



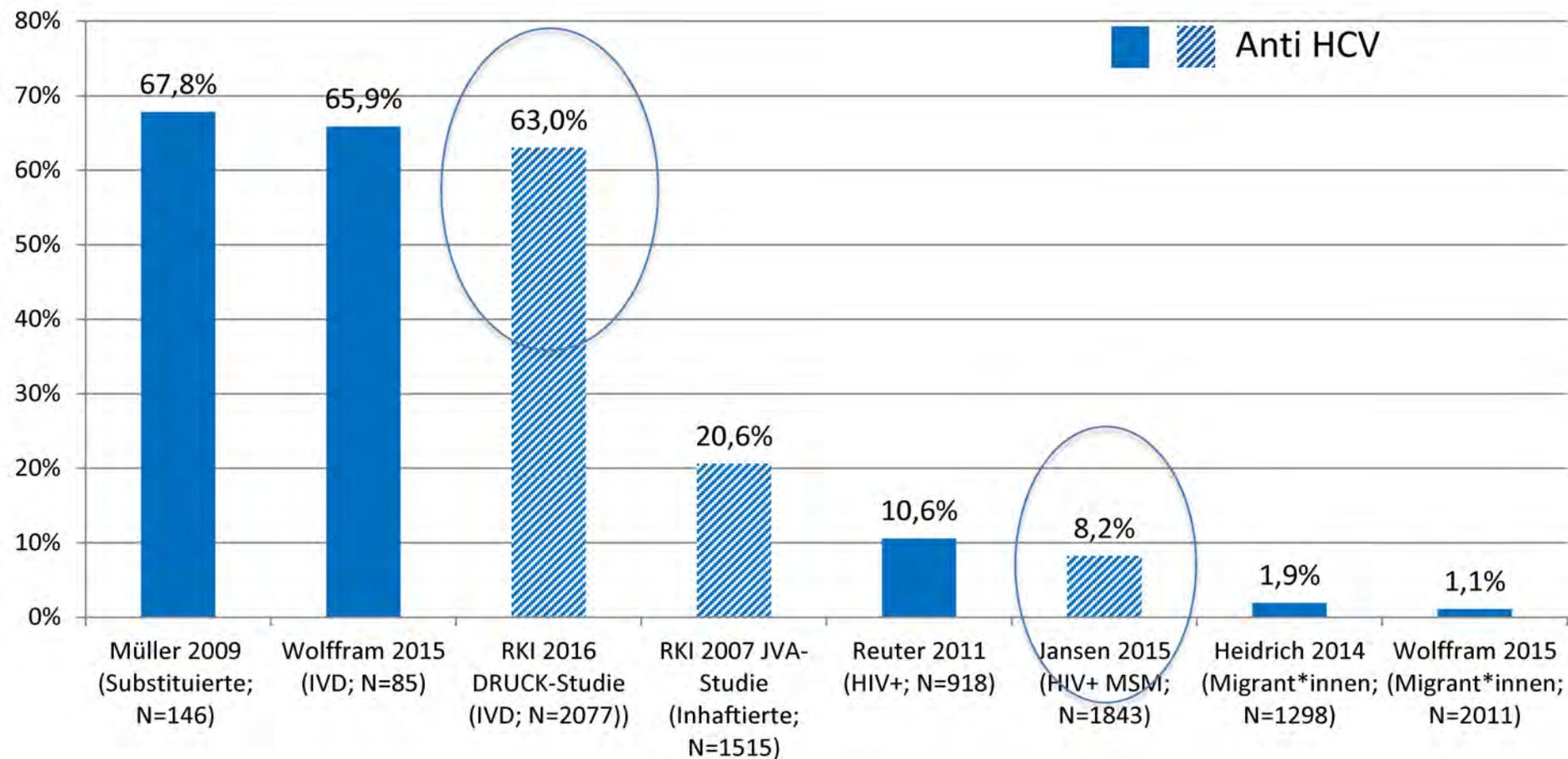
Hepatitis C in high risk populations

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Robert Koch Institute

Elimination of Viral Hepatitis in Europe: the German strategy
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HCV-Seroprevalence in vulnerable groups





DRUCK-Study

Drogen und chronische Infektionskrankheiten

Design

- Multicentre cross-sectional sero-behavioural survey 2011-15
- 2,077 current injectors in 8 cities
- Co-operation with low threshold drug services

Objectives

- determine HBV, HCV & HIV prevalence among current injectors
- Know more about current risk and prevention behaviour & knowledge of PWID
- focus prevention of HIV and hepatitis among PWID in Germany

