Office of National AIDS Policy (ONAP)

Incidence Subcommittee Update

Greg Millett
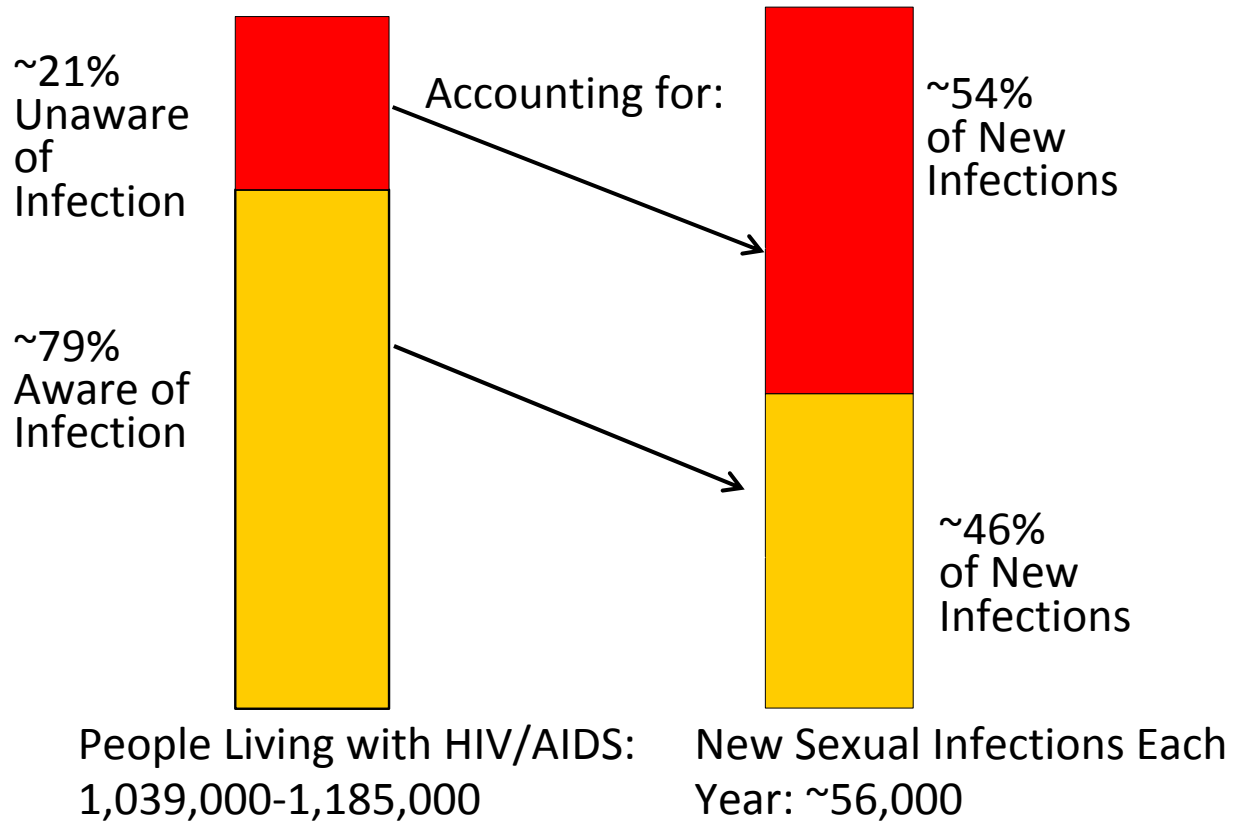### April 26, 2010

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Federal HIV/AIDS Interagency Working Group of Committees and Respective Missions

- ***Incidence:*** Identify programmatic and policy strategies that will result in reducing incidence of HIV and AIDS.

- ***Access to Care:*** Identify programmatic and policy strategies that will result in increased access to care and optimal health outcomes among people living with HIV/AIDS.

- ***Disparities:*** Identify programmatic and policy strategies that will result in reductions in HIV-related disparities.

