



SYNC  
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# KEY STRATEGIES FOR OVERCOMING BARRIERS TO HCV ELIMINATION AMONG MEN WHO HAVE SEX WITH MEN

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# CONFLICT OF INTEREST DISCLOSURE W. DAVID HARDY, MD

- Consulting fees from CSL Behring, Enochian Biosciences, Gilead Sciences, Merck & Co, Inc, and ViiV Healthcare.
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# SEXUAL HCV TRANSMISSION AMONG MSM WITH HIV INFECTION IN NEW YORK CITY

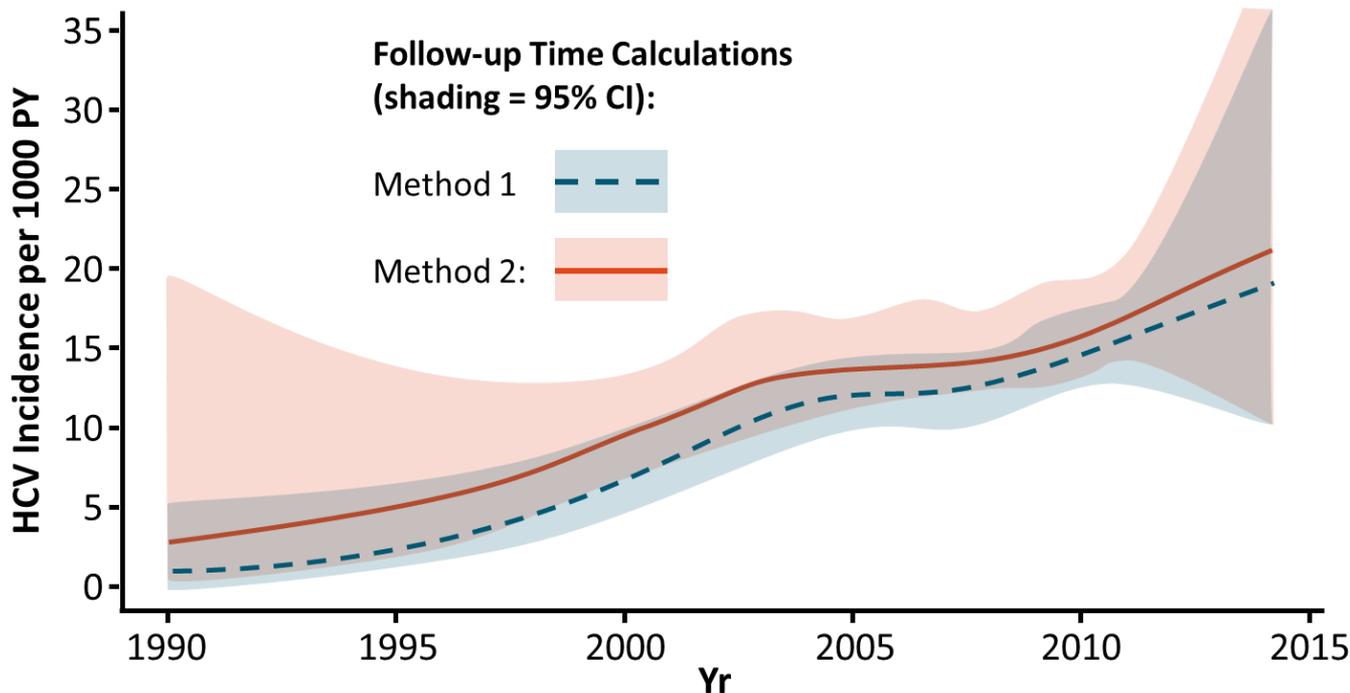
- 2005-2010: 74 HIV+ MSM with recently acquired HCV infection and no IDU history
- Phylogenetic analyses identified 5 clusters of closely related HCV variants among 26 of 47 men with GT 1a HCV
  - Suggesting networks of transmission
- Matched case-control study showed high-risk sexual behavior most likely mode of transmission

CDC. MMWR Morb Mortal Wkly Rep. 2011;60:945.

