CDC's Universal Data Collection Project:

Blood Safety

February 2002

Background

The safety of blood products is important for all people, especially those with hemophilia. The introduction of clotting factor concentrates in the 1970s greatly improved the treatment for hemophilia patients. Unfortunately, these products also introduced a new risk—the transmission of infectious diseases. While the risk of hepatitis from these products was recognized early on, the large number of persons with hemophilia who became infected with human immunodeficiency virus (HIV) in the early 1980s brought new questions to the safety of the blood supply. Prevention measures, including more sensitive donor screening methods, viral inactivation (viral killing) techniques, and the development of genetically engineered (recombinant) factor, were rapidly introduced to avoid future contamination. The use of these strategies has virtually eliminated the spread of viral diseases, including HIV and hepatitis, through the use of blood products.

A blood safety monitoring system

Today, clotting factor concentrates are considered safe from contamination with known viruses. However, continued monitoring of blood products provides an additional measure to ensure their safety. With this in mind, the Centers for Disease Control and Prevention (CDC), in cooperation with federally funded hemophilia treatment centers (HTCs), established the Universal Data Collection (UDC) project. Persons with bleeding disorders are eligible to enroll in UDC at their participating HTC. As part of the program, clinical data and a blood sample are collected from participants each year during their annual clinic visit. A portion of the blood sample is tested for viral hepatitis (hepatitis A virus [HAV], hepatitis B virus [HBV], hepatitis C virus [HCV]) and HIV, and the remainder is stored for possible use in future blood safety investigations.

Since the program began in May 1998, nearly 9,500 persons from 135 HTCs have been enrolled in UDC. As part of the program, each participant's annual test results are monitored for new infections with hepatitis or HIV. To date, no new cases of HAV, HBV, HCV, or HIV infection have been found among UDC participants. Additionally, the monitoring has revealed that more than 90 percent of UDC participants under the age of 20 have been vaccinated against HBV. Since UDC began, 191 participants who were not immune to either HAV or HBV when first enrolled have been vaccinated.

How you can help protect yourself

The nation's blood supply is safer now than ever before. However, monitoring is important to make sure that it remains safe and to detect the appearance of any new infectious agent that may pose a threat to its safety. Members of the bleeding community can help protect themselves in two important ways:

1. GET VACCINATED. Vaccination is a safe and effective way of protecting oneself against infection from HAV and HBV. CDC's Advisory Committee on Immunization Practices recommends HBV vaccination for all children and HAV vaccination for persons greater than 2 years of age who have hemophilia or other bleeding disorders. No vaccine is currently available against HCV.

2. PARTICIPATE IN UDC. Early identification of potential bloodborne diseases in the blood supply can help prevent further spread to others. Blood samples collected as part of the UDC program are stored in a national serum bank, and if a new disease is discovered, these stored blood samples can be tested to identify any potential threats to the safety of the blood supply.

For more information on the Universal Data Collection project, contact your local HTC.

Department of Health and Human Services

CDC

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