Methods

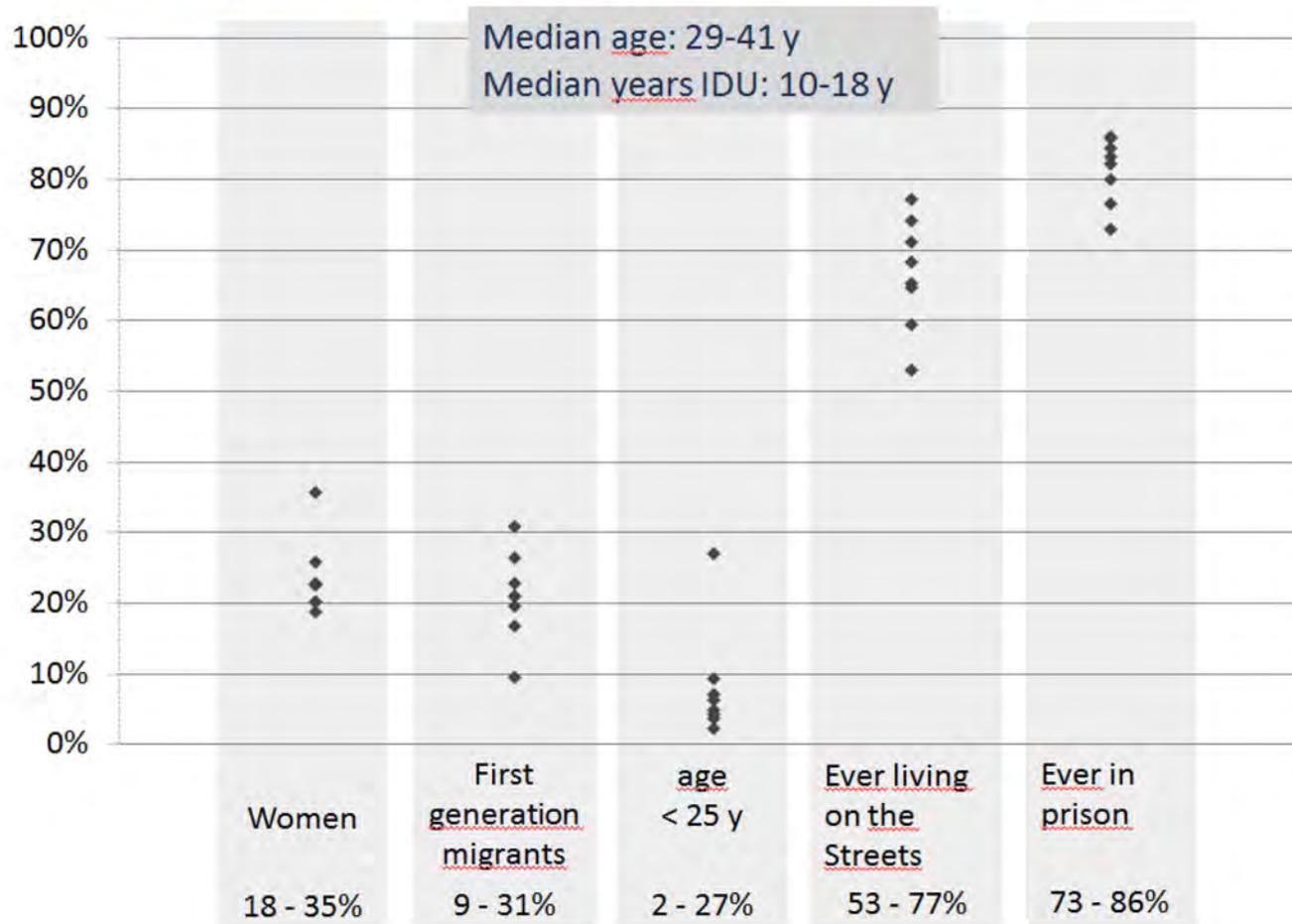
- Recruitment via Respondent driven sampling
- Behavioural data (sociodemographics, used substances, unsafe use, sex, imprisonment, knowledge, health status, testing history)
 - by questionnaire-assisted interviews
- HIV, HBV, HCV (serology & PCR)
 - testing from capillary Dried Blood Spots





Sociodemographic characteristics

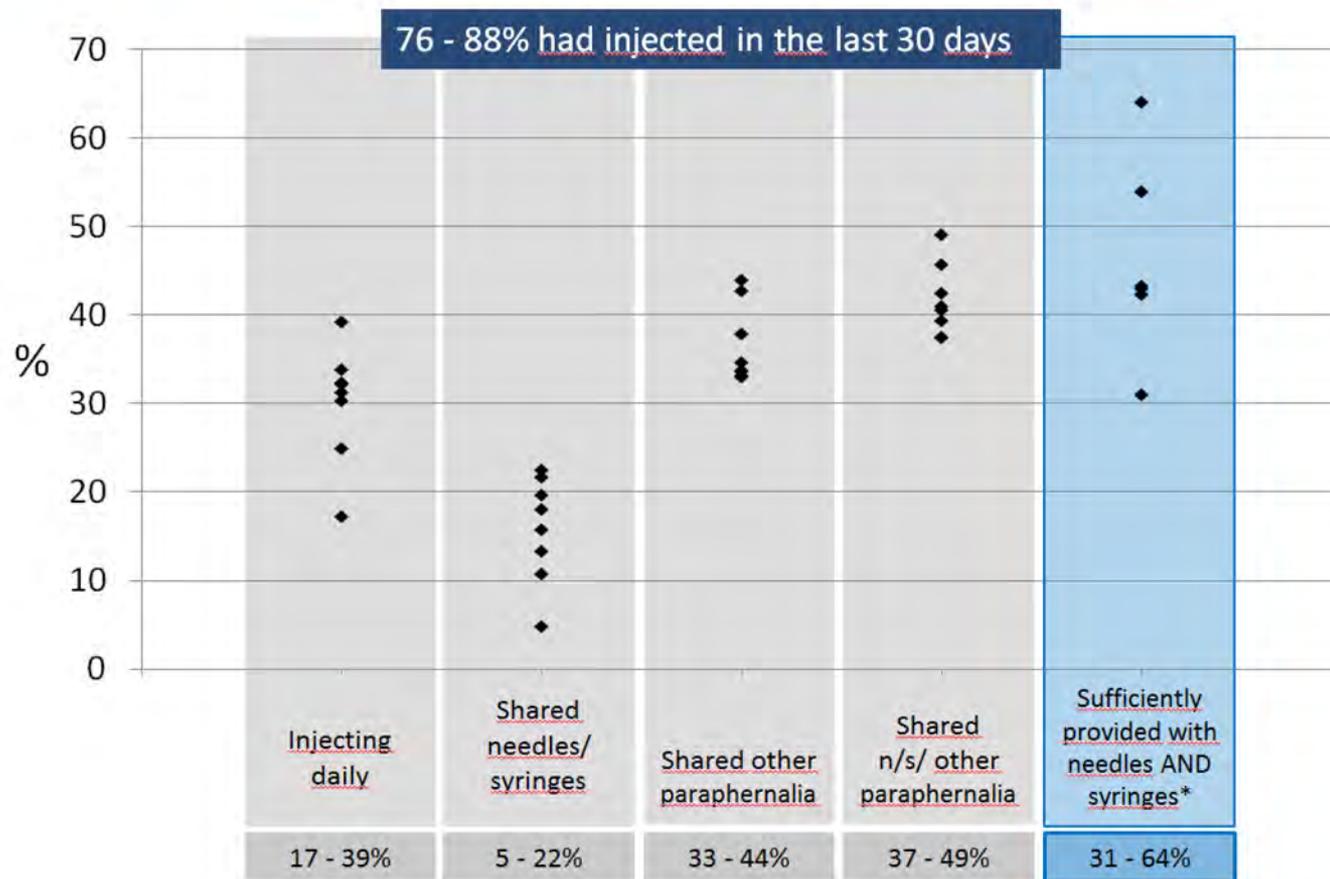
DRUCK-Study 2011-2015; all study sites; N=2,077





