

HIV Prevention today: Who we are not reaching and why?

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Epidemiology and Prevention

- Inform HIV prevention programs as to target subgroups and content
- Evaluate impact of HIV Prevention Program and health policies

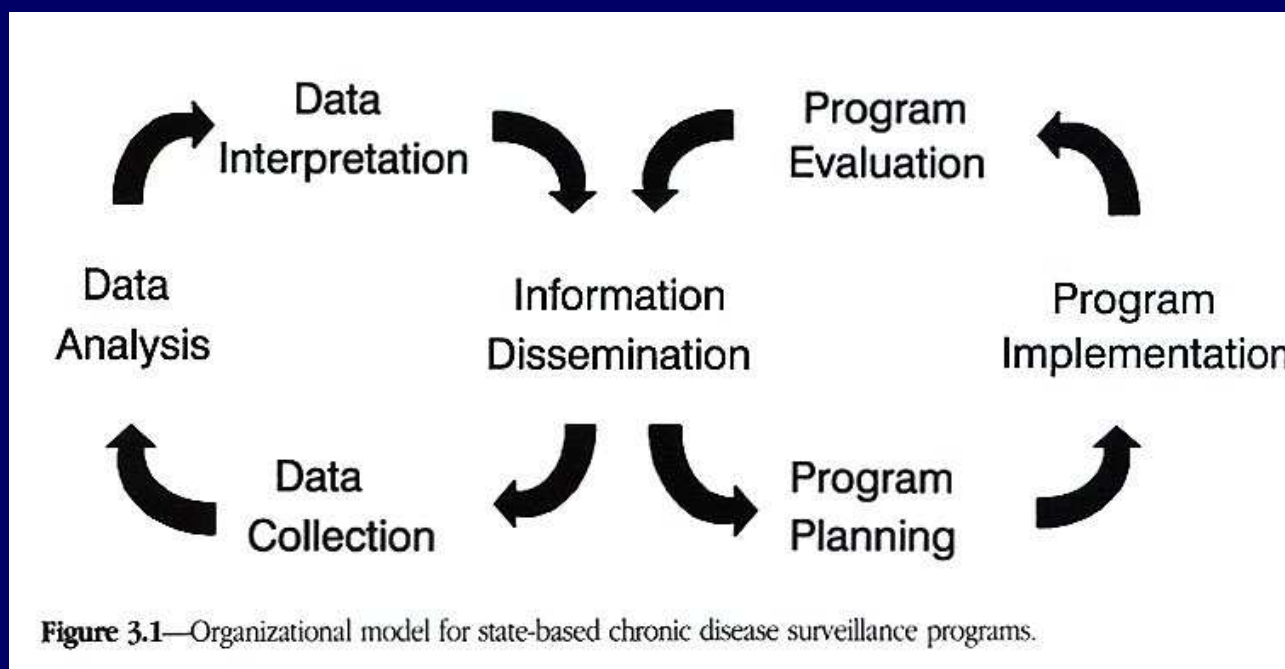
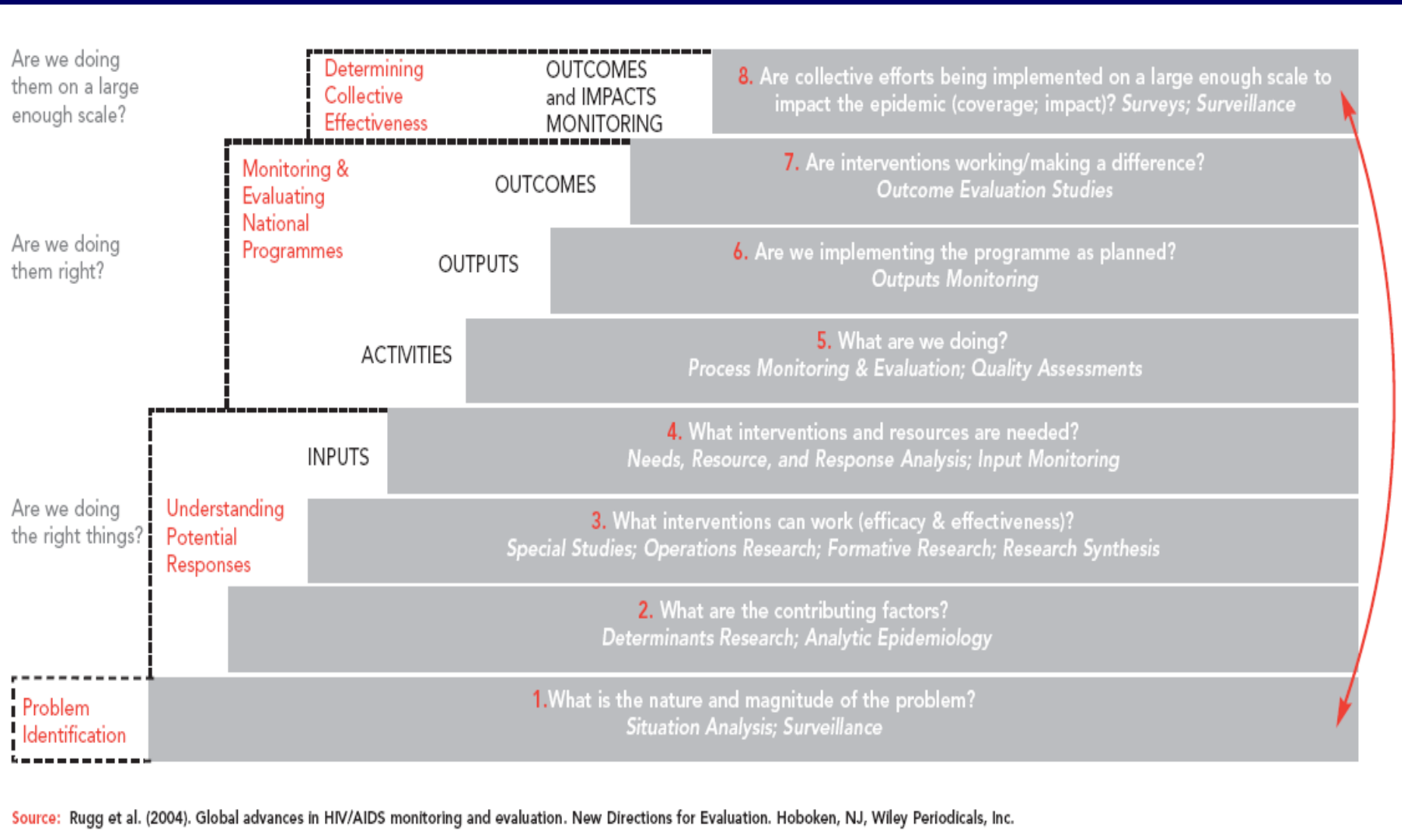