- ***Overarching:*** Monitor process across subcommittees; Identify cross-cutting issues; Identify inefficiencies and

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- *Increase knowledge of HIV status among positives*

~21% Unaware of Infection

~79% Aware of Infection

Accounting for:

~54% of New Infections

~46% of New Infections

People Living with HIV/AIDS: 1,039,000-1,185,000

New Sexual Infections Each Year: ~56,000

Marks G, et al AIDS 2006; 20:1447

Trend in Share Naming HIV/AIDS as Most Urgent Health Problem Facing the Nation

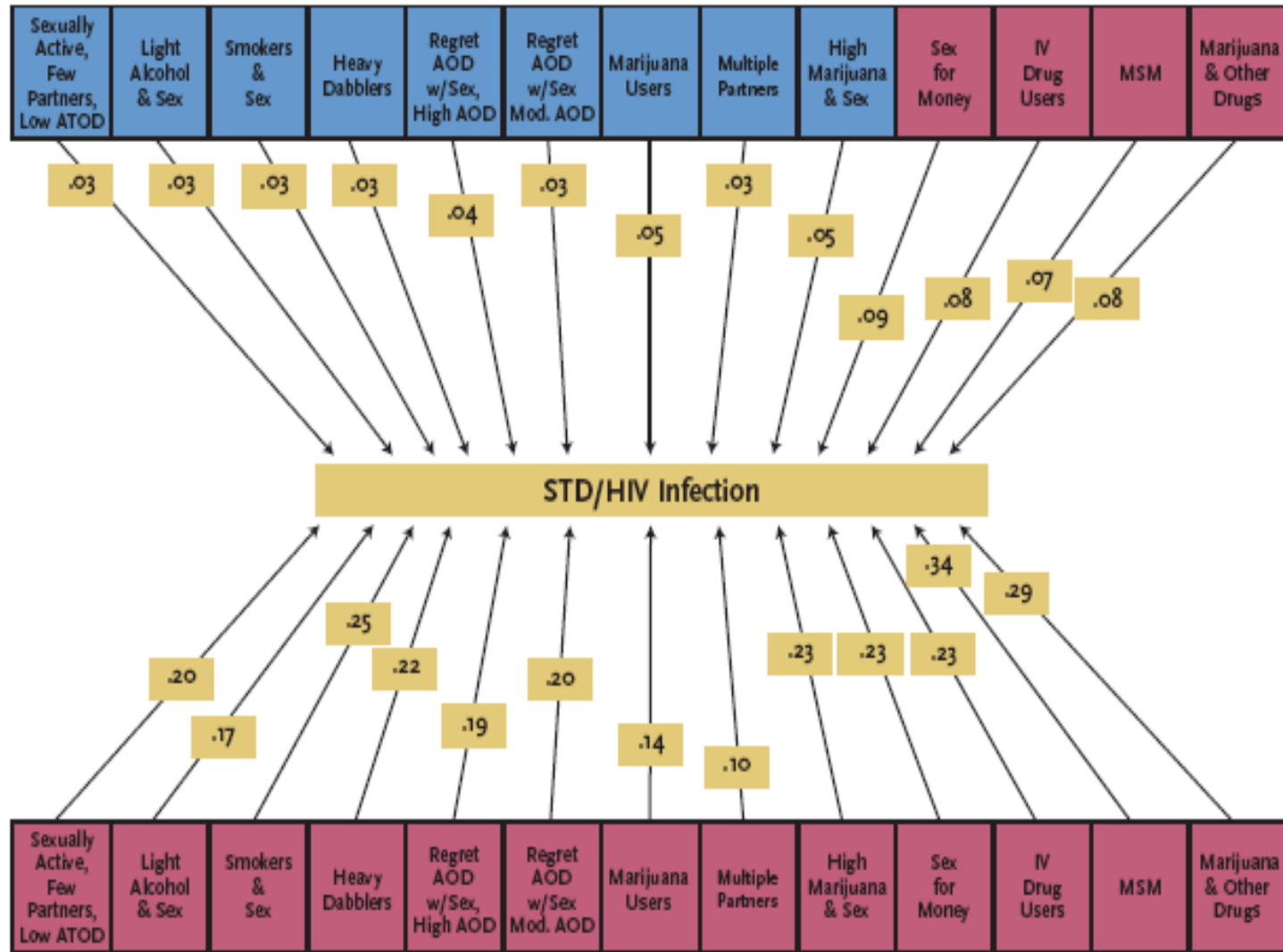Percent naming HIV/AIDS as the most urgent health problem facing the nation in an open-ended question…