Reported unsafe use in the last 30 days

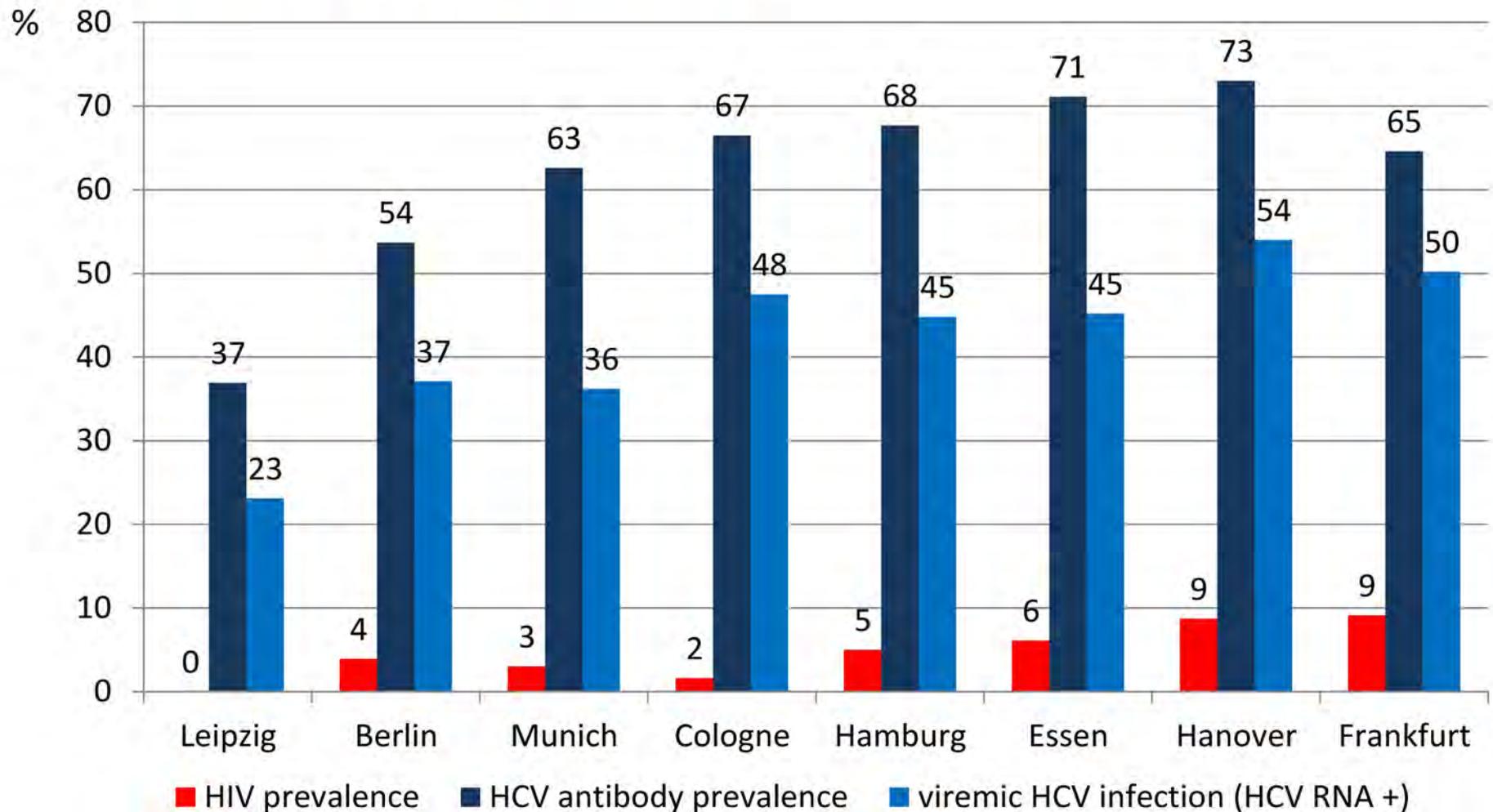
DRUCK-Study 2011-2015; all study sites; N=2,077