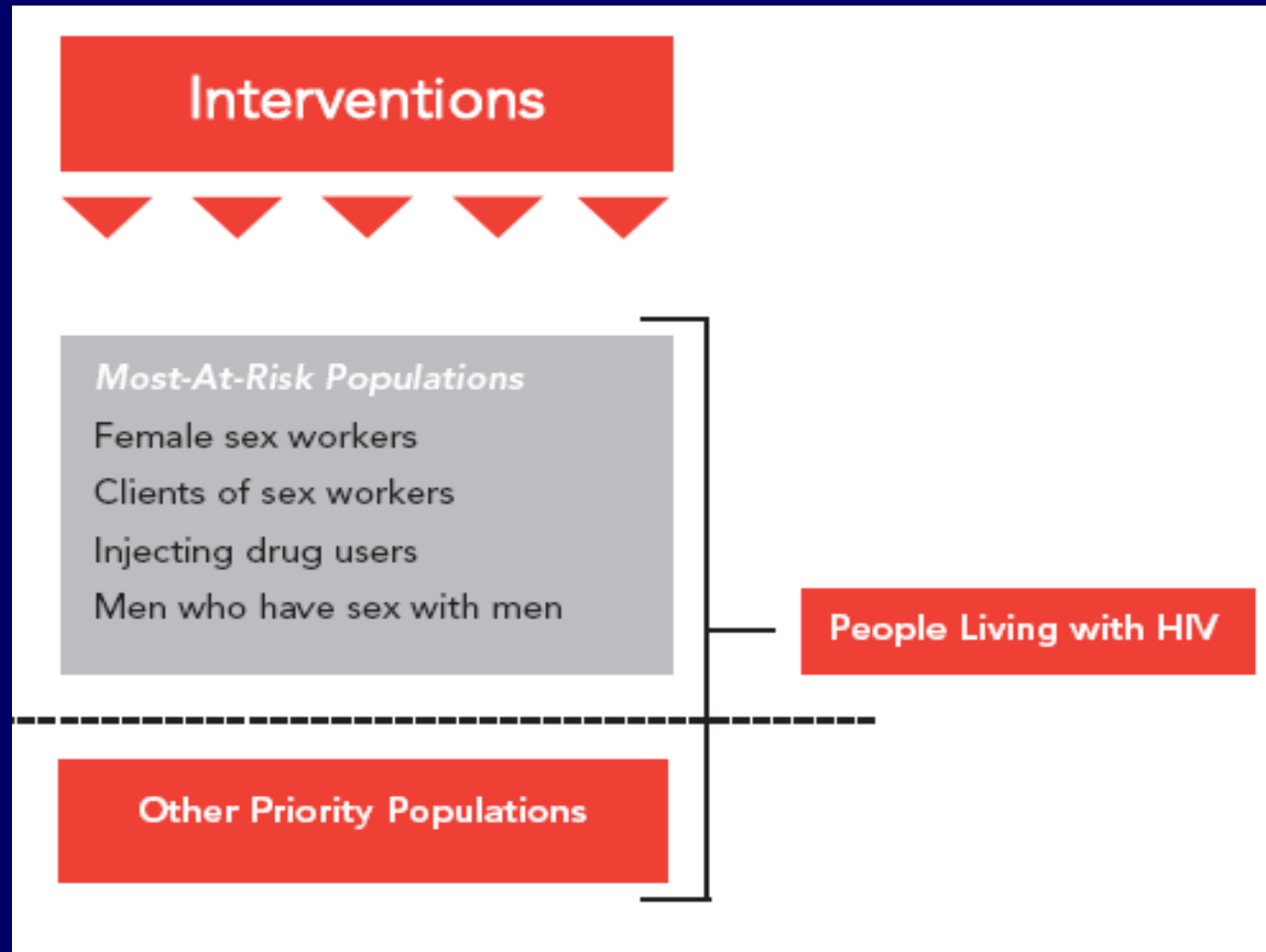
Figure 3.1—Organizational model for state-based chronic disease surveillance programs.

