

# Extragenital Testing and HIV Risk in MSM

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# Extragenital Testing

- **Nucleic Acid Amplification Test (NAAT) is a molecular technique that detects the presence of chlamydia-specific DNA or gonorrhea-specific DNA that is amplified (DDPH, 2018).**
- **Testing for STIs at any body site other than urogenital site (Roberts, 2015; Hologic, 2018):**
  - **Male and female urine (Aptima Combo 2 Assay for CT/GC Urine Specimen Collection Kit, Hologic ®)**
  - **Male urethra and endocervix (Aptima Combo 2 Assay for CT/GC Unisex Swab Specimen Collection Kit, Hologic ®)**
  - **Vagina (Aptima Combo 2 Assay for CT/GC Vaginal Swab Specimen Collection Kit, Hologic ®)**

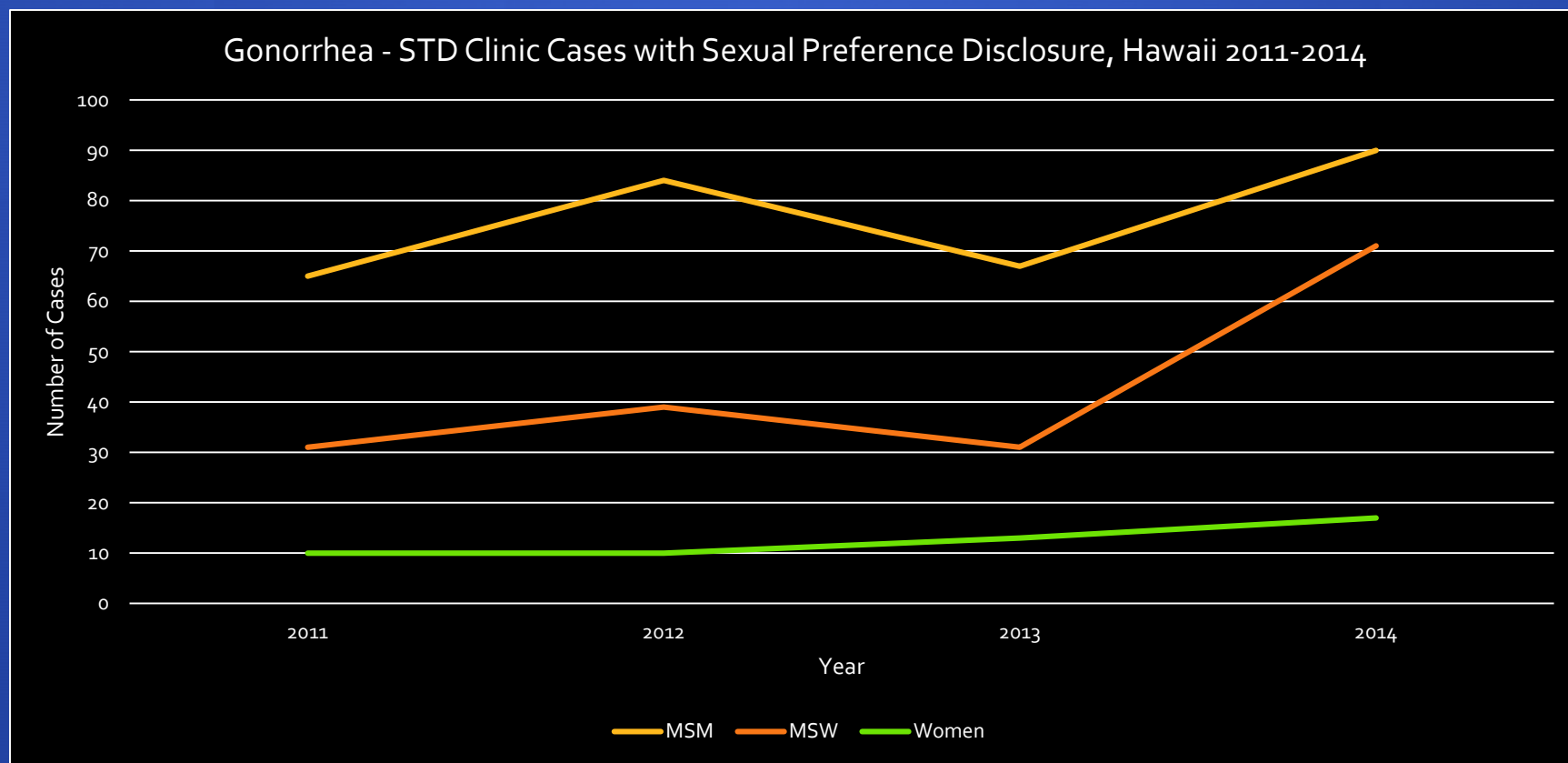
# Extragenital Testing

- Usually refers to rectum and oropharynx
- Tests for *neisseria gonorrhoea* (GC) and/or *chlamydia trachomatis* (CT) only
- Routinely done only for men who have sex with men (MSM)

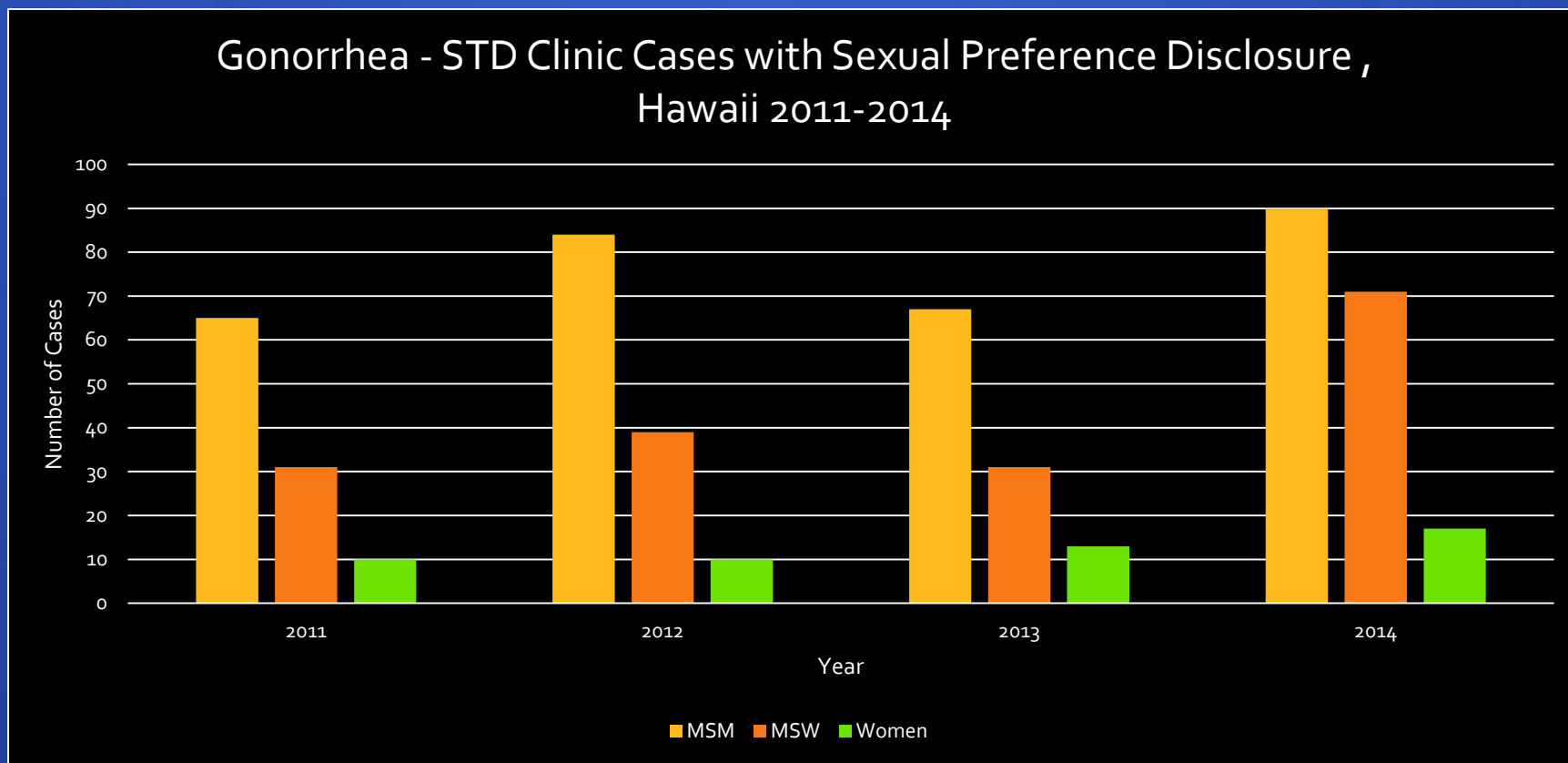
# Goals of Extragenital Testing (Bacon, 2017)