*Berlin and Essen not included



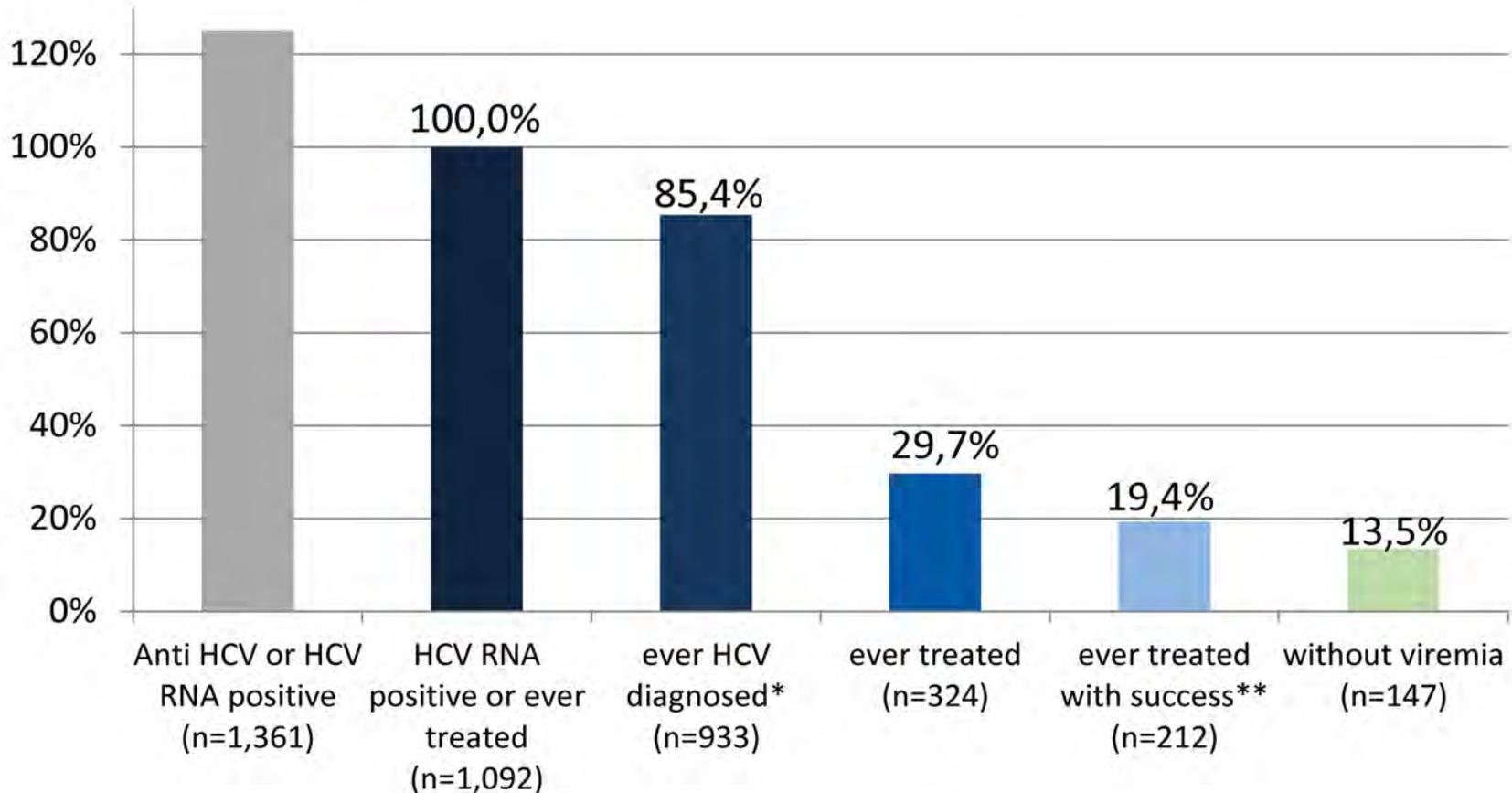
HCV and HIV-Serostatus by study site DRUCK-Study 2011-2015; N=2,077





