

Post-vaccination serologic testing for babies born to mothers infected with hepatitis B virus

The Department of Health (DH) today (December 31) announced that babies attending its Maternal and Child Health Centres (MCHCs) who are born to mothers infected with hepatitis B virus (HBV) will be offered with serologic testing after hepatitis B vaccination starting from tomorrow (January 1, 2022), with a view to further reducing the mother-to-child transmission (MTCT) of hepatitis B and realising a hepatitis B-free generation in Hong Kong.

MTCT is the major route of transmission of HBV. In 2020, about 3.4 per cent of pregnant women who attended antenatal care at MCHCs were infected with HBV in Hong Kong. Ninety per cent of neonates would develop chronic hepatitis B infection if they became infected.

The Government has been attaching importance to its work on prevention and control of hepatitis. Universal antenatal screening and childhood hepatitis B vaccination have been in place in Hong Kong since the 1980s. The coverage for the hepatitis B vaccination programme generally has reached over 99 per cent. Babies born to HBV-infected mothers are given hepatitis B immunoglobulin at birth. These measures have resulted in a substantial decline in the incidence of HBV infection in the younger generation. To further reduce the risk of MTCT of hepatitis B, pregnant women with a high HBV viral load have also been provided with antiviral since August 2020.

Hepatitis B vaccination is effective in preventing HBV infection. About 90 to 95 per cent of babies can produce adequate protective antibodies after vaccination. Post-vaccination serologic testing (PVST) can assess the immune response to vaccination and hepatitis B infection status. Starting from tomorrow, the Government will provide PVST to babies born to mothers infected with HBV in or after April 2021.

If the test results show that babies have not developed adequate protective antibodies, they will be given a second three-dose series of hepatitis B vaccines in MCHCs, followed by another PVST to ascertain the immune response. Babies found to be infected with HBV will be referred for specialist management and follow-up.

To meet the World Health Organization's goal of eliminating the major public health threat posed by viral hepatitis by 2030, the Government launched the [Hong Kong Viral Hepatitis Action Plan 2020 – 2024](#) in October 2020, setting out a comprehensive strategy with specific actions by the DH, the Hospital Authority and other stakeholders, to reduce transmission of viral hepatitis, as well as the related morbidity and mortality. Prevention of MTCT of hepatitis B is one of the focuses of the Action Plan.

A spokesman for the DH reminded parents that all newborn babies should complete the three-dose course of hepatitis B vaccination, while mothers with HBV infection should receive appropriate antenatal care and long-term management of their liver condition.

More information about MTCT of hepatitis B is available at the DH's website (www.hepatitis.gov.hk/english/hepatitis_elimination/maternal_transmission_of_hepatitis_b.html).