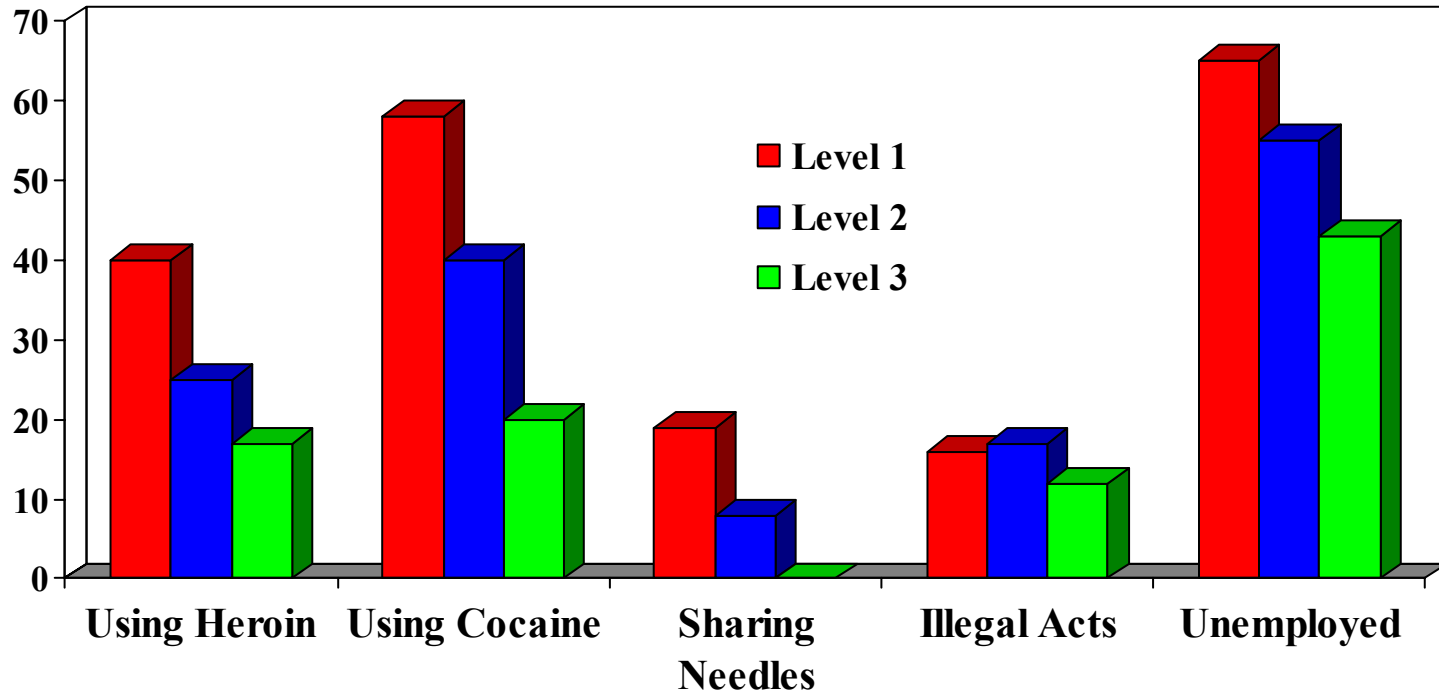
Family Therapy

Psychiatric Care

*** Does not include 13 patients who did not successfully complete the program**

Methadone Levels Study

Target Behaviors at Six Months, by level of Services





Challenges for Improving Medication Adherence


- **Patient characteristics**
 - Older age, cognitive impairments, depression and substance abuse, and attitudes and beliefs about medication importance
- **Barriers to target**
 - Adverse effects, polypharmacy, dosing frequency and high costs
- **Clinician barriers**
 - Insufficient substance abuse experience, lack of trust, negative attitudes