- To prevent morbidity
- To reduce transmission
- To identify patients at risk for HIV
- To identify patients who might benefit from PrEP

# GC, STD Clinic Cases with Sexual Preference Disclosure, Hawaii 2011-2014 (Komeya and Sung, 2016)



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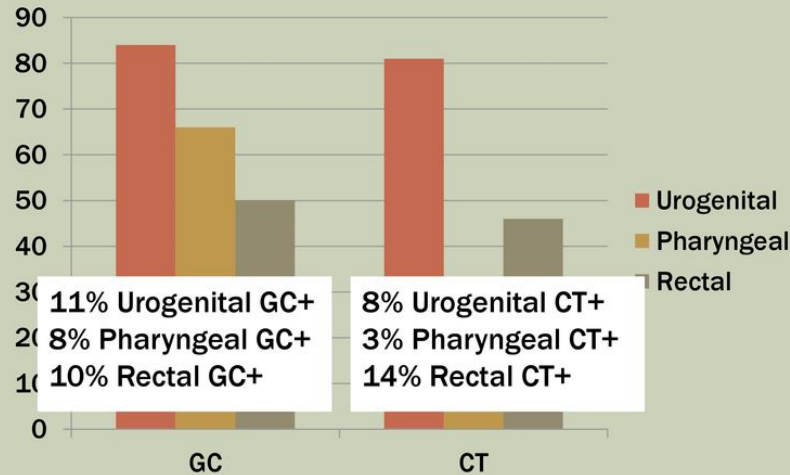


# GC and CT Screening by Anatomic Site

## SSuN, 2011-2012 (Patton, et al, 2014)

### % SCREENED BY ANATOMICAL SITE AMONG MSM IN STD CLINICS

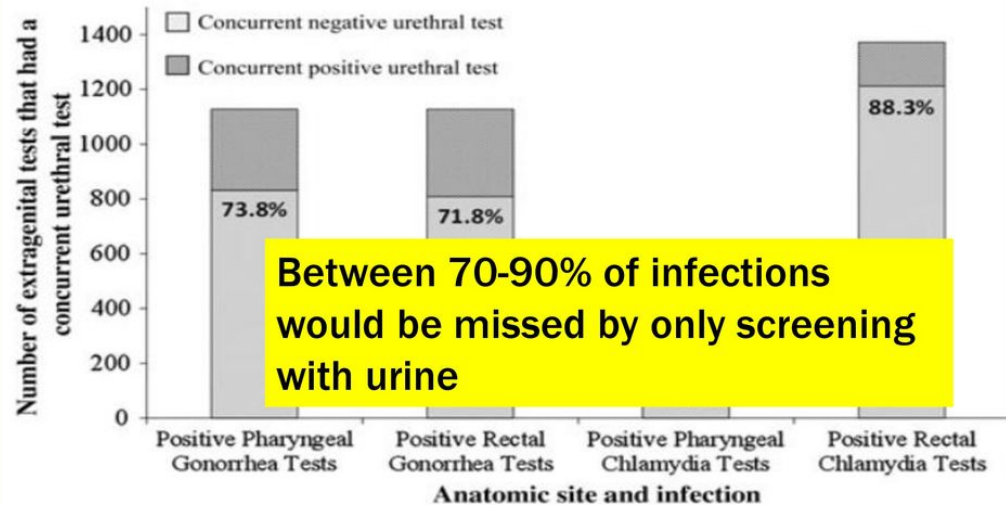
■ N=21994 MSM in the STD Surveillance Network (SSUN)



