



Sexual Transmission of HCV

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Objectives:

- Review epidologic information on sexual transmission of HCV
- Define terms and behaviors of groups at risk for HCV
- Discuss intersection of chemsex and infectious diseases
- Unique aspects for gay/bi cis men
- Explore prevention strategies for this specific group

Sexual Transmission of HCV amongst heterosexual couples:

- Among 500 couples and 8377 person-years of sexual contact, the HCV Partners Study found a **low prevalence** of HCV infection among partners, with a **maximum of 1.2%** (95% CI: 0.2%–2.2%) of infections potentially attributable to sexual contact. The maximal incidence of HCV infection was 7.2 per 10,000 person-years (95% CI: 1.3–13.0), and maximal risk per sexual contact was 1 per 380,000 (95% CI: 1/600,000–1/280,000). These estimates were similar to or lower than previously reported rates for both prevalences (2.0%–10.3%) ([Tahan et al., 2005](#); [Vandelli et al., 2004](#); [Stroffolini et al., 2001](#)) and incidence (0.0–23.3 per 10,000 person-years) ([Vandelli et al., 2004](#); [Marincovich et al., 2003](#); [Kao et al., 2000](#)). Overall, available data indicate that HCV transmission by sex is reassuringly low, and the HCV Partners Study provides the numerical context to counsel HCV-infected persons in monogamous partnerships.

HCV rates amongst men who have sex with men:

- HCV Prevalence all MSM: 3.4%
 - HIV negative MSM: 1.5%
 - HIV positive MSM: 6.3%
- HCV Prevalence general population: 0.7%

Jin F, Dore GJ, Matthews G, et al. Prevalence and incidence of hepatitis C virus infection in men who have sex with men: a systematic review and meta-analysis. *Lancet Gastroenterol Hepatol*. 2021;6(1):39-56. doi:10.1016/S2468-1253(20)30303-4

Polaris Observatory HCV Collaborators. Global change in hepatitis C virus prevalence and cascade of care between 2015 and 2020: a modelling study. *Lancet Gastroenterol Hepatol*. 2022;7(5):396-415. doi:10.1016/S2468-1253(21)00472-6

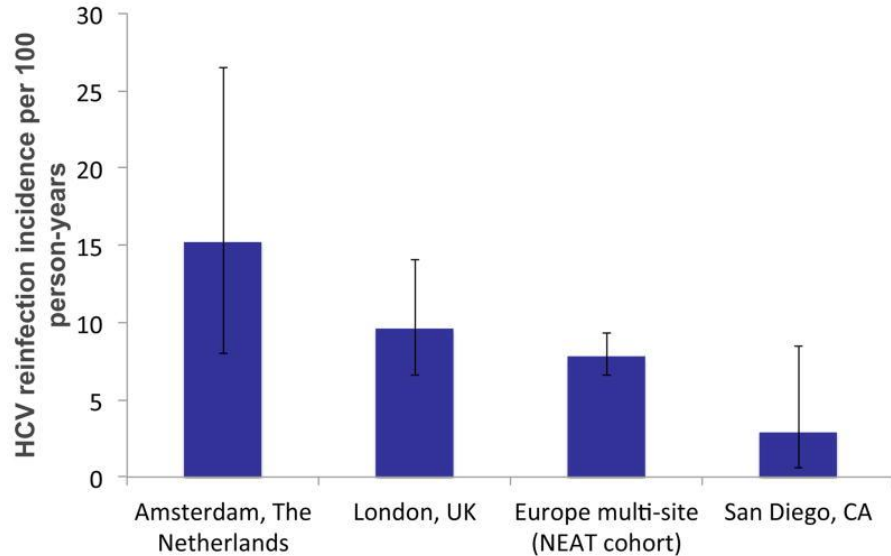
Current HIV Outbreak in Minnesota:

As of May 23, 2023

Data are preliminary and may change as reports are received.

| Outbreak | Counts |
|---|--------|
| Encampment-Related HIV Outbreak | 75 |
| MSM/IDU & IDU Non-Encampment HIV Outbreak | 108 |

HCV Reinfection Amongst HIV+ MSM:

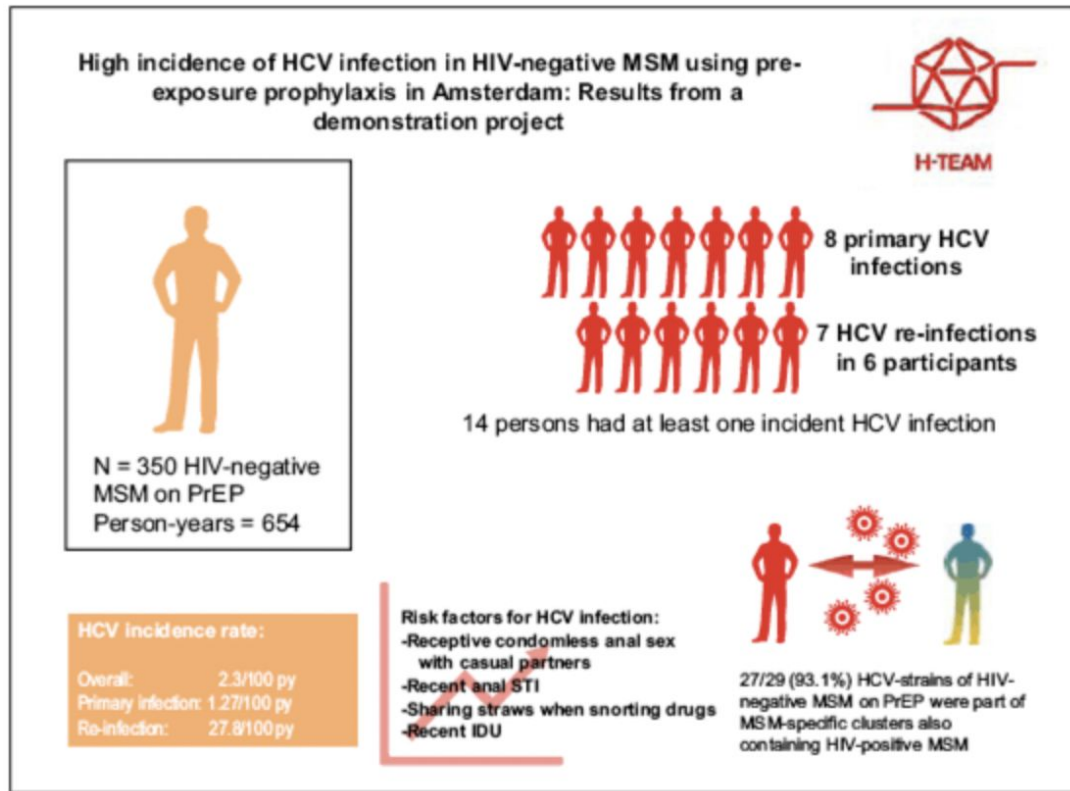


**3 - 10 x higher than
general population**

HCV reinfection incidence after successful treatment among HIV+ MSM as reported in Amsterdam, London, the NEAT cohort, and San Diego, California (Data from references [17-20](#)).

Martin TCS, Rauch A, Salazar-Vizcaya L, Martin NK. Understanding and Addressing Hepatitis C Virus Reinfection Among Men Who Have Sex with Men. *Infect Dis Clin North Am.* 2018 Jun;32(2):395-405. doi: 10.1016/j.idc.2018.02.004. PMID: 29778262; PMCID: PMC5973544.

HCV Reinfection Amongst HIV- MSM on PrEP:



Hoornenborg E, Coyer L, Boyd A, et al. High incidence of HCV in HIV-negative men who have sex with men using pre-exposure prophylaxis. *J Hepatol.* 2020;72(5):855-864. doi:10.1016/j.jhep.2019.11.022

MSM sexual practices and HCV risk:

Certain sexual practices +/- substance use may increase someone's risk for HCV.

There is some evidence that low CD4 counts can increase one's chances of acquiring HCV.

