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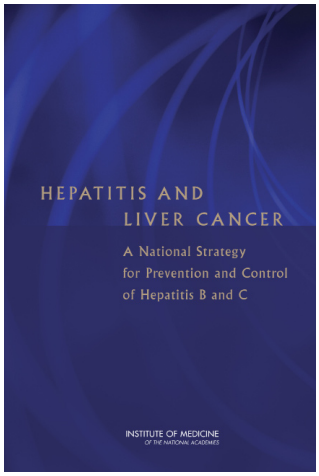
Hepatitis and Liver Cancer

A National Strategy for Prevention and Control of Hepatitis B and C



Up to 5.3 million people—2 percent of the U.S. population—are living with chronic hepatitis B or hepatitis C. These diseases are more common than HIV/AIDS in the U.S. Yet, because of the asymptomatic nature of chronic hepatitis B and hepatitis C, most people who have them are unaware until they have symptoms of liver cancer or liver disease many years later. Each year about 15,000 people die from liver cancer or liver disease related to hepatitis B and hepatitis C.

Hepatitis B and hepatitis C can be either acute or chronic. The acute form is a short-term illness that occurs within the first six months after a person is exposed to hepatitis B virus (HBV) or hepatitis C virus (HCV) which cause hepatitis B and hepatitis C, respectively. The diseases can become chronic, although this does not always happen and, particularly in the case of hepatitis B, the likelihood of this becoming a chronic disease depends on a person's age at the time of infection.

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Although the number of people with acute hepatitis B is declining in the U.S., mostly because of the availability of hepatitis B vaccines, about 43,000 people still develop acute hepatitis B each year. People at risk for hepatitis B include infants born to women with the disease and those who have sexual contact or share injection drug equipment with a person with the disease. People who received a blood transfusion before 1992 and past or current injection-drug users are at risk for chronic hepatitis C.

In 2008, the Institute of Medicine convened a committee to assess current prevention and control activities for hepatitis B and hepatitis C and to determine ways to reduce new cases of HBV and HCV infections and illnesses and deaths from chronic viral hepatitis. The committee concludes that chronic

hepatitis B and hepatitis C are important public health problems and that there are several barriers to prevention and control efforts, such as a lack of knowledge and awareness about chronic viral hepatitis among health care providers, at-risk populations, and the public. Improved surveillance and better integration of viral hepatitis services are needed to fix this problem.

Surveillance

Surveillance information better prepares policy makers to allocate sufficient resources to viral hepatitis prevention and control programs. Monitoring viral hepatitis in the U.S. is challenging because surveillance data currently do not provide accurate estimates of the current burden of disease and are insufficient for program planning and evaluation. The committee recommends that the Centers for Disease Control and Prevention (CDC) conduct a comprehensive evaluation of the national hepatitis B and hepatitis C public health surveillance system to determine its current status. In addition, the committee recommends that the CDC develop specific agreements with all state and territorial health departments to support core surveillance for acute and chronic hepatitis B and hepatitis C, and conduct targeted active surveillance to monitor incidence and prevalence of hepatitis B and hepatitis C in populations not fully captured by core surveillance.

Knowledge and Awareness

A major challenge to preventing hepatitis B and hepatitis C is the lack of knowledge and awareness about these diseases among health care providers, social service providers, and the public, especially among members of specific at-risk populations. This insufficient understanding about chronic viral hepatitis can contribute to continued transmission, missed opportunities for early diagnosis and medical care, and poor health outcomes in infected people. To improve knowledge and awareness, the committee recommends that the CDC work with stakeholders to develop hepatitis B and hepatitis C educational programs for health care and social service providers. As a way to increase awareness about hepatitis B and hepatitis C among at-risk populations and the general public, the committee recommends that the CDC work with stakeholders to develop, coordinate, and evaluate innovative outreach and education programs. Such programs should be offered in a variety of languages and should be integrated into existing health programs that serve at-risk populations.