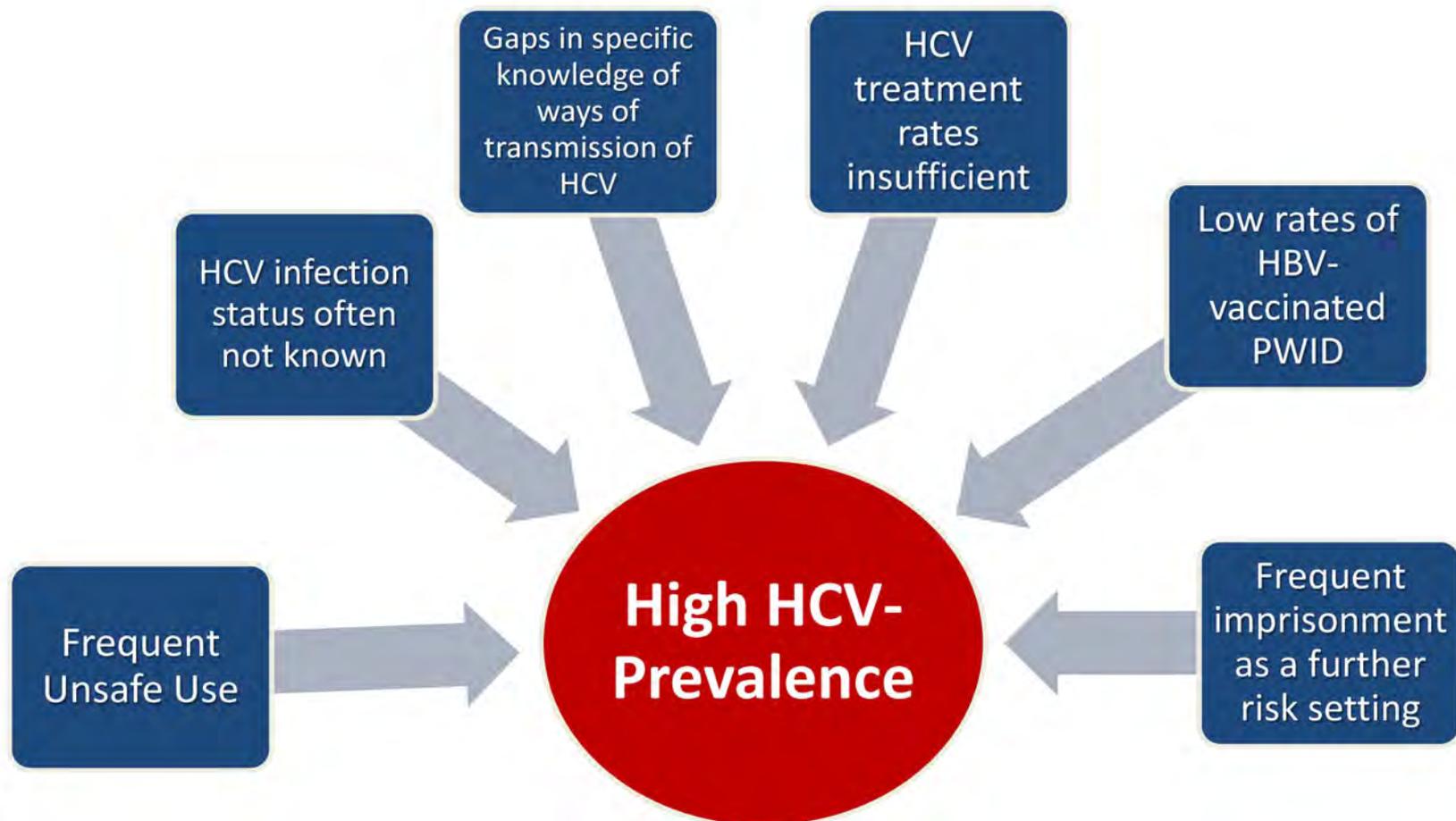
HCV continuum of care

DRUCK-Study 2011-2015; total study population, N=2.077





Conclusion of results of sero-behavioural survey among PWID in Germany, 2011-2015





Recommendations (1)

- **In low-threshold drug services:**
 - NSP should be complemented by giving out all consumption-associated paraphernalia as much as needed
 - Implement low-threshold testing for HCV combined with counselling
 - Refer for confirmatory testing
 - Implement short targeted counselling in case of knowledge gaps (transmission via sharing filters, cookers, water and snorting straws, prevention via vaccination)
 - Training of staff in low threshold drug services for counselling & testing
- **In OST services:**
 - Make use of regular contact with PWID or former injectors for upscale of testing, counselling and referral to care
 - Inform substitution doctors of their important role to counsel and inform PWID



Recommendations (2)