Factor	Univariate OR (95% CI)	P Value
Receptive anal intercourse, no condom, with ejaculation*	24.87 (3.18-194.55)	.002
Insertive anal intercourse, no condom, no ejaculation	8.13 (1.76-37.55)	.007
Insertive anal intercourse, no condom, with ejaculation	2.62 (1.00-6.87)	.05
Receptive fisting	10.08 (2.03-50.02)	.005
Insertive fisting	7.90 (1.96-31.84)	.004
Use of sex toys	4.38 (1.35-14.26)	.01
Group sex	19.28 (2.51-148.23)	.005
Previous syphilis	8.80 (1.88-41.05)	.006
*Adjusted OR from multivariate analysis	5.22 (1.95-13.02)	17-243.84 (P = .009).
Sex while high on drugs	11.37 (2.51-51.52)	.002

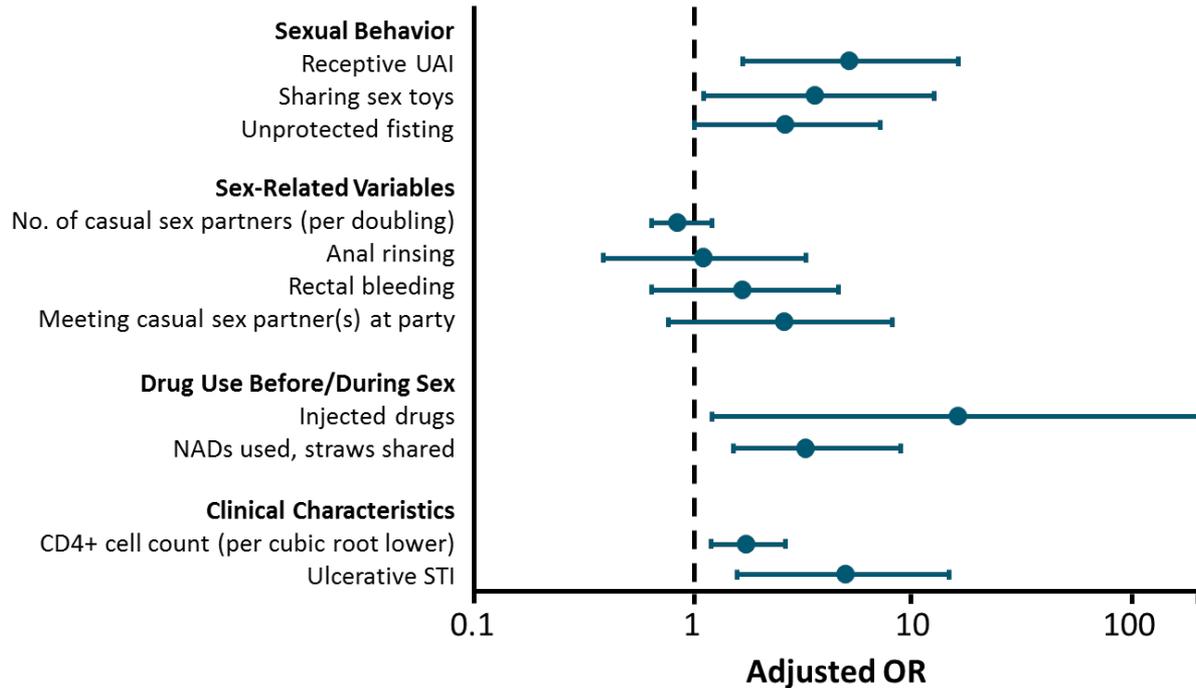


# CASCADE COLLABORATION IN EUROCOORD: HCV INCIDENCE INCREASING AMONG HIV-INFECTED MSM



Method 1: Follow-up began moment MSM considered at risk.  
Method 2: Follow-up began from first HCV negative test after becoming at risk (ie, left truncation). Poisson regression to test overall effect of calendar year on HCV incidence 1990-2014 in both methods.

