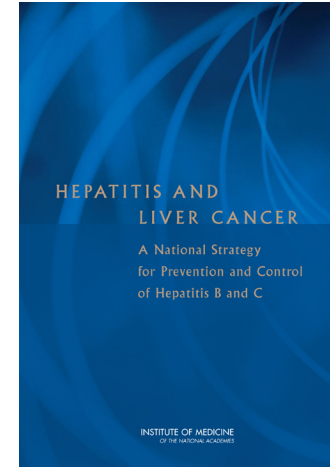


For more information visit www.iom.edu/viralhepatitis

Hepatitis and Liver Cancer

Opportunities for Reducing Harm



Hepatitis B and hepatitis C are major public health problems in the United States. Millions of people have these treatable infectious diseases, most do not know it, and about 15,000 people die each year from liver cancer or liver disease resulting from these contagious viral infections. Together, hepatitis B and C are more common, and claim more lives each year, than HIV/AIDS.

Chronic hepatitis B and C persist despite the current federal, state, and local efforts that are directed at their prevention and control. Therefore, the U.S. Centers for Disease Control and Prevention (CDC), along with several other government and private organizations, sought guidance from the Institute of Medicine (IOM) in identifying missed opportunities for addressing hepatitis B and C. The IOM report, *Hepatitis and Liver Cancer: A National Strategy for Prevention and Control of Hepatitis B and C*, presents a range of recommendations that detail, among other things, strategies that can help in reducing the harm caused by these diseases in one at-risk population: illicit-drug users.

Harm reduction refers to programs that seek to reduce the medical and social harms associated with illicit drug use.

The Goals of Harm Reduction

Harm reduction refers to programs that seek to reduce the medical and social harms associated with illicit-drug use. Harm reduction focuses on providing information about safer practices (for example, how to inject without exposing oneself to contaminated blood), providing materials for engaging in safer practices (such as needle syringes and condoms), and offering hepatitis B vaccination.

It should be noted that harm reduction programs do not require absti-

nence for participation but rather, they focus on providing drug users with information about safer practices. Because they seek practical solutions to mitigate the harmful consequences of using illicit drugs rather than simply condemning drug use, such programs have in some instances been met with controversy.

Viral Hepatitis and Illicit-Drug Users

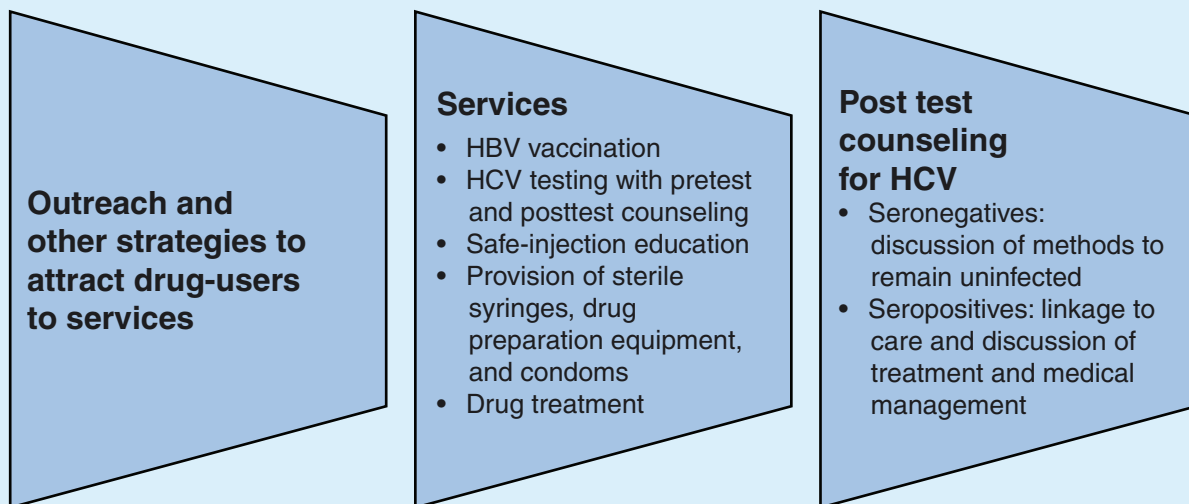
People who use illicit injection drugs are at particularly high risk for viral hepatitis. Preventing viral hepatitis, particularly hepatitis C, in injection-drug users is a critical public health challenge. Injection-drug users can be exposed to blood contaminated with the hepatitis C virus (HCV) through the sharing of needles or other injection-related equipment. It takes only a very small amount of infected blood on injection equipment to result in infection.

