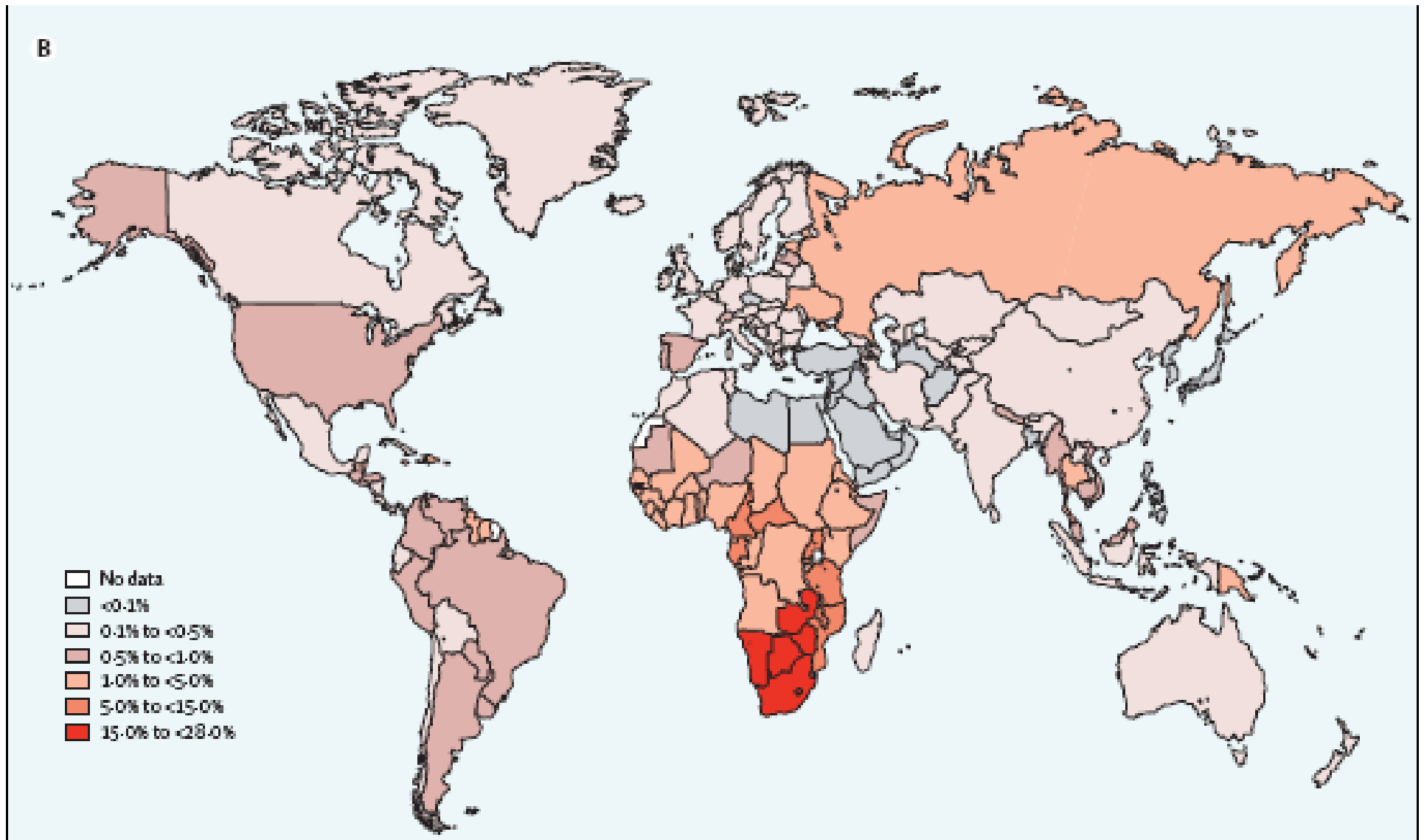


**PUMA:**  
**Prevention**  
**Umbrella for**  
**MSM in the**  
**Americas**

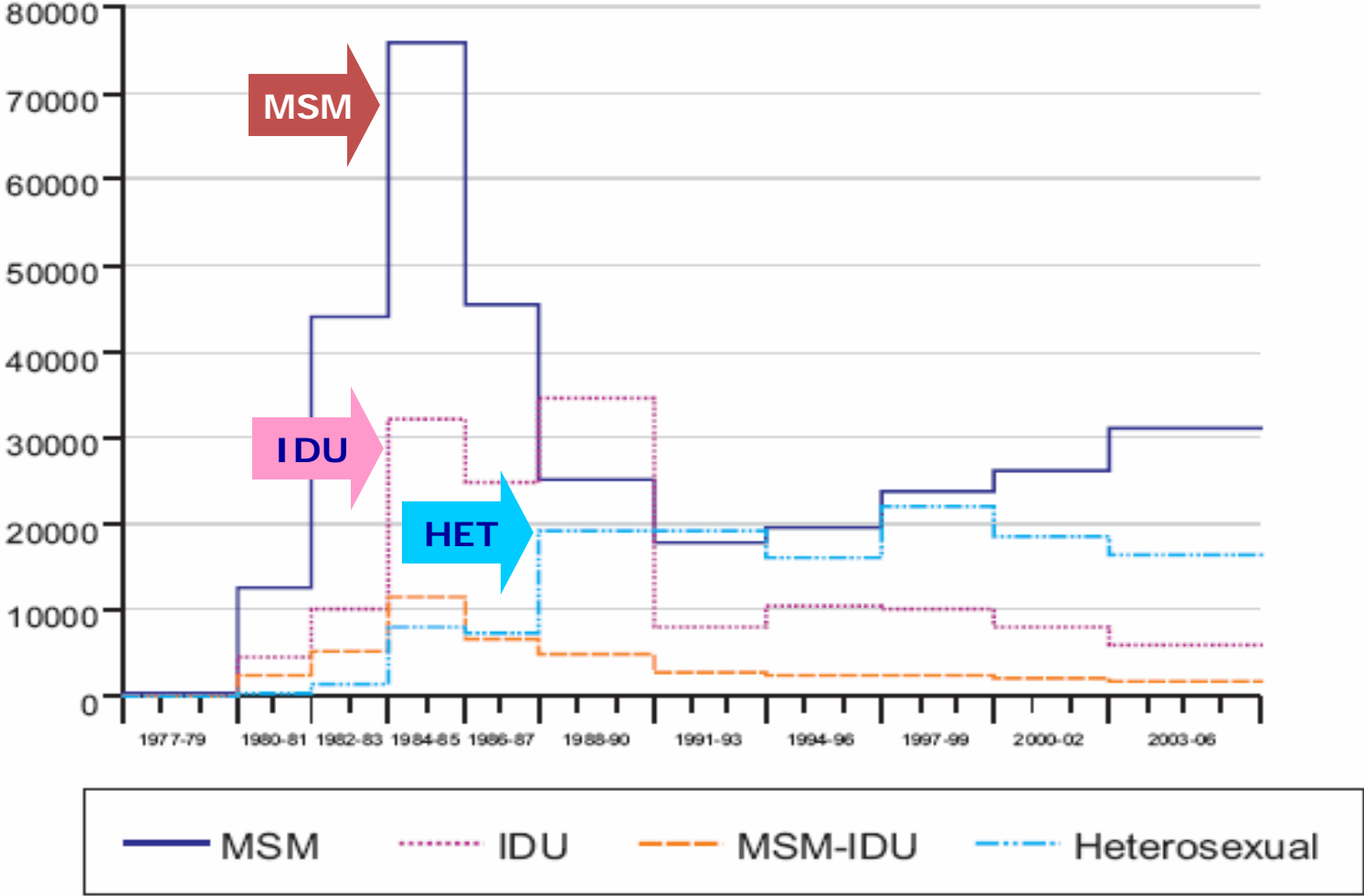


# “Know Your Epidemic, Know Your Response”



# Estimated number of new HIV infections U.S., 1977-2006

Hall, JAMA 2008



# HIV Prevalence in MSM vs. General Population

Baral et al, PLoS Med 2007

**Table 1. HIV Prevalence among MSM vs. General Population in Latin American Countries**

Country	MSM Prevalence	Population Prevalence	OR
Mexico	25.6%	0.32%	109.0
Bolivia	21.2%	0.15%	178.8
Columbia	19.4%	0.69%	34.5
Uruguay	18.9%	0.56%	41.0
Ecuador	15.1%	0.31%	56.4
Brazil	14.4%	0.58%	28.7
Paraguay	13.0%	0.42%	35.4
Honduras	13.0%	1.72%	8.6
Peru	12.2%	0.61%	22.6
Argentina	12.1%	0.65%	21.0
Guatemala	11.5%	1.04%	12.4
Panama	10.6%	1.03%	11.5
Nicaragua	9.3%	0.25%	40.8
El Salvador	7.9%	1.04%	8.1

“If we really want to advance the effectiveness of HIV prevention, we have to disabuse ourselves of the notion that the epidemic can be conquered by a single best intervention.”

-Michael Merson and colleagues  
Lancet, 2008

# Predictors of HIV seroconversion in MSM

Explore: 4295 MSM in 6 US cities, 1999-2003