Unifying HIV Prevention Monitoring and Evaluation



UNAIDS/07.15E / JC1338E. A framework for monitoring and evaluating HIV prevention programmes for most-at-risk populations (April 2007)

Priority Populations For HIV-Prevention Interventions In Low-Level And Concentrated Epidemics



UNAIDS/07.15E / JC1338E. A framework for monitoring and evaluating HIV prevention programmes for most-at-risk populations (April 2007)

Interventions with known efficacy in concentrated epidemics

- **MSM**
 - Education, behavioral interventions, peer outreach
 - Condom promotion and social marketing
 - HIV voluntary counseling and testing (VCT)
 - Structural interventions (closing bathhouses, providing MSM clinic services)
- **IDU**
 - Harm Reduction
 - Needle and syringe exchange
 - Methadone maintenance therapy (MMT), other substitution
 - HIV VCT
- **Sex Workers**
 - Education, behavioral interventions, peer outreach
 - Condom promotion, distribution, social marketing
 - STI based approaches, VCT
 - Structural interventions (100% Condom Campaign), decriminalization
 - Empowerment, self-efficacy, micro-economics

New Potential HIV Prevention Tools

HIV vaccines

- First class (subunits) failed
- Pox vectors (bird pox) weakly immunogenic
- ADV5 vector phase IIb trial stopped for non-efficacy, possible harm

Microbicides

Many phase I/II trials, a few phase III

No evidence for efficacy

Male Circumcision

3 trials with efficacy for prevention of male acquisition

ARV Treatment as Prevention (PEP): under study

New Substitution Therapies of IDU transmission: in trials

BESURE MSM Study – Baltimore (2004-2005)

Unrecognized HIV & Associated Risks	Total (%) N = 243	Unrecognized n=142 (%)	AOR ¶ (95% C.I.)
Race/Ethnicity			
White, not Hispanic	26 (10.7)	4 (15.4)	Reference
Black, not Hispanic	192 (79.0)	121 (63.0)	12.2 (3.7,40.4) **
Hispanic	11 (4.5)	7 (63.6)	7.0 (1.1, 44.5) *
Other, not Hispanic	14 (5.8)	10 (71.4)	13.0 (2.3,72.9) *
Age Group			
18 to 24	41 (16.9)	36 (87.8)	Reference
25 to 34	53 (21.8)	36 (67.9)	0.4 (0.1, 1.2)
35 to 44	99 (40.7)	51 (51.5)	0.2 (0.0, 0.5) *
45 or older	50 (20.6)	19 (38.0)	0.1 (0.0, 0.3) **

¶ adjusted for number of male partners, L12M & STD diagnosis, ever;
 •p-value <0.05; **p-value <0.001

Baltimore data contributing to: Sifakis F, et al. MMWR 2004

HIV testing – Baltimore Young Men’s Survey (1996 – 2000)

