HEPATITIS B PREVALENCE USING RESIDUAL SERA FROM FEBRILE RASH SURVEILLANCE IN SOUTH AFRICA IN 2018

ABSTRACT

Hepatitis B is a significant public health issue caused by the hepatitis B virus. In 2017 there were 1.1 million new hepatitis B infections, most of them occurring in low and middle-income countries. A viral hepatitis strategy has been developed whereby countries are required to have updated information on the prevalence of hepatitis B and this data may be collected by ongoing surveillance. In South Africa, there is no active surveillance for hepatitis B amongst asymptomatic individuals in the general community. Therefore, in order to obtain estimates of the hepatitis B burden in South African children we have used residual samples from the active febrile rash surveillance conducted in 2018. We measured serological markers for hepatitis B. Of the included children, 0.2% (2/1010) were positive for hepatitis B surface antigen. Immunity due to vaccination was observed in 76% (770/1010) of the children. Of the analyzed samples 3% (30/1010) had immunity due to previous exposure, 1.1% (11/1010) had evidence of previous exposure by the presence of antibodies to hepatitis B core antigen and 20% (197/1010) had no evidence of previous exposure to hepatitis B. The results suggest that the current prevalence of hepatitis B infection is low in comparison to the period before implementation of hepatitis B immunization in South Africa.