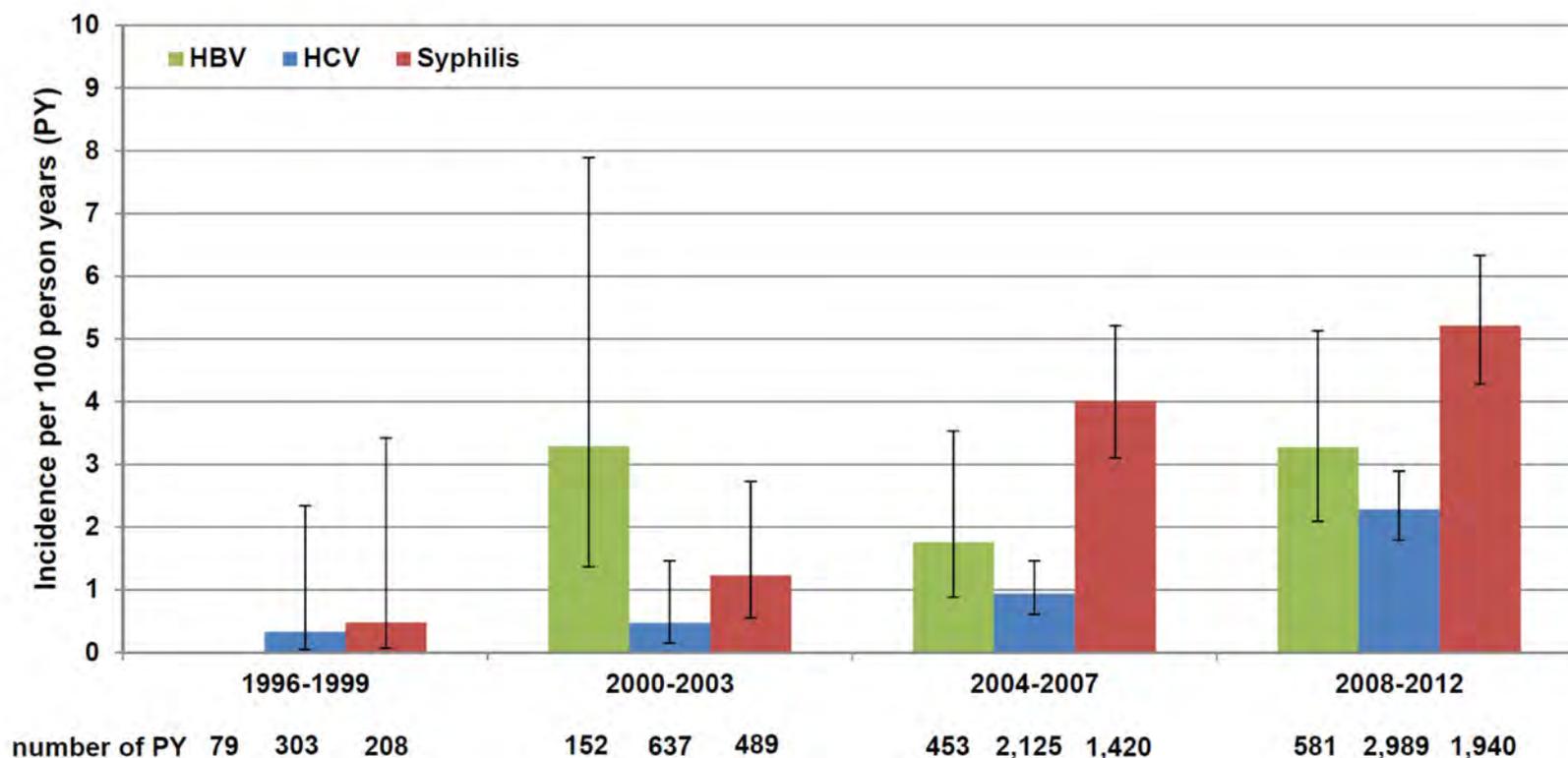
- **In prisons:**
 - Offer confidential and voluntary testing for HCV to prisoners
 - Infected persons should be offered treatment
 - Improve access to harm reduction measures with evident effectiveness for reduction of injection associated risk and incidence of infection (e.g. OST, NSP)
 - Improve transition to release period (in terms of continuation of OST, treatment...)

- **In conclusion:**
 - **Better integrate all available structures and services at the local level!**



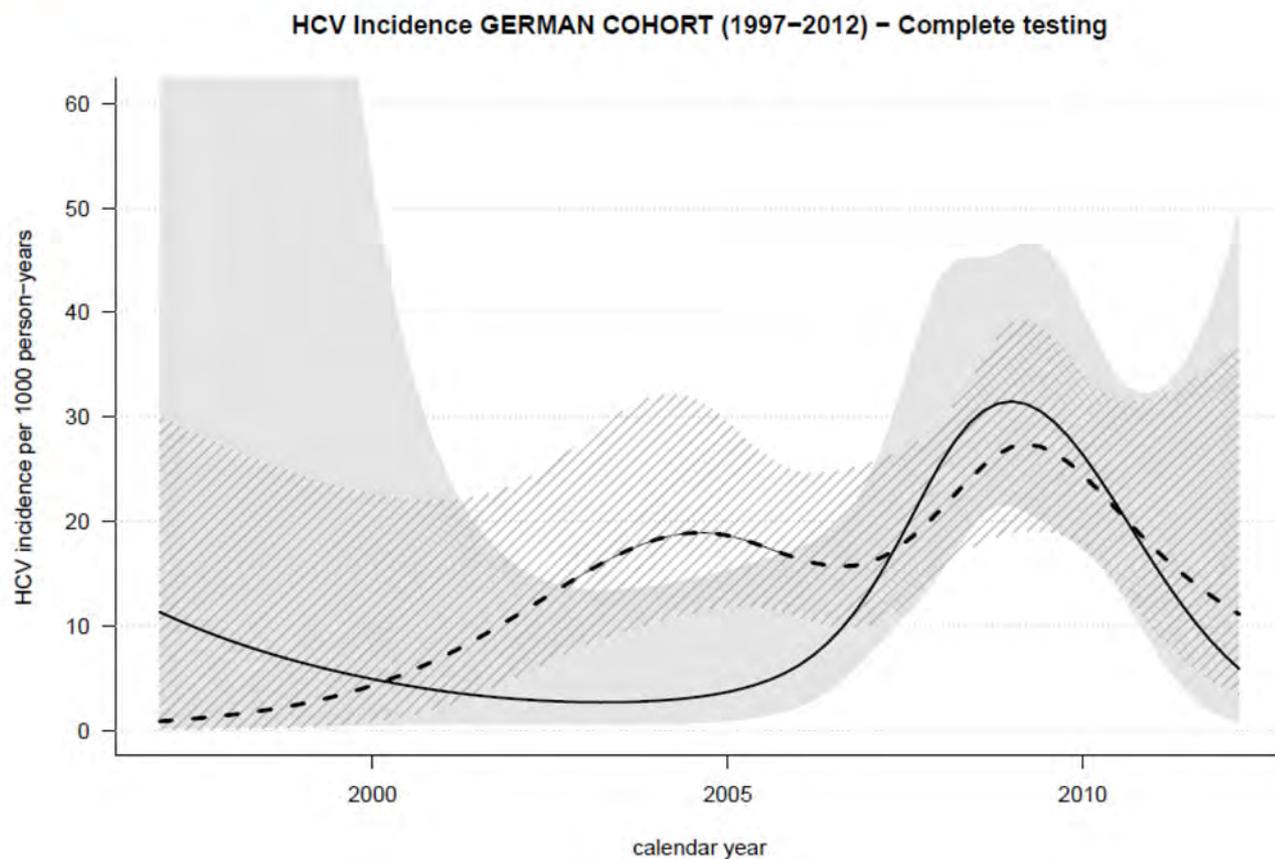
Newly acquired HCV among participants of the German HIV seroconverter study