Kaiser, 2009

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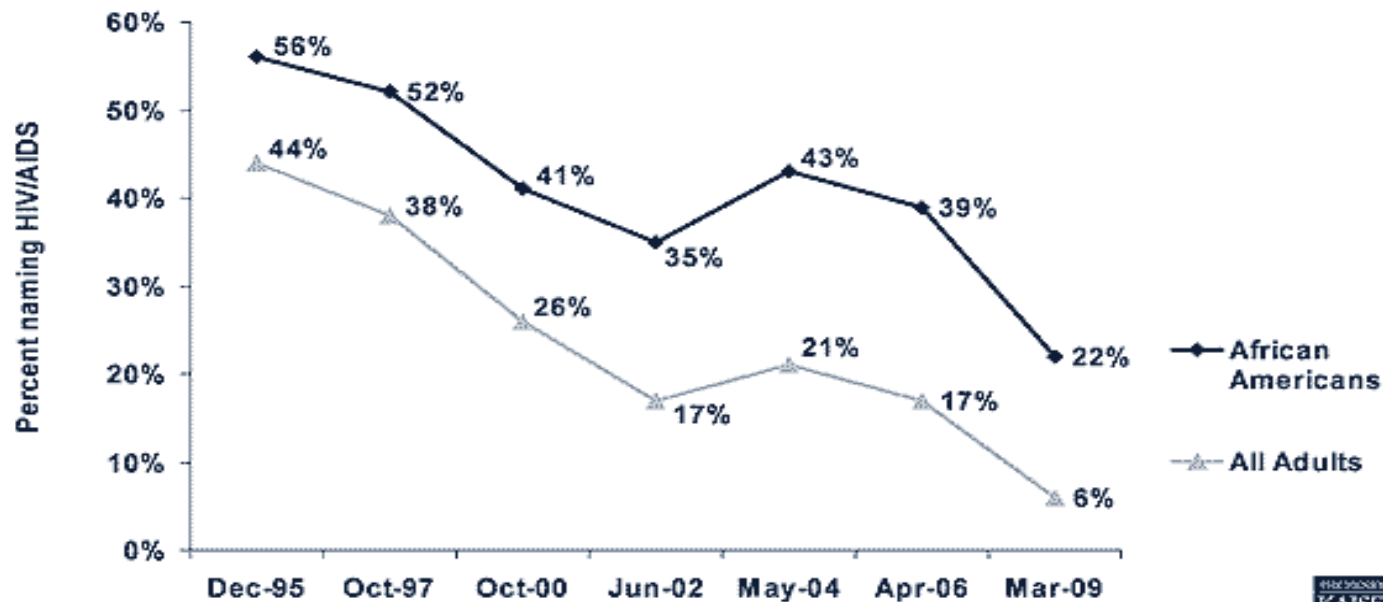
- *Reduce risk of HIV transmissibility among diagnosed positives*