Table 2 Univariate and multivariate analyses of prior HIV testing of young MSM, by demographics, prior STD diagnosis, and lifetime and recent risk behaviors, the Young Men’s Survey, Baltimore (1996–2000)

	Participants (N) ^a	Prior HIV test (%)	OR ^b (95% CI)	AOR ^c (95% CI)
Total	843	665 (78.9)	–	–
<i>Characteristic</i>				
Age group (years)				
15–19	135	76 (56.3)	1.0 (Ref.)	1.0 (Ref.)
20–22	217	152 (70.1)	1.8* (1.2, 2.8)	2.0* (1.3, 3.2)
23–25	257	223 (86.8)	5.1** (3.1, 8.4)	6.1** (3.5, 10.8)
26–29	234	214 (91.5)	8.3** (4.7, 14.7)	10.1** (5.4, 18.8)
Male sex partners, lifetime number				
1–4	219	131 (59.8)	1.0 (Ref.)	1.0 (Ref.)
5–19	351	283 (80.6)	2.8** (1.9, 4.0)	2.2** (1.5, 3.3)
≥20	272	250 (91.9)	7.6** (4.5, 12.6)	5.0** (2.9, 8.7)
Anal sex with men, lifetime				
No	74	36 (48.7)	1.0 (Ref.)	1.0 (Ref.)
Yes	769	629 (81.8)	4.7** (2.9, 7.8)	4.0** (2.4, 6.8)
STD ^b diagnosis, lifetime				
No	678	517 (76.3)	1.0 (Ref.)	1.0 (Ref.)
Yes	165	148 (89.7)	2.7** (1.6, 4.6)	2.1* (1.2, 3.7)
UAI, ^b last 6 months				
No	506	382 (75.5)	1.0 (Ref.)	1.0 (Ref.)
Yes	337	283 (84.0)	1.7* (1.2, 2.4)	1.6* (1.1, 2.3)

Baltimore MSM Studies Conclusions

- High levels of HIV testing reported:
 - Approx. 87% in the BESURE Study
 - Approx. 79% in YMS
- High levels of unrecognized infection and high-risk sexual behavior post HIV test
- Clear disconnect between testing and counseling

Rapid Epi Assessment MSM – Russia 2008

HIV Seropositivity & Associated Factors	Total (%) N = 401	HIV+ (%)	p-value
City			
Moscow	201 (50.1)	12 (6.0)	-
St. Petersburg	200 (49.9)	11 (5.5)	-
Age Group			
18 to 22	91 (22.8)	7 (7.7)	-
23 to 25	106 (26.5)	6 (5.7)	-
26 to 28	80 (20.0)	5 (6.3)	-
29 or older	123 (30.8)	5 (4.1)	-
Venue Attendance			
Physical venue, yes vs. no	335 (88.9)	21 (6.3)	0.012
Internet access, yes vs. no	327 (86.7)	20 (6.1)*	0.011

* NB: several times a day --> HIV%=14.9

Rapid Epi Assessment MSM – Russia 2008

HIV Seropositivity & Associated Factors (cont.)	Total (%) N = 401	HIV+ (%)	p-value
Prior HIV Test, ever			
No	52 (13.0)	7 (13.5)	0.01
Yes	349 (87.0)	16 (4.6)	Ref.
Injected Drugs, ever			
No	380 (95.2)	17 (4.5)	Ref
Yes	13 (3.3)	5 (38.5)	< 0.0001
Prior STD diagnosis, ever*			
No	276 (87.3)	15 (5.4)	Ref.
Yes	40 (12.7)	6 (15.0)	0.027