Jansen K, Thamm M, Bock C-T, Scheufele R, Kücherer C, Muenstermann D, et al. (2015) High Prevalence and High Incidence of Coinfection with Hepatitis B, Hepatitis C, and Syphilis and Low Rate of Effective Vaccination against Hepatitis B in HIV-Positive Men Who Have Sex with Men with Known Date of HIV Seroconversion in Germany. PLoS ONE 10(11): e0142515. doi:10.1371/journal.pone.0142515





D. K van Santen. HCV incidence within CASCADE Cohorts version 1 (24-3-2015)





HCV risk factors among HIV-positive MSM (Germany)

Schmidt AJ, Rockstroh JK, Vogel M, An der Heiden M, Baillot A, et al. (2011) Trouble with Bleeding: Risk Factors for Acute Hepatitis C among HIV-Positive Gay Men from Germany—A Case-Control Study. *PLoS ONE* 6(3): e17781. doi:10.1371/journal.pone.0017781

■ **Methods**

- Case-control study (2006-2008) embedded into a behavioural survey of MSM in Germany.
 - Cases were HIV-positive and acutely HCV-co-infected, with no history of injection drug use.
 - Controls HIV-positive MSM without known HCV infection, matched for age group. HCV-serostatus of controls assessed by serological testing of dried blood specimens.
- Univariable and multivariable regression analyses used to identify factors independently associated with HCV-co-infection.
- 34 cases and 67 controls were included.

■ **Results**

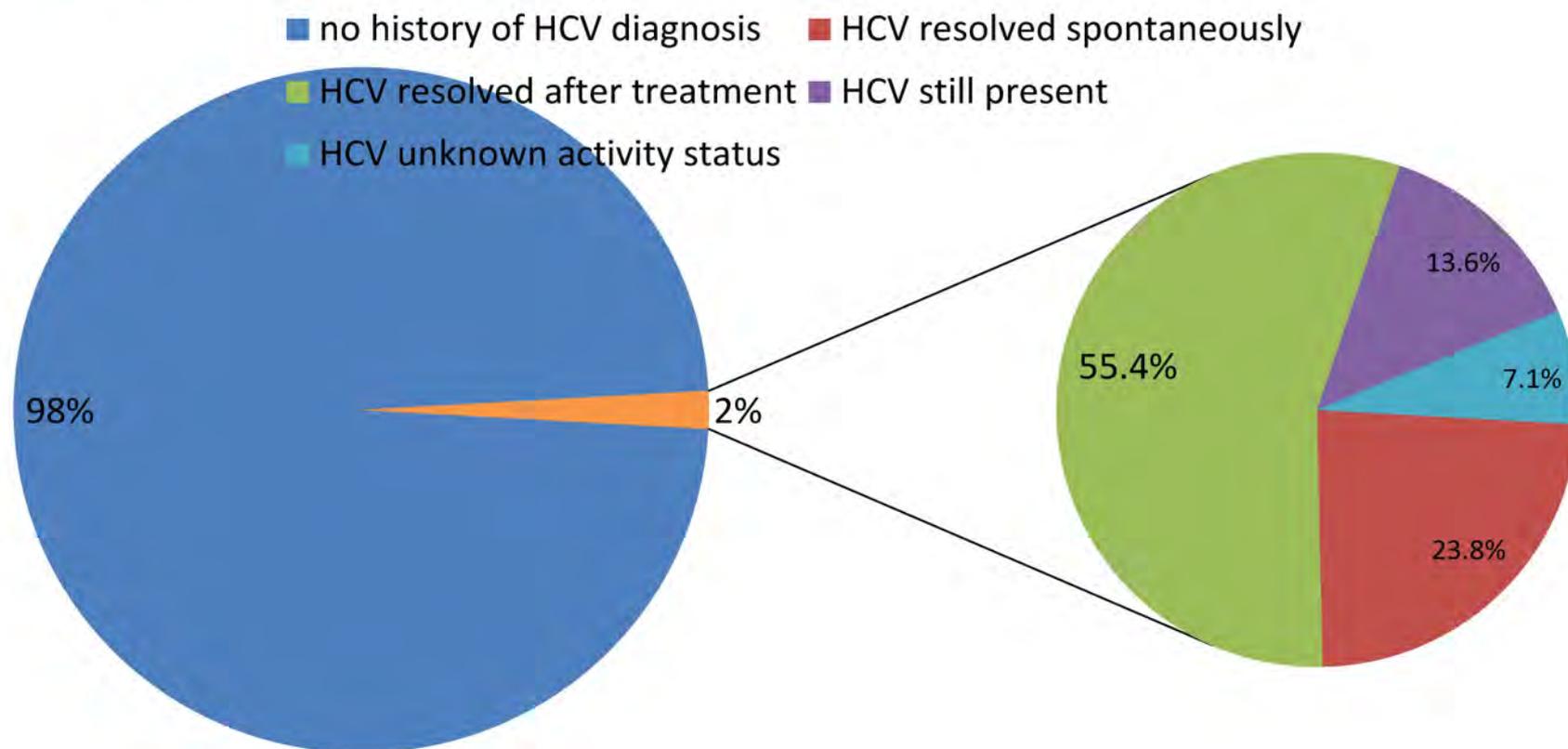
- Sex-associated rectal bleeding, receptive fisting and snorting cocaine/amphetamines, combined with group sex, were independently associated with case status.
- Among cases, surgical interventions overlapped with sex-associated rectal bleeding.