- *Reduce behavioral risk among HIV-negatives*

- *Address structural issues that contribute to HIV incidence*
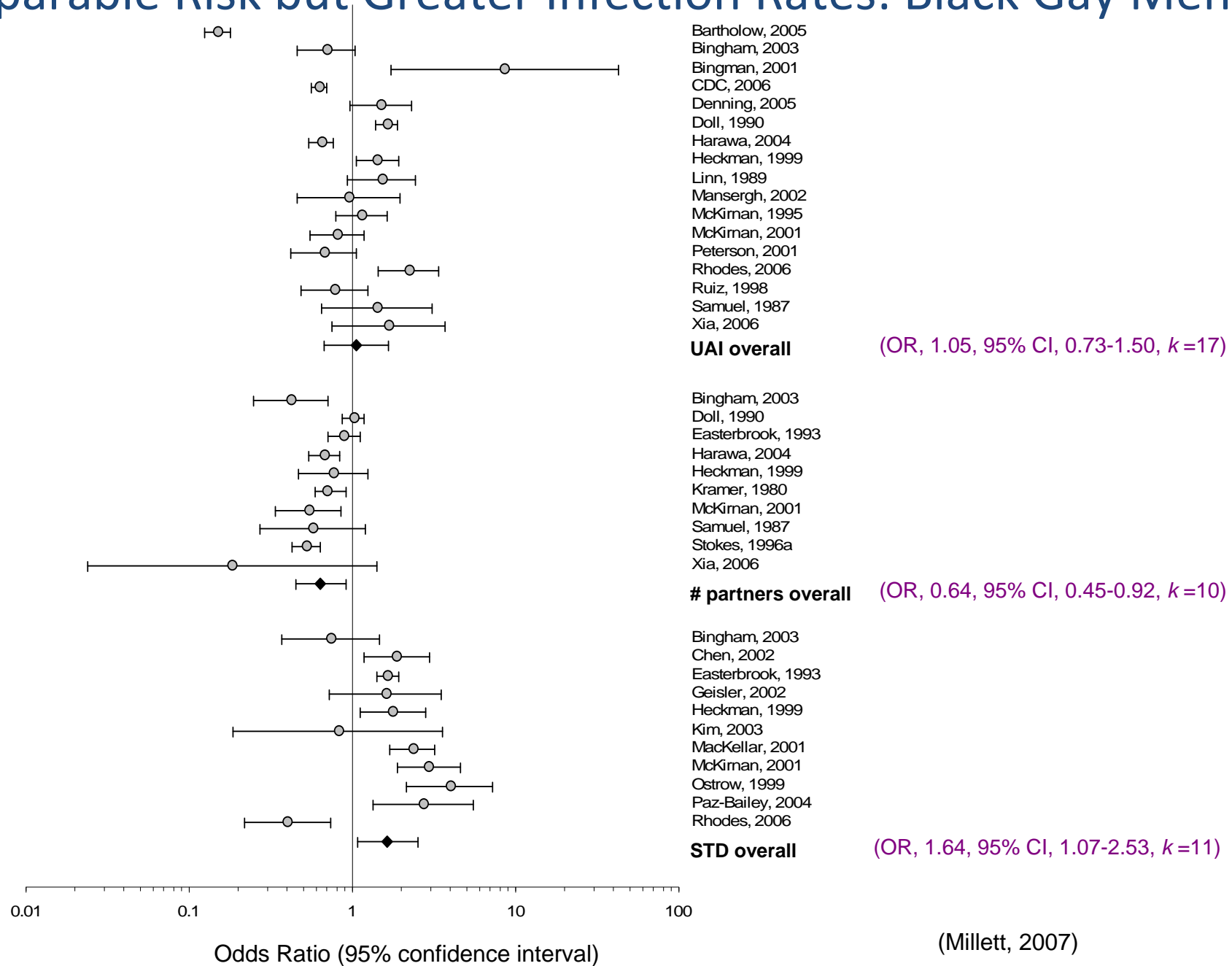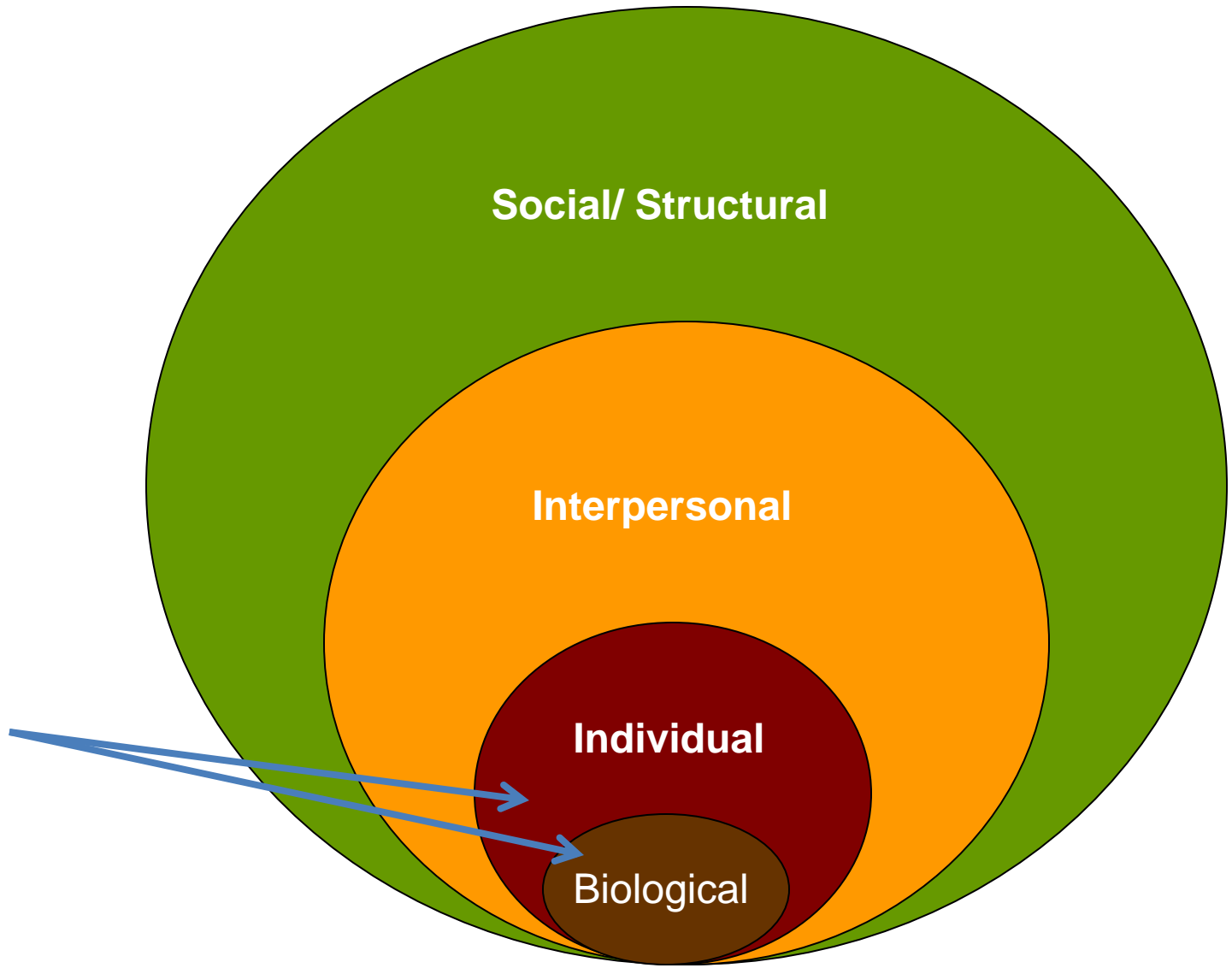
Whites (red clusters = infection rates >.o6)