# MOSAIC: RISKY SEXUAL BEHAVIOR IN HIV-INFECTED MSM ASSOCIATED WITH HCV INFECTION





# AASLD/IDSA HCV GUIDANCE FOR MSM

- *“Annual HCV testing is recommended for sexually active HIV-infected adolescent and adult MSM. Depending on the presence of high-risk sexual or drug use practices, more frequent testing may be warranted.”*
- *“**All MSM** should be counseled about the risk of sexual HCV transmission with high-risk sexual and drug use practices, and educated about measures to prevent HCV infection or transmission.”*



# AASLD/IDSA HCV GUIDANCE: RISK FACTORS FOR SEXUAL HCV TRANSMISSION AMONG MSM

- Sex practices that can cause trauma to rectal mucosal tissue and rectal bleeding
  - Eg, receptive anal intercourse without a condom, receptive fisting
- Sexualized drug use (eg, ChemSex, Party and Play or PNP)
  - Eg, crystal methamphetamine, mephedrone, gamma-hydroxybutyrate, phosphodiesterase type 5 inhibitors before or during sex
- Presence of ulcerative and rectal sexually transmitted infections including syphilis, lymphogranuloma venereum, and genital



# PATIENT CASE: HIV-NEGATIVE MSM RECEIVING PREP ACQUIRES HCV INFECTION

- 22-yr-old MSM has been receiving HIV PrEP for 2 yrs
- HCV screening at PrEP initiation and at annual screen 1 yr later was negative
- Second annual HCV screening test positive, reflex RNA test also positive
- Reports condomless insertive and receptive anal sex since initiating PrEP



# CASE SERIES: SEXUALLY-ACQUIRED HCV AMONG MSM RECEIVING PREP IN NYC AND SAN FRANCISCO

- 2013-2018: 15 likely sexually-acquired HCV infections among 14 MSM receiving PrEP
  - 87% asymptomatic; all detected by routine ALT or HCV monitoring
  - One half reported increasing sex partners and drug use after starting PrEP; 5 reported methamphetamine injection
  - 3 cleared spontaneously within 12 wks (including 1 reinfection); 8 treated and cured; 1 treated with unknown outcome; 3 currently undergoing treatment



# AMSTERDAM PREP PROJECT (AMPREP): PREP IN MSM AND TRANSGENDER PATIENTS

- AMPrEP
  - MSM and transgender participants chose daily or event-driven PrEP
- 376 individuals initiated PrEP
  - 73% selected daily PrEP option
- **HCV prevalence before starting PrEP was higher than expected:  
4.8% (95% CI: 2.9-7.5)**
  - 67% were unaware they had HCV
- Median follow-up (2015-2017): 1.76 PY (IQR 1.57-1.98)
- 12 new HCV infections
  - 6 primary; 6 reinfection
- **Overall HCV incidence rate:  
1.9/100 PY (95% CI: 1.1-3.4)**
  - Primary infections: 1.0/100 PY (95% CI: 0.5-2.2)
  - Reinfections: 25.5/100 PY (95% CI: 11.5-56.8)



# AASLD/IDSA HCV GUIDANCE FOR MSM RECEIVING PREP

- *“HCV testing at initiation of PrEP and annually thereafter while on PrEP is recommended in HIV-negative MSM. More frequent testing may be needed if patients engage in high-risk sexual practices or drug use.”*
- Provide HCV risk reduction counseling at PrEP initiation and during time on PrEP



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- For more case-based discussion on HCV Elimination Among MSM, view an online, interactive, CME-certified video module featuring HIV experts **Daniel S. Fierer, MD, W. David Hardy, MD, and Mark S. Sulkowski, MD**  
<https://www.clinicaloptions.com/hepatitis/programs/hcv-elimination-2018>

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