# **Disproportionately High Rates of STDs Among MSM**

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### General Observations: Prevalence of STDs Among MSM

- Significant data gaps:
  - Same sex behavior
  - Anatomic site of infection
  - Few population-based samples
- Preponderance of evidence: many STDs occur at disproportionately high rates in MSM



## Factors Influencing Disparate STD Rates in MSM

- Physiological factors (e.g., epithelium of rectum vs. vagina)
- Sex differences in the desire for sexual variety (e.g., time interval before initiation with a new partner)
- Alcohol and drug use (e.g., crystal meth and syphilis outbreaks among MSM)
- Stigma (e.g., anonymous sex in PSE)
- Sexual networks (e.g., pairing of high risk and low risk partners)
- Developmental issues (e.g., MSM coming out may be less willing/able to insist on safer sex)



#### **Enteric STDs**

"For Love has pitched his mansion in the place of excrement" Yeats

- Shigella
- Salmonella
- Giardia
- Amoeba
- Hepatitis A



#### **Bacterial STDs in MSM**

- Substantial evidence for disparate rates of gonorrhea and syphilis among MSM
- For chlamydia, specific serovars (L1, L2, L3) appear disproportionately higher among MSM (LGV)



Gonococcal Isolate Surveillance Project (GISP) — Percent of urethral *Neisseria gonorrhea* isolates obtained from men who have sex with men attending STD clinics, 1988–2005



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#### MSM Prevalence Monitoring Project — Syphilis serologic reactivity among men who have sex with men, STD clinics, 1999–2005



#### \*Data not reported in 2004 and 2005.



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#### Viral STDs in MSM

- Substantial data on disproportionate impact of HIV
- HPV-16 seroprevalence (pbs\*): 37.7% (MSM) vs. 8.1% (never MSM)
- HSV-2 seroprevalence (pbs\*): 23.9% (MSM) vs. 12.8% (MSW)
- HHV-8: most--but not all--studies show higher rates in MSM
- \* Population based survey



#### HPV Infection in MSM (see Chin-Hong et al. JID 2004; 190:2070-2076)

- 1218 HIV (-) MSM from Boston, Denver, NYC, San Fran
- Age of participants: 18-89 years
- HPV DNA found in anal canal of 57% (PCR)
- Prevalence similar across all age groups
- 26% of men had "high risk" HPV types
- Infection indep assoc with RAI and > 5 sex partners in past 6 months



### Anal Cancer among MSM (see Palefsky et al. JID 1998; 177:361-367)

- Anal cancer rates among MSM are several times higher than rates of cervical cancer among US women (35/100,000)
- Rates of HPV infection among HIV-infected MSM are even higher than among HIV (-): 93% vs. 61% in this study
- There are currently no recommendations to vaccinate males against HPV
- Many experts recommend anal PAP smears among MSM



#### Strategies to Reduce STD Disparities among MSM

- Enhance surveillance
- Improve understanding of social determinants of risk
- Improve providers' capacity to deliver care to MSM
- Develop improved preventive, diagnostic, and treatment strategies [community & institutional settings]