Matser A, Vanhommerig J, Schim van der Loeff MF, Geskus RB, de Vries HJ, Prins JM, Prins M, Bruisten SM. HIV-infected men who have sex with men who identify themselves as belonging to subcultures are at increased risk for hepatitis C infection. PLoS One. 2013;8(3):e57740. doi: 10.1371/journal.pone.0057740. Epub 2013 Mar 4. PMID: 23469226; PMCID: PMC3587624.

| | |
|----------------------------|-----------------|
| Receptive UAI ⁴ | 186/400 (46.5%) |
| Insertive UAI ⁴ | 161/348 (46.3%) |
| Receptive fisting | 79/113 (69.9%) |
| Insertive fisting | 77/126 (61.1%) |
| Group sex | 158/301 (52.5%) |
| Poppers use | 199/416 (47.8%) |
| Drug use ⁵ | 172/329 (52.3%) |

How does PrEP & U=U factor in?

- 33% of HIV/HCV coinfecting men had detectable HCV levels in their semen that was high enough to lead to infection
 - Correlated with HCV viral load being higher
- 46% of HIV/HCV coinfecting men had detectable HCV levels in their rectal tissue that was high enough to lead to infection
 - Correlated with HCV viral load being higher

Various studies have shown a reduction in condom use over recent years as people have adopted PrEP & U=U as prevention.

Foster AL, Gaisa MM, Hijdra RM, et al. Shedding of Hepatitis C Virus Into the Rectum of HIV-infected Men Who Have Sex With Men. *Clin Infect Dis*. 2017;64(3):284-288. doi:10.1093/cid/ciw740

Turner SS, Gianella S, Yip MJ, et al. Shedding of Hepatitis C Virus in Semen of Human Immunodeficiency Virus-Infected Men. *Open Forum Infect Dis*. 2016;3(2):ofw057. Published 2016 Mar 11. doi:10.1093/ofid/ofw057

<https://www.nyc.gov/assets/doh/downloads/pdf/survey/hiv-prevention-2021.pdf>

Chemsex & HCV:

Involves:

- Using substances, sometimes injected or other means that could lead to infection with HCV/HIV
- Sexual activities that often last for extended periods of time, leading to potential skin breakdown and multiple partners - STI's may increase risk for HCV/HIV infection
- Sexual activities that put people at greater risk for HCV/HIV
- Decreased decision making capabilities, for some



Don't share pots of lubricant.



During sex, you may have contact with traces of blood or rectal mucus without noticing.

- Fisting
- Using sex toys
- Anal sex without a condom, especially if it goes on a long time



Chemsex Harm Reduction:

CHEMSEX PARTY PLANNING



PLASTIC SHEETS

Use on the sofa + bed. Easier to degrease + disinfect (+ dry up if play is involved) when changing partners or roles.

FOOD

Put protein bars, granola bars, and bananas in the space or in the chillout corner to remind folks to refuel.



PARTY 'N PLAY FORM

Keep a record of what you're taking, when, and how much. This is handy for knowing when to take more, but it is also useful to know what you've taken in case something goes wrong

SAFE SEX SUPPLIES

- Place condoms + lube throughout the space!
- Don't use saliva as lubricant - It dries quickly and our bodies produce less when using drugs
- Latex gloves if your party is going to involve fisting

CHILLOUT CORNER

Create a space where folks can take a break that is conducive to resting and chatting. Consider putting out info on HIV, PrEP, and HCV.

HARM REDUCTION SUPPLIES

- Snorting, smoking, booty-bumping, and injection supplies are essential
- Never re-use syringes + never share!

SEX TOYS

Make sure all toys are properly disinfected in chloride and water for at least 5 minutes.

CLEANING SUPPLIES

- Place strategically throughout the space
- Include all-purpose cleaner, paper towels, clean towels, + disinfection wipes
- Degrease residue before disinfecting



SLING

Have cleaning supplies easily accessible to clean (sling + chains) before changing partners or roles.



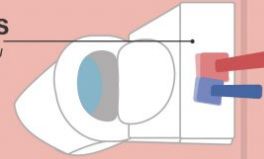
WATER + SPORTS DRINKS

- Place throughout. Make it easy to remember to drink something, by jogging folks' memory.
- Don't drink more than 3 glasses of water / juice in an hour, as this can cause fluid intoxication.