■ **Conclusions**

- Sexual practices leading to rectal bleeding, and snorting drugs in settings of increased HCV-prevalence are risk factors for acute hepatitis C. We suggest that sharing snorting equipment as well as sharing sexual partners might be modes of sexual transmission. Condoms and gloves may not provide adequate protection if they are contaminated with blood.
- Public health interventions for HIV-positive gay men should address the role of blood in sexual risk behaviour. Further research is needed into the interplay of proctosurgery and sex-associated rectal bleeding.

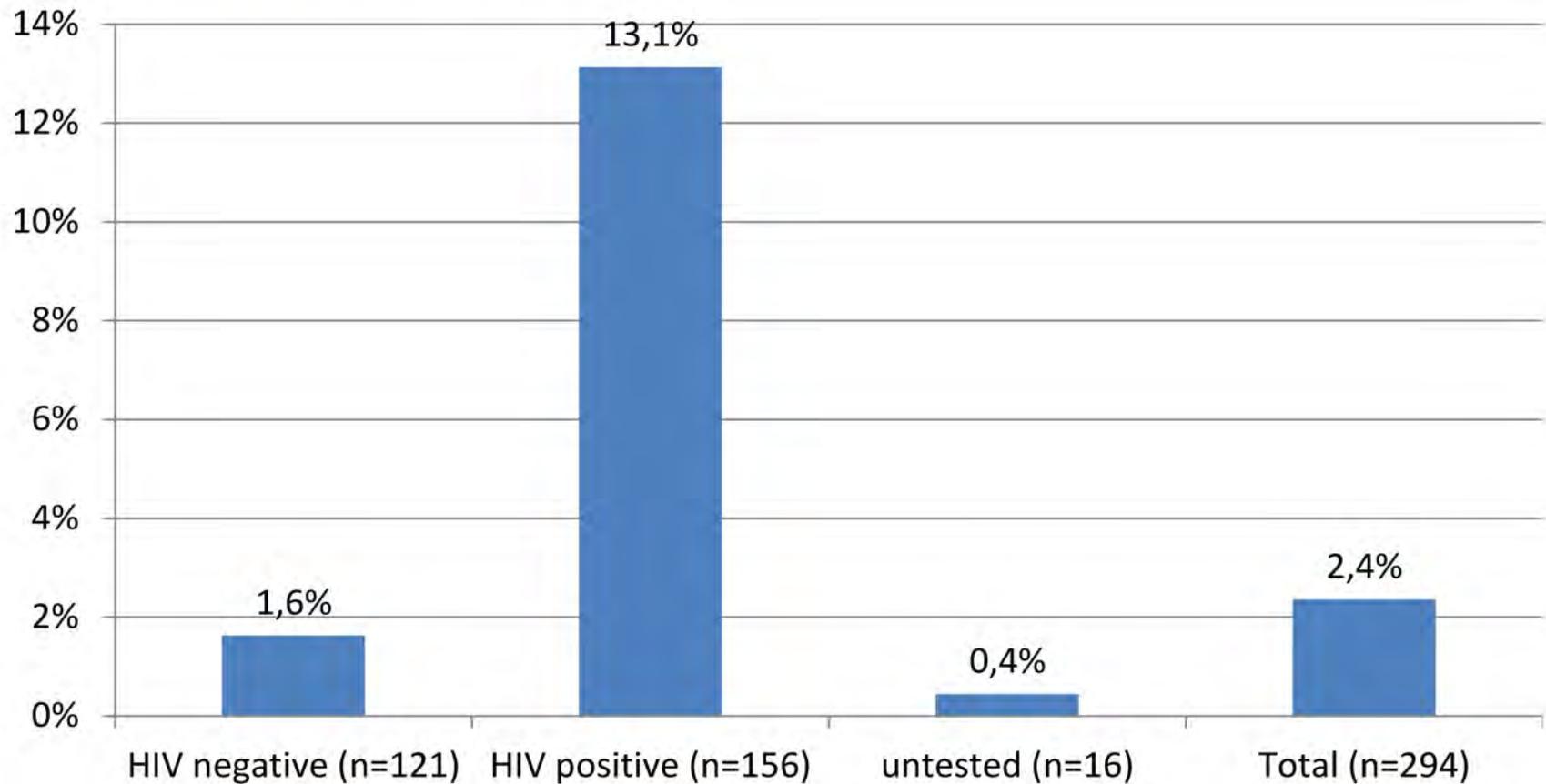


Self-reported HCV history among MSM participating in the SMA 2013 online survey





Self-reported HCV-ab prevalence among MSM by HIV status (SMA 2013)





Conclusions and Recommendations (MSM)

- Increased HCV incidence among HIV –positive MSM due to a combination of behavioural (condom serosorting, increased drug use, group sex), epidemiological (increased HCV and STI prevalence in sexual networks), and biological (increased susceptibility due to HIV infection) factors
- Increasing availability and use of HIV PrEP and expected behaviour changes may increase vulnerability of HIV-negative PrEP users for HCV-infection
- Optimal setting for quick detection of HCV seroconversion and early treatment (if HCV screening is introduced in HIV care and HIV PrEP follow-up and treatment is available)
- Clear prevention messages possible
- Explicit and intensive counselling necessary to reduce risk of infection and re-infection