Conclusions

- **Drug abuse and HIV are interacting chronic diseases**
- **Limited evidence that drug use has an important biologic effect on HIV pathogenesis**
- **Strong evidence that drug use interferes with optimal HIV management**
 - **Delayed access to medical care and HAART**
 - **Impaired long-term adherence**
 - **Lower rates of viral suppression**
 - **HIV disease progression associated with active drug use**
- **Integrated care models have promise for this population**
 - **Outcome-based and cost-effectiveness research needed**

**We must remain vigilant to continual counseling on risk reduction
(for drugs, sex and to enhance adherence)**



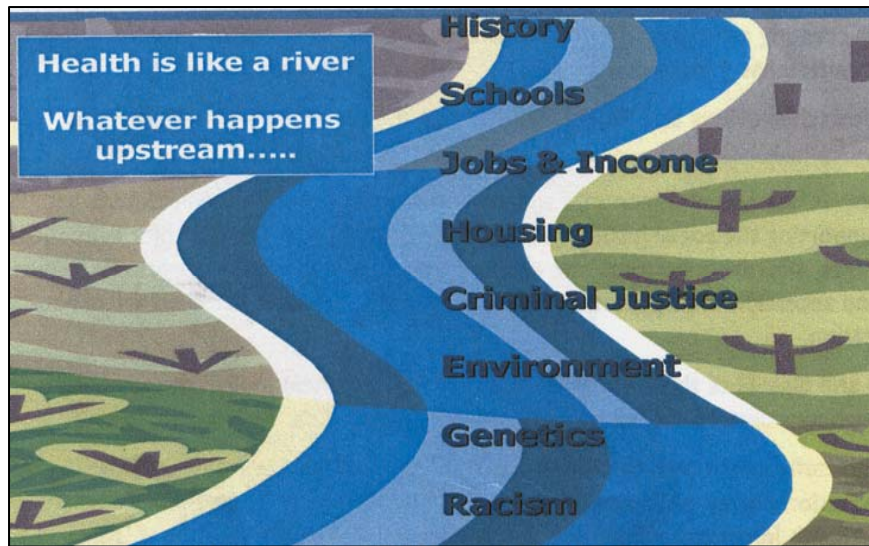
DAART and Opioid Substitution Therapy May Be the Key

- **DAART provided in urban methadone clinics yielded 56% with VL <400 copies compared to 44% in non-IDU group¹**
- **Maintaining high adherence levels essential to avoiding resistant HIV and transmission via needle sharing²**
- **Adherence case management and DAART failed to improve VL compared to SOC³**

1. Lucas et al. *CID*. 2006;42:1628

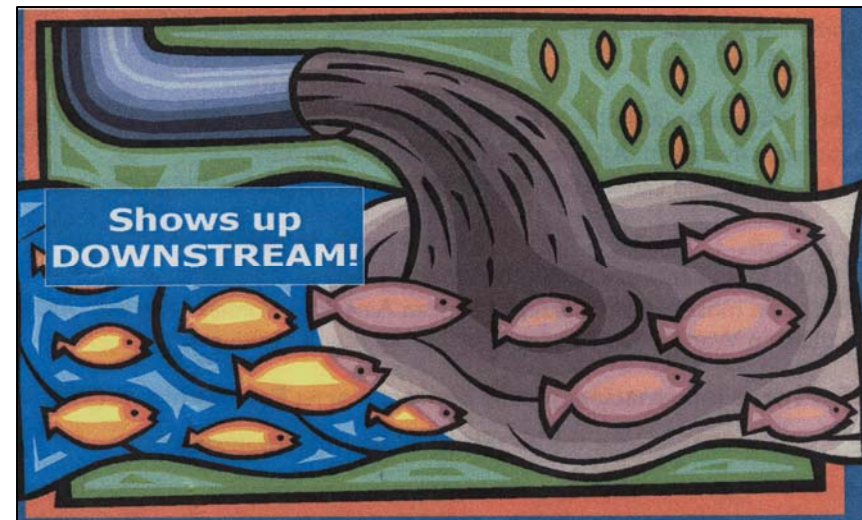
2. Kozal et al. *JAIDS*. 2005;40:106

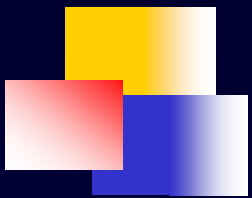
3. Wohl et al. *CID*. 2006;42:1619



Many factors influence our health: unequal health care access and treatment; unjust economic and environmental conditions; unsafe living and work conditions; poor social and community networks and unhealthy personal lifestyles.