African-Americans (red clusters = infection rates >.o6)

Low Risk but Greater Infection Rates:
Heterosexual Black Adults (Hallfors et al., 2006)

Comparable Risk but Greater Infection Rates: Black Gay Men

Bartholow, 2005
Bingham, 2003
Bingman, 2001
CDC, 2006
Denning, 2005
Doll, 1990
Harawa, 2004
Heckman, 1999
Linn, 1989
Mansergh, 2002
McKirnan, 1995
McKirnan, 2001
Peterson, 2001
Rhodes, 2006
Ruiz, 1998
Samuel, 1987
Xia, 2006
UAI overall　　(OR, 1.05, 95% CI, 0.73-1.50, *k* =17)

Bingham, 2003
Doll, 1990
Easterbrook, 1993
Harawa, 2004
Heckman, 1999
Kramer, 1980
McKirnan, 2001
Samuel, 1987
Stokes, 1996a
Xia, 2006
 # partners overall　(OR, 0.64, 95% CI, 0.45-0.92, *k* =10)

Bingham, 2003
Chen, 2002
Easterbrook, 1993
Geisler, 2002
Heckman, 1999
Kim, 2003
MacKellar, 2001
McKirnan, 2001
Ostrow, 1999
Paz-Bailey, 2004
Rhodes, 2006
STD overall　　(OR, 1.64, 95% CI, 1.07-2.53, *k* =11)

Odds Ratio (95% confidence interval)

(Millett, 2007)

HIV Incidence Proxy Measures

Increase awareness HIV of status among positives

- % Lifetime test

- % recent (past year) HIV test

- % received HIV test in past 12 mos and know results

HIV Incidence Proxy Measures

Reduce transmissibility

- HIV transmission rate
- % diagnosed among all positives
- Disease stage at HIV diagnosis
- % of those who access care immediately after HIV diagnosis
- % of those with advanced HIV receiving ART
- % of STIs diagnosed
- % HIV/STI co-infections

HIV Incidence Proxy Measures

Reduce risk behaviors among negatives

- % reporting unprotected sex w/ HIV+ or unknown partners;

- % sharing needles, cotton, cooker;

- % unprotected sex while under influence of alcohol or drugs.

