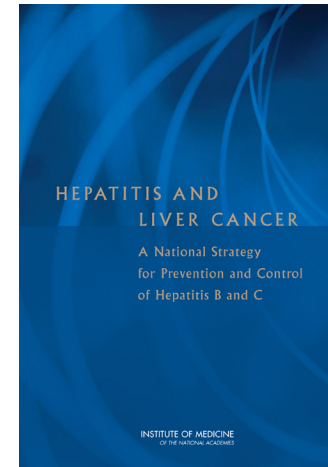


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Hepatitis and Liver Cancer

Information for State and Local Health Departments



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.

Despite the high numbers of people affected by and the morbidity and mortality associated with hepatitis B and C, only limited funding has been available to support federal, state, and local efforts to respond to these epidemics and they continue to persist. In response, 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*, offers recommendations on what state and local health departments can do as part of a national effort to address these epidemics.

Improving Surveillance

Public health surveillance is an essential tool in the prevention and control of all infectious diseases, including hepatitis B and C. The IOM report concludes, however, that the surveillance system for viral hepatitis in the United States is poorly funded and consequently incomplete and inconsistent among jurisdictions. As a result, surveillance efforts do not provide accurate estimates of the current burden of disease, are frequently inadequate for follow-up of

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recently diagnosed cases, and do not give policy makers the information they need to best allocate resources to viral hepatitis prevention and control programs.

Some of the difficulties that surveillance systems face derive from the complexity of the infections and their progression. Most people acutely infected with hepatitis B virus (HBV) or hepatitis C virus (HCV) show no symptoms and thus do not seek medical attention. Even when symptoms occur and a person seeks help, the symptoms may resemble those of other common illnesses, and health care providers often do not conduct serologic testing for HBV or HCV. As a result, for many people who develop chronic HBV or HCV infection, the disease goes undetected for years, often until they develop symptoms of advanced liver disease, including liver cirrhosis or a type of liver cancer called hepatocellular carcinoma.

The resources available to process test results, classify the cases, and provide follow-up (such as educational materials and referral for treatment) are very limited. Moreover, many of the people at highest risk of contracting HBV and HCV have not been tested due to limited access to health care. High-risk populations include people using illicit injected drugs; the homeless; and immigrants from regions where HBV is endemic, especially Asia, the Pacific Islands, and sub-Saharan Africa. In addition, the ability of state and local surveillance program staff to track cases across jurisdictions, and hence to identify chronically infected individuals and to avoid counting previously reported cases, is hampered by such factors as inadequate resources, nonstandardized surveillance software systems, and the lack of a national database that could be used to identify potential matches.

Given such problems, the IOM report calls for the CDC to work with state and local health departments to develop a new model for structuring surveillance for hepatitis B and C. As envisioned, the model would have two tiers: one for core surveillance and one for targeted surveillance.

The initial focus should be on developing and implementing standardized systems among all states to maximize their capacity to perform core surveillance for all cases of acute and chronic HBV and HCV infection. Core surveillance will include collection, processing, analysis, and dissemination of data. Standardization will be accomplished through cooperative agreements, improved guidance, and adequate and consistent funding. Systems should be integrated into existing disease surveillance infrastructure where feasible.

With core activities established, the CDC should lead in building the second tier of supplemental surveillance systems to better describe trends in at-risk populations, especially those unlikely to be fully represented in core surveillance data. Innovative surveillance projects should be carried out in both urban and rural regions, and they should enable researchers to focus on emerging behavioral risks, for example, in adolescents and young adults and in HIV-positive men who have sex with men. Additionally, partner notification services, which have been found to be effective for following up cases of HIV and sexually transmitted disease infections, should be piloted to determine their usefulness in following up cases of HCV infection.

In both tiers, the state would be the primary unit of surveillance. The CDC should develop cooperative agreements to ensure that all states have sufficient infrastructure to identify and appropriately investigate all suspected cases of acute and chronic HBV and HCV infection. Cooperative agreements should require reporting of standardized viral hepatitis surveillance data within three years of implementation. The agreements should include funding for states to hire staff to process laboratory results, enter data, and follow up with management of cases of acute and chronic hepatitis B and C.

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Improving Programmatic Activities

State and local health departments obtain funds for viral hepatitis prevention and control activities from a variety of public and private sources, with most funding for programs that target adults coming from the CDC's Division of Viral Hepatitis. (The federal government also supports a range of programs aimed at preventing hepatitis in infants and children.) Forty-nine states and five cities have established adult viral hepatitis prevention coordinator positions, at a total program cost of about \$5 million per year. Further, 32 states have developed a hepatitis prevention plan, half of which recently were developed. However, most states do not have the funding needed to implement the recommended components of those plans.

Promoting knowledge about and awareness of viral hepatitis is critical among health care providers and social-service providers (such as staff of drug-treatment facilities and immigrant-services centers). The CDC can help by working with stakeholders to develop a range of innovative educational materials, curricula, and programs—culturally appropriate and available in a variety of languages—that health departments and providers can integrate into existing health programs to inform clients about how to avoid viral hepatitis or, if they are infected, to educate them on how it can be treated and how they can avoid transmission to others. It is essential that the CDC and health departments work to expand public outreach and prevention efforts, particularly in

Components of Comprehensive Viral Hepatitis Services

Community Outreach:

- Community-awareness programs
- Provider-awareness programs

Prevention:

- Vaccination
- Harm reduction
 - Needle-exchange programs
 - Drug and alcohol treatment services
- Vaccination of hepatitis B virus-susceptible contacts

Identification of Infected Persons:

- Risk-factor screening
- Serologic testing

Social and Peer Support:

- Positive prevention services
- Education and referral to other related services and care

Medical Management:

- Assessment for and provision of long-term monitoring for viral hepatitis and selection of appropriate persons for treatment (in accordance with American Association for the Study of Liver Diseases guidelines)
- Psychiatric and other mental-health care
- Adherence support



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the areas of harm reduction programs and vaccination initiatives. The expansion of state immunization registries to include adults, especially those who are or have been incarcerated, is also needed to improve completion rates for the hepatitis B immunization series.

Federal agencies and state and local health departments should take steps to expand the public’s access to screening and testing services so that people at risk can learn if they are infected with HBV or HCV. Similarly, these agencies and health departments should work to provide coordinated care programs for those people found to be infected with HBV or HCV. As part of medical management efforts, particular attention should be paid to community health centers and programs already serving populations at-risk for hepatitis B and C.

Conclusion

If state and local health departments implement these recommendations, the result will be reductions in new HBV and HCV infections and in medical complications and premature deaths in those already chronically infected. The IOM report acknowledges that uncertainties in government funding may create challenges in implementing some of the recommendations. But in addition to saving lives, the improvements should reduce total health costs, making them a sound investment in the nation’s health.

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