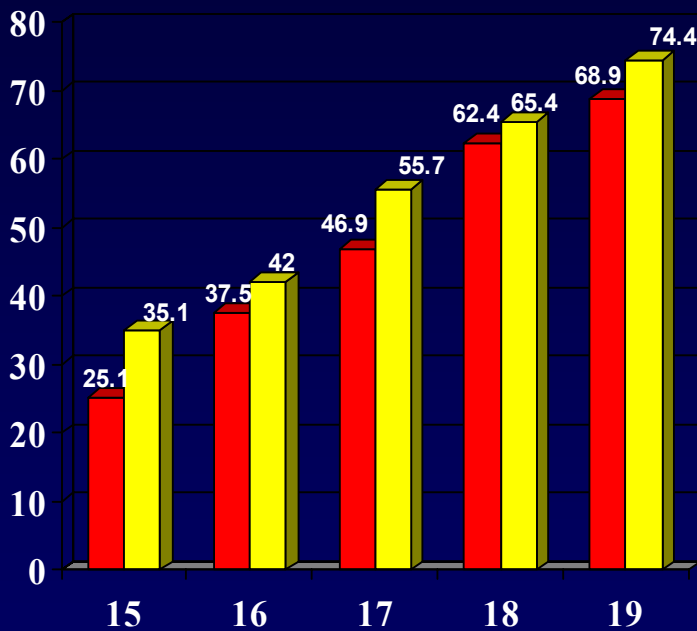
Social Injustice → Health Inequalities



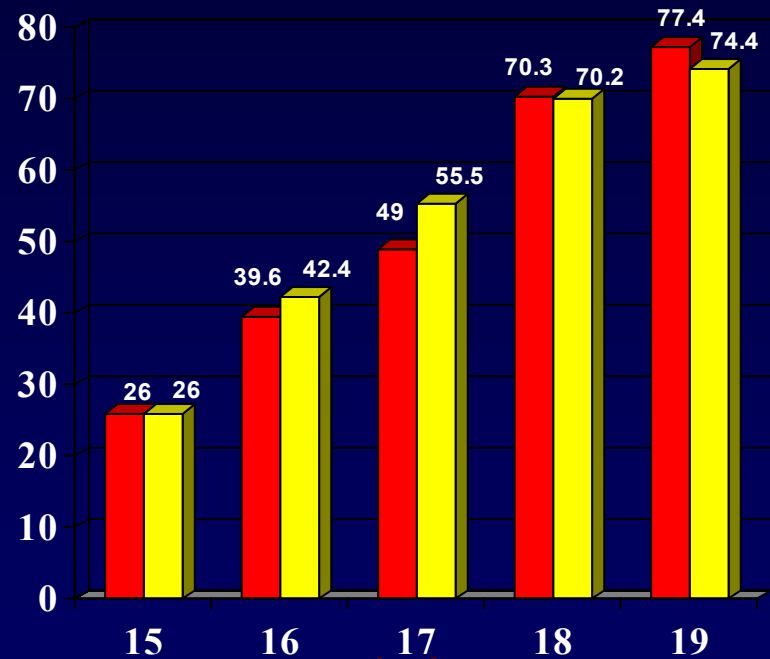


A Sense of Intimacy appears to be lacking


■ Percentage who have had Intercourse ■ Percentage who have had oral sex



Boys



Girls



THANK YOU