CHEMSEX PARTY PLANNING

RECTAL DOUCHES

If possible, use only your own rectal douche. Otherwise, wipe any that you use clean of oil or grease and disinfect it in the bleach solution before use.



TOWELS

Provide a clean towel for each participant. Leave more clean towels next to the sling + bed. Lubricant residue containing tiny particles of blood can stick to used towels.



DISINFECTANT

Degrease and disinfect your arms and hands before changing partner or role.



BOWL OR BUCKET

Fill a bucket with a mix of bleach and water (1:9). Disinfect dildos, toys, and rectal douches by letting them soak for at least 5 minutes. Make sure you wipe off any oily / greasy residue before doing so. Rinse thoroughly with water before use.



SHOWER

Wash before and after. Be certain to wash your pubic hair too; lubricant residue containing blood particles can stick to your pubic hair quite easily.



Chemsex Party Kits:

| Booty Bumping | Injecting |
|--|---|
| <ul style="list-style-type: none"> - 3cc syringe barrel - Sterile - 2 packets of water-based lube - Glove - Hand sanitizer - Information inserts - 2 drams of sterile water - Female and male condoms | <ul style="list-style-type: none"> - 2 iodine wipes - 2 alcohol wipes - 2 syringes <ul style="list-style-type: none"> o 28g/100cc & 30/31-100cc o Options are best for IV stim use - Tourniquet - Information inserts - Cooker - Paperclip/bread tie - Cotton for filter - Female and male condoms - 2 packets of water-based lube |
| Smoking | Snorting |
| <ul style="list-style-type: none"> - Pipe or foil - Brillo - Short wooden stick - Chapstick - Gum - Sucker - Straw - Information inserts - Female and male condoms - 2 packets of water-based lube | <ul style="list-style-type: none"> - Clean plastic card - Small cosmetic scoop - 3 short straws in different colors - Plastic razor blade - Information inserts - Female and male condoms - 2 packets of water-based lube |



Addressing MSM & HCV:

Unique Challenges:

- Typically MSM are not in encampments where many prevention efforts are targeted
- No “perfect” treatment for meth
- Intersectionality of gay/race/sex/drugs & stigma
- Access to PnP is readily available and often encapsulating
- Much of the prevention activities for MSM center HIV not HCV
- A diagnosis of HCV can trigger feelings around previous HIV diagnosis
- Treatment programs are not always safe places for MSM

Minneapolis Specific Treatment Options for MSM:



Latitudes in St. Paul

<https://www.meridianprograms.com/program/latitudes-lgbt/>

Considerations in HCV Cure Work with MSM:

- HIV negative - Consider offering/referring for PrEP
- HIV positive - Reinforce U=U & importance of adherence
- Potential for Reinfection - discuss potential for reinfection and ask patients to advocate for annual HCV testing with PCP using HCV RNA
- Test HIV negative MSM for HCV if risk criteria applies
- Consider prescribing needles/syringes/Chemsex kits
- Provide patients participating in Chemsex detailed info on how to prevent HCV:<https://anypositivechange.org/wp-content/uploads/Toolkit-on-Chemsex.pdf>
- Reinforce curability of HCV in our modern DAA era

Thank you!

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A primer on language & behaviors associated with MSM:

Terms:

- Top/topping - insertive partner for anal sex/insertive partner for that episode
- Bottom/bottoming - receptive partner for anal sex/receptive partner for that episode
- Versatile/verse - identifies as someone who both tops and bottoms
- Flipping - both insertive/receptive in same episode
- Bareback/raw/*unprotected*/condomless - no barrier used during episode
- Leather/S&M/Pup Play - fetishes, but also culturally complex aspects of queer identity and sex
- Group Play/Sex Party - episodes involving multiple partners
- Fisting/fisted - inserting a hand into a rectum
- PnP - Party and Play, most commonly meth, but other drugs too
- Chemsex - use of meth, GHB, GBL, poppers, cocaine, ketamine, MDMA during an episode
- Booty Bumping/Boofing - inserting drugs into the rectum