Epidemiology of Hepatitis B
Kayla Hager

Hepatitis B infection is a global public health problem. Worldwide, about 2 billion people have been infected with the Hepatitis B virus (HBV). Of these 2 billion people, 360 million have chronic infection and 600,000 die each year from liver disease or hepatocellular carcinoma caused by HBV. The frequency of HBV in certain parts of Asia and Southeast Asia, including China, Korea, Indonesia, and the Philippines, exceeds 8%. As of 1998 the Malysian Liver Foundation estimated that approximately 4.7% of the population (1.1 million people) was chronically infected with the hepatitis B virus.

Hepatitis B is a virus that causes acute liver infection. This often leads to long-term liver disease and increases peoples’ risk of cirrhosis of the liver and liver cancer. The hepatitis B virus can be transmitted in a variety of ways, through sexual or household contact, or unsafe injections. However, it is the chronic infection at infancy or childhood that account for a large and disproportionate share of worldwide mortality and morbidity.

A vaccine against Hepatitis B has been available since 1982. Since then over one billion doses of the hepatitis B vaccine have been distributed worldwide. It is 95% effective in preventing infection with HBV and its associated chronic consequences. It is also the first vaccine to prevent a major human cancer. It has been shown to be both safe and effective. In countries where 8-15% of children used to become chronically infected with HBV each year with the virus, vaccination has reduced that rate to less than 1% among immunized children.

Prevention of Hepatitis B is vital in lieu of the magnitude and complications associated with chronic HBV infection. Before the introduction of the vaccine, some preventative measures were employed to reduce the transmission of this virus, such as screening of blood donors, preparing plasma-derived products in such a way as to inactivate the hepatitis B virus, etc. A lot of these preventative measures are still encouraged and carried out today, even with the availability of a vaccine. Vaccination is, however, the most important aspect of preventative care against the Hepatitis B virus.

As of December of 2007, 171 countries reported that they have included the hepatitis B vaccine in their infant immunization programs. Only two of these 171 countries reported having only introduced it in parts of the country. This is a major increase when compared to the 31 countries in 1992. The World Health organization recommends that by the end of the 21st century all countries incorporate hepatitis B vaccination among their list of necessary childhood immunizations.