Hepatitis B virus (HBV) may cause a wide spectrum of liver diseases ranging from an asymptomatic carrier state to severe chronic liver disease, cirrhosis, and hepatocellular carcinoma (HCC). In patients with Chronic hepatitis B (CHB) infection, serum HBV viral load has been shown to be significantly associated with disease activity and disease progression. The aim of this study was to determine the viral load distribution of HBV DNA in patients with HBV infection who admitted to our hospital in Isparta region. HBV DNA levels in 1546 plasma samples of 1054 patients were analysed retrospectively between January 2013 and December 2013. The levels of plasma HBV DNA were quantified with real-time PCR method by Cobas/AmpliPrep/Cobas Taqman HBV test v 2.0 (Roche Diagnostics GmbH, Mannheim, Germany) and HBV Quantification Kit v1, Magnesia 16, Montania 483 (Anatolia Geneworks, Turkey). HBV-DNA levels were determined as 1-102 IU/ml (29.5%), 102-3 IU/ml (29.7%), 103-4 IU/ml (21.9%), 104-5 IU/ml (8.2%), 105-6 IU/ml (2.7%), 106-7 IU/ml (3.6%), 107-8 IU/ml (1.5%), 108-9 IU/ml (2.7%), and ≥109 IU/ml (0.2%). Amounts of the viral load of HBV DNA positive samples were observed to concentrate around the lower levels (1-105 IU/ml) in Isparta region (89.3%) which predicted lower risk of progression to HCC.