<b>Variable</b>	<b>PAR</b>	<b>OR<sub>adj</sub></b>	<b>95% CI</b>
4-9 male sex partners	32.3%	1.6	1.1-2.4
≥ 10 male sex partners		1.8	1.2-2.7
Use of alcohol or drugs before sex	29.0%	1.6	1.1-2.3
Unprot receptive anal sex w/ unknown sero	28.4%	2.9	2.1-3.8
Unprot receptive anal sex w/ HIV negative	21.6%	1.9	1.4-2.7
Unprot receptive anal sex w/ HIV positive	18.3%	3.4	2.2-5.1
Depression	16.7%	1.5	1.1-1.9
Amphetamines	16.3%	2.0	1.4-2.6
Unprot insertive anal sex w/ HIV positive	8.6%	1.6	1.0-2.4
Heavy alcohol use	6.1%	2.0	1.2-2.8
Self-reported gonorrhea	4.3%	2.5	1.5-4.2

## Potential Interventions

- Pre-exposure prophylaxis
- Male circumcision
- Treatment of substance use
- Increase uptake HIV testing
  - Disclosure, serosorting
- Decrease infectiousness of HIV positives
- Optimizing biomedical interventions
  - Adherence
  - Risk compensation

## Specific Aims

### PUMA

- Review epidemiologic data sources, model interventions to select interventions likely to have greatest impact
- Obtain community input into components of prevention package including community members, CBOs, providers
- Build efficacy trial of menu-based HIV prevention package

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