* Missing n=85

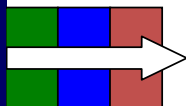
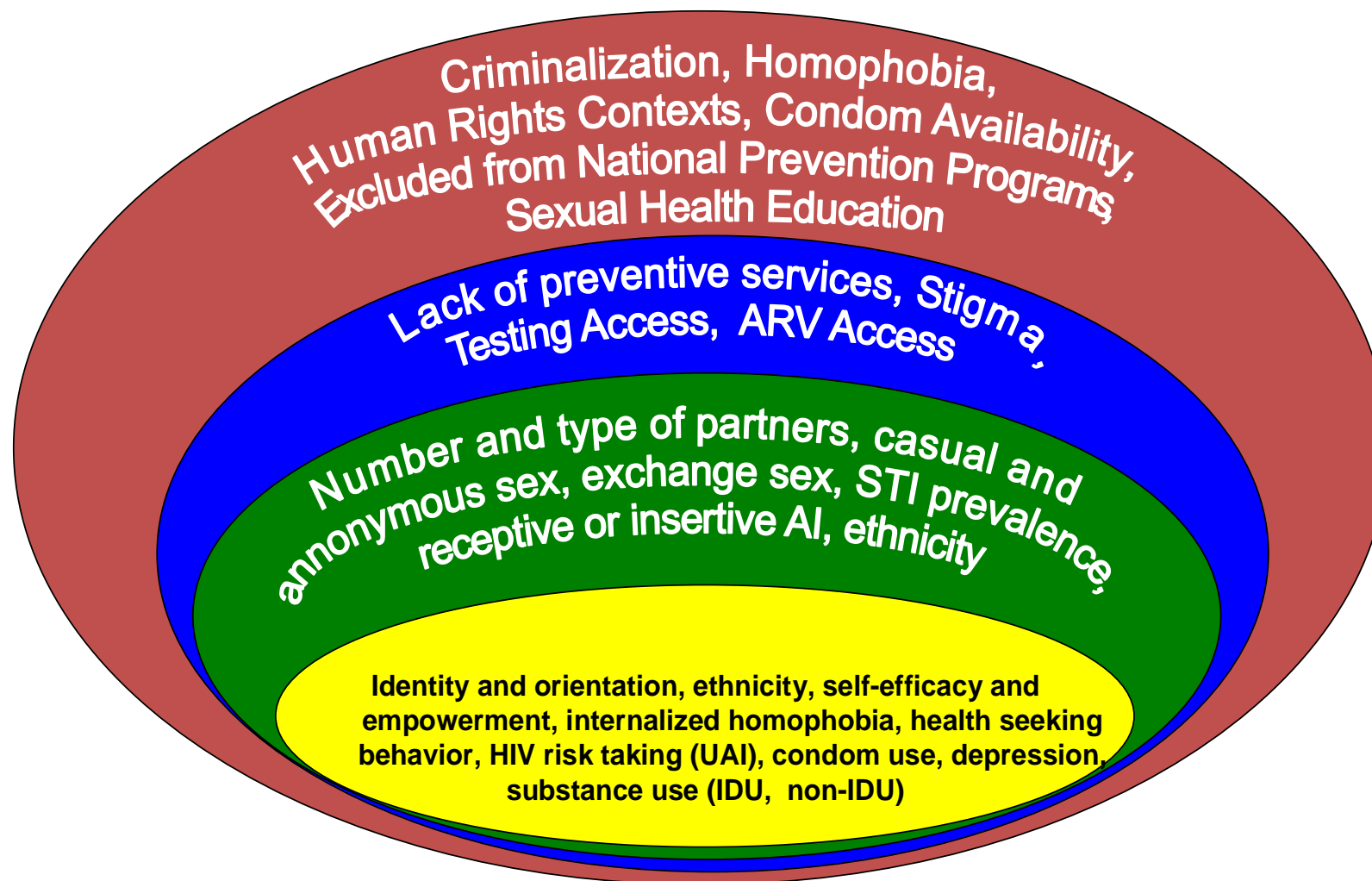
Rapid Epi Assessment MSM – Russia 2008

HIV Seropositivity & Associated Factors- Multivariate Analysis	Total (%) N = 401	HIV+ (%)	AOR † (95% C.I.)
Prior HIV Test, ever			
No	52 (13.0)	7 (13.5)	7.5 (1.9, 29.9)
Yes	349 (87.0)	16 (4.6)	Ref.
Injected Drugs, ever			
No	380 (95.2)	17 (4.5)	Ref.
Yes	13 (3.3)	5 (38.5)	9.8 (2.0, 47.3)

Russia MSM Study Conclusions

- Report of prior HIV testing high (87%); 63% had participated in individual- or group-level HIV prevention program; 70% had received free condoms
- Risk behaviors are present:
 - Approx. 75% reported UAI
 - Approx. 20% reported exchange sex
 - Approx. 49% reported ≥ 5 male sex partners L12M
- Injection drug use and lack of access to HIV testing are powerful predictors of HIV infection

Social Ecological Model for identity and health Risks among GB and in MSM



Widening risk contexts for HIV



Individual risks for HIV

Strategy Recommendations

- Look at the 'big picture'; HIV risk behaviors and infection happen in the context of life
- Address structural needs and priorities; provide social support, reduce stigma and discrimination
- Engage those at risk, public health, and political leadership
- Expand focus from individual-level behaviors to community- and country-level factors
- Specifically tailor prevention to target groups
- Focus on outcome as well as process evaluation
- Treat as consumers and address barriers
- Keep up with new technologies and changes in social interactions among those at risk