and interferon alpha reduces the rate of antiviral resistance compared with lamivudine monotherapy (Paganelli, Stephenne, and Sokal, 2012). Adefovir is used to treat HBV in children older than 12 years old. Entecavir is a recently approved treatment for HBV in adolescents 16 years old or older (Paganelli, Stephenne, and Sokal, 2012). Pegylated interferon, interferon alpha-2b, and ribavirin have been approved for use in the treatment of HCV infections in children 3 years old or older (Jensen and Balistereri, 2016). Products such as telbivudine and tenofovir are under current investigation in clinical trials, largely with adult patients.

## **Prevention**

Proper hand washing and standard precautions prevent the spread of viral hepatitis. Prophylactic use of standard immune globulin is effective in preventing hepatitis A in situations of preexposure (e.g., anticipated travel to areas where HAV is prevalent) or within 2 weeks of exposure.

Hepatitis B immune globulin (HBIG) is effective in preventing HBV infection after one-time exposures such as accidental needle punctures or other contact of contaminated material with mucous membranes and should be given to newborns whose mothers are HBsAg positive. HBIG is prepared from plasma that contains high titers of antibodies against HBV. HBIG should be given within 72 hours of exposure.

Vaccines have been developed to prevent HAV and HBV infection (see Table 22-9). HBV vaccination is recommended for all newborns and children who did not receive the vaccination as a newborn (see Immunizations, Chapter 6). Because HDV cannot be transmitted in the absence of HBV infection, it is possible to prevent HDV infection by preventing HBV infection. Routine serologic testing for anti-HCV of children older than 12 months who were born to women previously identified as being infected with HCV is also recommended (Jensen and Balistereri, 2016).

## **Prognosis**

The prognosis for children with hepatitis is variable and depends on the type of virus and the child's age and immunocompetency. Hepatitis A and E are usually mild, brief illnesses with no carrier state. Hepatitis B can cause a wide spectrum of acute and chronic