HIV Incidence Proxy Measures

Address structural issues that contribute to HIV incidence.

- Stigma (delayed HIV testing, treatment)
- Enforcement of current CDC testing guidelines
- Availability of needle exchange programs
- Housing, poverty, joblessness
- Drug sentencing laws
- Community viral load

Community VL predicts HIV incidence
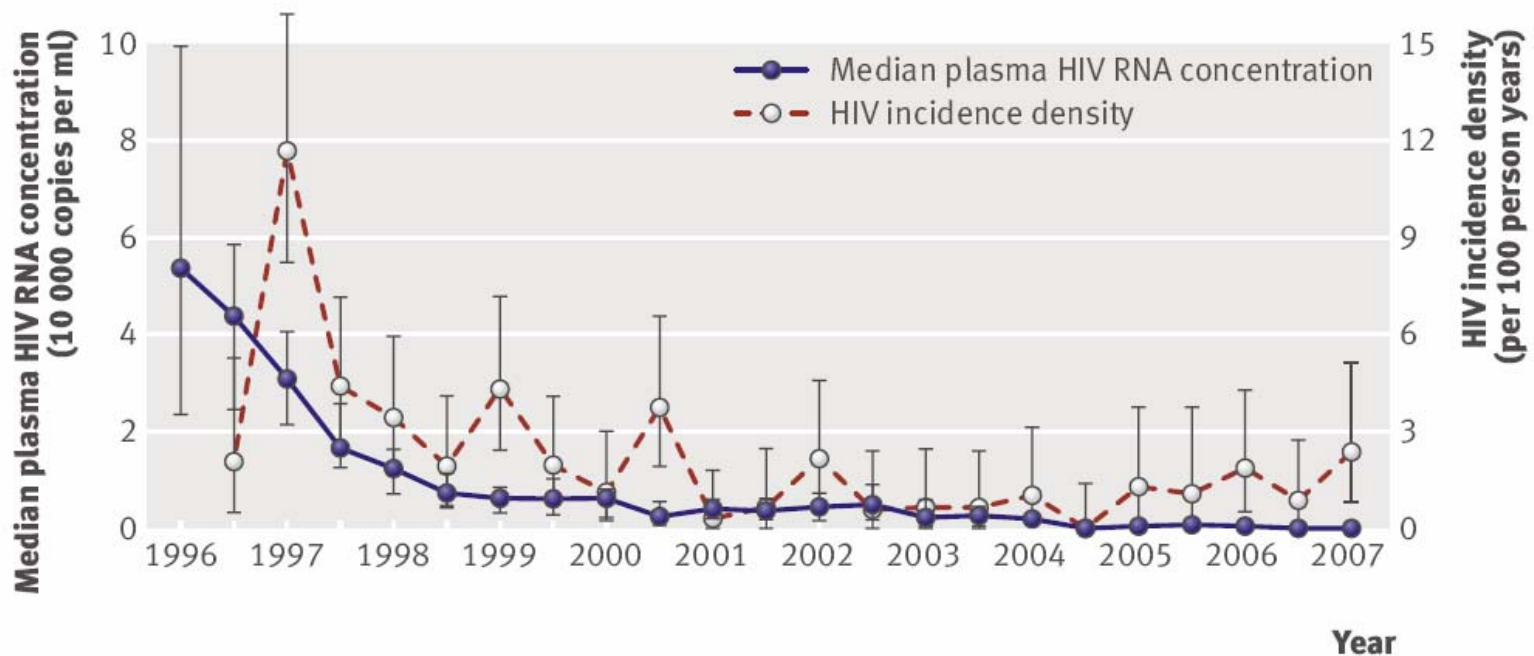
Estimated community plasma HIV-1 RNA concentrations and HIV incidence density, with 95% confidence intervals, among two parallel cohorts of injecting drug users. HIV incidence first estimated in second half of 1996 as enrolment started in May 1996 and repeat HIV tests to assess incidence were available only after six months of follow-up

Wood E et al. BMJ. 2009 Apr 30;338:b1649

Interagency Conference Call with PACHA and Others

- Additional proxy measures
  - % of people who need prevention services
  - Acute HIV infection

- Discussion of what can be achieved in the next 2 years vs. longer

- Role of private sector in reducing HIV incidence