Immunization

Through the years, the hepatitis B vaccine has been effective in the reduction of new HBV infections. CDC's Advisory Committee on Immunization Practices (ACIP), which provides recommendations on the control of vaccine-preventable diseases, recommended that all infants and children and at-risk adults (people at risk for HBV infection from infected household contacts and sex partners, from exposure to infected blood or body fluids, and from travel to regions with high or intermediate levels of endemic HBV infection) receive the hepatitis B vaccine. To prevent transmission of HBV from mothers to their newborns, ACIP recommended that infants born to mothers who have hepatitis B receive a first dose of the hepatitis B vaccine within 12 hours of birth. Despite the ACIP recommendation, first doses of the vaccine are being missed or delayed, which the committee believes is due to the lack of a delivery-room policy for hepatitis B vaccination. Missing or delaying the first dose for infants born to women with hepatitis B substantially increases the risk that they will develop chronic hepatitis B, and therefore, the IOM committee recommends that all full-term infants born to women with hepatitis B receive the hepatitis B vaccine in the delivery

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room as soon as they are stable and washed.

School-entry mandates have been shown to increase hepatitis B vaccination rates and to reduce disparities in vaccination rates. Therefore, the committee recommends that all states mandate the hepatitis B vaccine series be completed or in progress as a requirement for school attendance. Because only about half of at-risk adults have received the hepatitis B vaccine, the committee recommends that additional federal and state resources be devoted to increasing hepatitis B vaccination in this population.

Viral Hepatitis Services

Due to the lack of health services related to viral hepatitis prevention at the federal, state, and local levels, the committee finds that a coordinated approach is necessary to reduce the numbers of new HBV and HCV infections and the illnesses and deaths associated with chronic viral hepatitis. Comprehensive viral hepatitis services should have five core components: outreach and awareness, prevention of new infections, identification of infected people, social and peer support, and medical management of chronically infected people.

The committee identifies major gaps in viral hepatitis services for the general population, including specific groups that are disproportionately affected by hepatitis B and hepatitis C, such as foreign-born people from countries with high occurrence of these diseases and illicit-drug users.

Recommendations for Populations Considered At-Risk:

For foreign-born populations:

The CDC, in conjunction with other federal agencies and state agencies, should provide resources for the expansion of community-based programs that provide hepatitis B screening, testing, and vaccination services that target foreign-born populations.

For illicit-drug users:

Federal, state, and local agencies should expand programs to reduce the risk of hepatitis C virus infection through injection-drug use by providing comprehensive hepatitis C virus prevention programs. At a minimum, the programs should include access to sterile needle syringes and drug-preparation equipment because the shared use of these materials has been shown to lead to transmission of hepatitis C virus.

Federal and state governments should expand services to reduce the harm caused by chronic hepatitis B and hepatitis C. The services should include testing to detect infection, counseling to reduce alcohol use and secondary transmission, hepatitis B vaccination, and referral for or provision of medical management.

For pregnant women:

The CDC should provide additional resources and guidance to perinatal hepatitis B prevention program coordinators to expand and enhance the capacity to identify chronically infected pregnant women and provide case-management services, including referral for appropriate medical management.

For incarcerated populations:

The CDC and the Department of Justice should create an initiative to foster partnerships between health departments and corrections systems to ensure the availability of comprehensive viral hepatitis services for incarcerated people.

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The committee concludes that it is important for the general population to have access to screening services so that people who are at risk for viral hepatitis can be identified. Therefore, the committee recommends that federally-funded health insurance programs such as Medicare, Medicaid, and the Federal Employees Health Benefits Program, incorporate guidelines for risk-factor screening for hepatitis B and hepatitis C as a required core component of preventive care. This will allow at-risk people to receive blood testing for HBV and HCV and chronically infected patients to receive medical treatment.

Conclusion

The current approach to the prevention and control of chronic hepatitis B and hepatitis C is not working. These diseases are not widely recognized as serious public health problems in the U.S. As a result, inadequate resources are being allocated to viral hepatitis prevention, control, and surveillance programs. Increased knowledge and awareness about chronic viral hepatitis, improved surveillance for hepatitis B and hepatitis C, and better integration of viral hepatitis services are needed to remedy this problem. Unless action is taken to prevent chronic hepatitis B and hepatitis C, thousands more Americans will die each year from liver cancer or liver disease related to these preventable diseases.

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