Patton et al CID 2014

# Extragenital GC and CT Associated with Negative Urine Test, SSuN, 2011-2012 (Patton, et al, 2014)

HIGH PROPORTION OF EXTRAGENITAL CT/GC  
ASSOCIATED WITH NEGATIVE URINE TEST,  
STD SURVEILLANCE NETWORK (N=21994)



Between 70-90% of infections  
would be missed by only screening  
with urine

Patton et al CID 2014



# HIV Risk from Extragenital GC and CT (Park, 2016)

## BACKGROUND: STDs PREDICT FUTURE HIV RISK

Rectal GC  
or CT



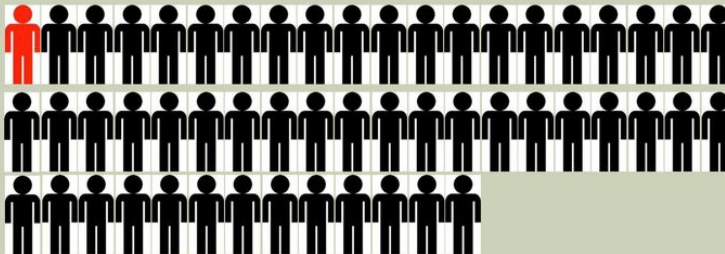
1 in 15 MSM were diagnosed with HIV within 1 year.\*

Primary or  
Secondary  
Syphilis



1 in 18 MSM were diagnosed with HIV within 1 year.\*\*

No rectal STD  
or syphilis  
infection



1 in 53 MSM were diagnosed with HIV within 1 year.\*

\*STD Clinic Patients, New York City. Pathela, CID 2013:57;

\*\*Matched STD/HIV Surveillance Data, New York City. Pathela, CID 2015:61

# Recommended STD Screening for MSM (Park, 2016)

## STD SCREENING FOR MSM

- HIV
- Syphilis
- Urethral GC and CT
- Rectal GC and CT (if RAI)
- Pharyngeal GC (if oral sex)
- HSV-2 serology (consider)
- Hepatitis B (HBsAg, freq not specified)
- Hepatitis C (HIV+MSM, at least annually)

\*

Anal Cancer in HIV+ MSM: Data insufficient to recommend routine screening, some centers perform anal Pap and HRA

**\* At least annually, more frequent (3-6 months) if at high risk (multiple/anonymous partners, drug use, high risk partners)**

*CDC 2015 STD Treatment Guidelines*

# “Triple Dip” (Hsu, 2015)



- ← HIV/Syphilis
- ← Pharyngeal GC NAAT\*
- ← Urine GC/CT NAAT
- ← Rectal GC/CT NAAT\*

**\*Off-label use . Not FDA-approved for testing at extragenital sites, but many reference labs have validated the assay for use.**

# Barriers to Extragenital Screening

(Barbee, 2015)

- **Provider-related**
  - Lack of testing and treatment knowledge (25-32%)
  - Lack of time (68%)
  - Discomfort with sexual history taking and genital exam (21%)
- **Patient-related**
  - Patient reluctance (39%)

# Endorsement (CDC, 2015, NASTAD & NCSD, 2017)



## MAKE EXTRAGENITAL TESTING A PRIORITY

STD screening of gay men/MSM, specifically of the throat and rectum, needs to improve. This is a **call to action** for health departments and medical providers to normalize 3-site testing.



# Food for Thought



## Food for Thought (Rompalo, n.d.)

- “If rectal STDs *cause* HIV, then preventing STDs is good HIV prevention.”
- “Even if rectal STDs *do not cause* HIV, MSM with rectal STDs are at higher risk for HIV.”

# References

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# Mahalo

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