

# Sexually Transmitted Hepatitis C in MSM in the U.S. and Europe

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Men who have sex with men (MSM) are at a heightened risk of sexual transmission of hepatitis C virus ([HCV](#)) in the United States and Europe, according to three studies presented Monday, February 9, at the 16th Conference on Retroviruses and Opportunistic Infections (CROI) in Montreal. Two further studies suggest that HIV-positive MSM are not being adequately screened for hepatitis and that when they do become infected with HCV they are more likely to experience rapid liver damage than HIV-negative people.

In recent years, more reports coming out of Europe and the United States explore the possibility that HCV is sexually transmitted among HIV-positive MSM. Experts once thought that HCV was almost exclusively transmitted by direct blood-to-blood contact as would occur when having a blood transfusion or sharing needles, but experts now concede that sexual transmission is possible.

## Trends in HCV Transmission

In a study of HIV-positive MSM in France, Jade Gohsn, MD, PhD, from the Bicêtre Hospital in Kremlin-Bicêtre, and her colleagues conducted a national survey in 2006 and 2007. They found 94 patients who'd been diagnosed with acute HCV infection, of whom 32 had complete records of tests for liver function, HCV antibodies and HCV genetic type. The average age of the men at the time of HCV infection diagnosis was 40. The average time between becoming infected with HIV and HCV was 10 years.

Sarah Fishman, PhD, and her colleagues from the Mount Sinai School of Medicine in New York City compared outbreaks of HCV infection among MSM in New York City and the United Kingdom. There were 81 cases of acute HCV infection reported, 21 in New York and 60 in the United Kingdom. In New York, the average age of the men was 40 and they had been infected with HIV for an average of eight years. The U.K. men were younger—36 on average—and had only been infected with HIV for an average of four years.

Fishman's team found that risk factors differed significantly between the two groups. Men in New York were seven times more likely to have injected drugs but were about half as likely to have tattoos or piercings. They were also about half as likely to have engaged in fisting. In the New York group, 76 percent reported engaging in unprotected receptive anal intercourse in a group,

compared with 94 percent of the men in the United Kingdom.

In a third study, from the Netherlands, Guido van den Berk, MD, and his colleagues from the Onze Lieve Vrouwe Gasthuis (OLVG) Hospital in Amsterdam reported that the rate of acute HCV infection among HIV-positive MSM has increased from zero cases between 2000 and 2002 to 14 cases in 2008. Cases began escalating in 2003. None of the patients had non-sexual risk factors, such as a history of injection drug use or blood transfusion.

### **Liver Damage Progresses Quickly After HCV Infection**

Another poster from the Mount Sinai group, this time by Daniel Fierer, MD, characterized what happens in HIV-positive MSM who become infected with HCV. Among the 31 men studied, four managed to clear their HCV infection spontaneously. Twenty-one of the men initiated HCV treatment. Among the 10 men who started treatment during acute infection, eight continued to have undetectable HCV levels after completing therapy. Twenty of the men agreed to have a liver biopsy about four months after their HCV infection was first suspected.

Fierer's team found that 85 percent of the men who received a liver biopsy had already progressed to a moderate amount of liver damage, which is far quicker and more serious than what typically occurs when HIV-negative people are infected with HCV. Because having unprotected anal intercourse, having sex while on drugs and the sharing sex toys were highly correlated with HCV infection, Fierer is encouraging health care providers to work on risk-reduction strategies with their MSM patients.

### **Hepatitis Screening Alarmingly Low**

Given the increasing rates of HCV transmission among HIV-positive MSM, one recommendation has been to more carefully screen for hepatitis in clinics. Hepatitis screening is also recommended as part of a first visit with a health care provider after an HIV diagnosis, according to treatment guidelines published by the U.S. Department of Health and Human Services (DHHS).

To determine whether health care providers are following this recommendation, Karen Hoover, MD, MPH, from the Centers for Disease Control and Prevention (CDC) in Atlanta examined the medical records of 1,607 HIV-positive MSM at eight clinics in six U.S. cities. She and her colleagues found that only 43 percent of the men had been tested for [hepatitis A](#) virus, 33 percent for [hepatitis B](#) virus and 48 percent for HCV. Hoover's team is encouraging interventions to improve screening rates among this population.