HCV prevalence in injection-drug users is typically 35-70 percent, and between 20-30 percent of uninfected injection-drug users acquire HCV infection each year. The first few years after onset of drug injection are especially high-risk periods, when rates of new infection are very high. The rate of new infections with hepatitis B virus (HBV) among injection-drug users is between 10-20 percent, lower than for HCV, but still significant. Transmission of HBV in this population generally occurs as a result of drug-related and sexual exposures to infectious carriers of HBV.

Prevention Strategies

To be effective, strategies to reduce the spread of HCV and HBV in illicit, injection-drug users should be comprehensive. They should include access to sterile injection equipment, safe injection education, HCV testing and counseling, and

Figure 1: Essential Viral Hepatitis Services for Illicit-Drug Users



Though essential, promoting safer drug use strategies cannot alone control the spread of viral hepatitis. Programs are needed to expand testing so that more people can learn whether or not they are infected.

access to drug treatment programs. The IOM report recommends that federal, state, and local agencies work together to develop and implement innovative, multicomponent programs to reduce the spread of HCV and HBV that occurs from use of illicit injection drugs. At a minimum, the programs should provide users with access to sterile syringes and other drug-preparation equipment, including “cookers” and “filtration cotton” used to prepare drugs for injection. Access to sterile syringes and other equipment can be increased by developing and expanding community-wide syringe exchange programs, by selling the materials through pharmacies, or even by making them available in syringe vending machines. The programs also should provide users with information about safer drug use practices, such as how to inject without exposing oneself to contaminated blood.

As many injection-drug users do not have a regular health care provider, it is important that services are offered in settings that users are more likely to frequent. Programs should be designed to draw people into care. For example, very high proportions of injection-drug users have spent some time in jail or prison, and such periods of incarceration may present a prime opportunity for providing viral hepatitis education to this high-risk population. In addition, staff members of harm reduction programs typically are skilled in conducting outreach to attract drug users to their services.

Drug users who sniff or smoke heroin, cocaine, or other illicit drugs—even if they do not inject them—also have a high risk of HCV infection. The exact route of infection is unclear. It may involve the methods of drug use, such as sharing contaminated crack pipes, or practicing unprotected sex. Prevention programs aimed at this group may reduce a drug user’s chances of becoming infected from his or her current use, and they also may keep at least some users from transitioning to injecting drugs, an even more risky practice.

Though essential, promoting safer drug use strategies cannot alone control the spread of viral hepatitis. Programs are needed to expand testing so that more people can learn whether or not they are infected. Further, counseling should be expanded so that uninfected people can learn how to avoid becoming infected and infected people can learn how to keep from transmitting the viruses to others. The programs should provide easy and affordable access to vaccination for hepatitis B (there is no vaccine for hepatitis C), and they should refer anyone found to be infected with HCV or HBV to appropriate health care institutions or providers for treatment and follow-up disease management. In addition, the programs should be expanded to include greater access to drug treatment, which has been shown to, at a minimum, reduce drug use frequency and assist a modest proportion of users to achieve abstinence.



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Conclusion

Harm reduction offers an array of practical strategies for viral hepatitis prevention among illicit-drug users. However, currently, harm reduction programs reach only a modest proportion of drug users, and there are vast regions of the United States where no programs exist. Expansion of these services is needed to reduce the very high rate of new infections in people who use drugs, and to counsel those who are already infected about medical management of their disease and how to avoid transmitting their infection to others. A comprehensive approach to harm reduction is essential to achieving the goal of reducing viral hepatitis in illicit drug-using populations. 

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