Strategy 3:

Preventing New Infections

71. Preventing new infections remains central to Hong Kong's elimination strategy. MTCT has historically been a significant route of HBV transmission locally, while HCV prevention relies on interrupting transmission chains in the absence of a vaccine.

72. The key aim of this Strategy is to reduce viral hepatitis transmission in three major areas through delivering a combination of evidence-based interventions, including the prevention of MTCT of hepatitis B, prevention of hepatitis in PWID and other marginalised populations, and prevention of hepatitis infections in healthcare settings. The essential package of viral hepatitis prevention services would typically include the following [3, 19] —

(a) Hepatitis B vaccination;
(b) Injection, blood and surgical safety and universal precautions;
(c) Prevention of MTCT of HBV;
(d) Harm reduction services for PWID; and
(e) Treatment of chronic HBV and HCV infection as secondary and tertiary prevention (See Strategy 4).

Strategy 3.1:

Stop mother-to-child transmission of hepatitis B

73. Hong Kong has sustained a comprehensive MTCT prevention programme for over three decades. The universal neonatal hepatitis B vaccination programme launched in 1988, coupled with universal antenatal HBsAg screening and administration of HBIg for infants born to mothers with hepatitis B, laid the groundwork.

74. Building on this foundation, the Action Plan 2020-2024 introduced two initiatives enhancing the prevention of MTCT of HBV: maternal antiviral prophylaxis for pregnant women with high viral loads (HBV DNA >200 000 IU/mL), fully implemented across all public birthing hospitals in August 2020 [20], and a PVST programme for infants born to mothers with hepatitis B, launched in January 2022. By 2024, 3 796 eligible pregnant women had been assessed under the prophylaxis initiative. Among those with a high viral load who attended physician consultations, 93.3% accepted antiviral prophylaxis. Moreover, 2 806 infants joined the PVST programme as of the end of 2024, which identified 95.0% as sero-protected after the primary series of hepatitis B vaccination and enabled prompt interventions for the remaining 5.0%, including re-vaccination and follow-up by paediatricians for infected babies. These measures collectively establish all WHO-recommended components in the incremental approach to preventing HBV infection at birth and in the first years of life (Figure 1) [21].

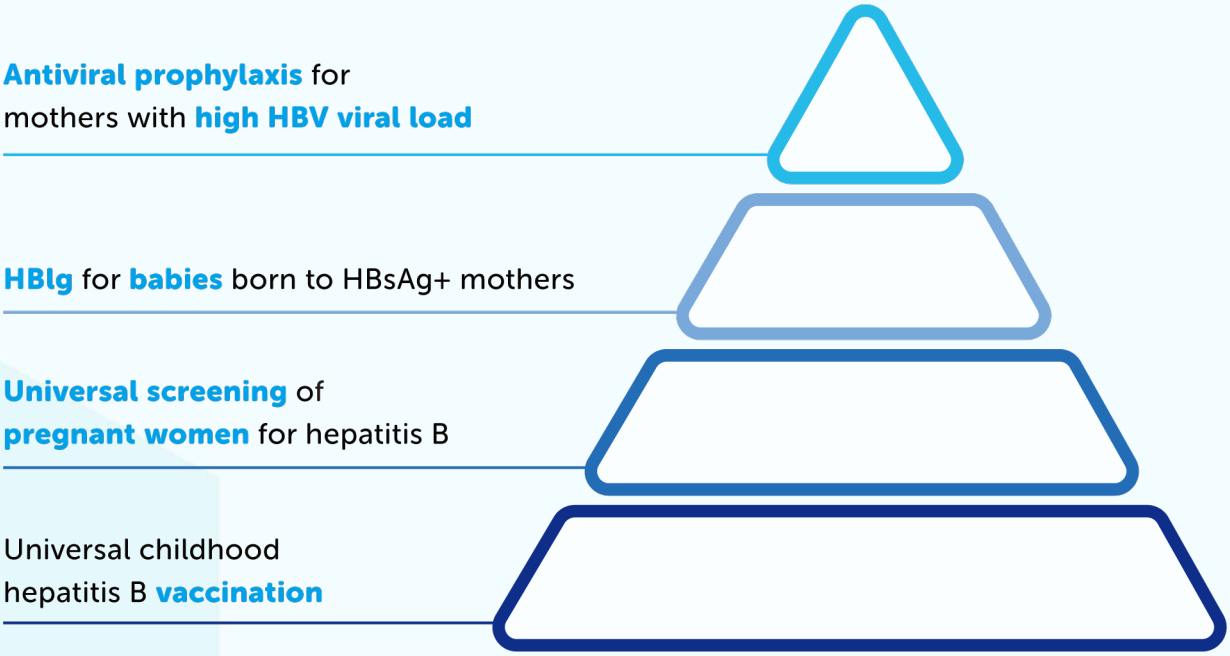

Figure 1. Incremental approach recommended by the WHO regarding prevention of HBV infection at birth and in the first years of life

75. Future efforts will be dedicated to maintain core interventions—antenatal screening, neonatal vaccination, immunoglobulin administration, and maternal antiviral prophylaxis—while systematically evaluating their reach and effectiveness. PVST coverage will be closely monitored to ensure at-risk babies are assessed, with appropriate follow-up actions for hypo- or non-responders, as well as for those infected. Emerging evidence on prophylaxis protocols will be reviewed, reinforcing Hong Kong's commitment towards elimination of MTCT of HBV with best practices.

Actions and activities

3.1.1 Sustain existing MTCT prevention measures including universal neonatal vaccination, universal antenatal HBsAg screening, hepatitis B immunoglobulin administration for exposed newborns, and maternal antiviral prophylaxis for pregnant women with high viral loads.

3.1.2 Continuously monitor service coverage to maintain optimal programme performance and identify improvement opportunities.

3.1.3 Maintain high uptake of PVST to verify infant protection status and ensure early linkage to care for infected cases.

3.1.4 Regularly review emerging scientific evidence on MTCT prevention strategies to determine their potential application in Hong Kong.

Strategy 3.2:

Prevent healthcare-related transmission of hepatitis B and C

76. Healthcare-related transmission of HBV and HCV poses a preventable risk globally. Hong Kong has long prioritised blood safety and infection control. Blood safety strategies in Hong Kong are based on 100% voluntary non-remunerated blood donations, donor selection, and quality-assured screening of all donated blood and blood components used for transfusion by antibody and nucleic acid testing. Of note, screening of blood donors for HBV and HCV infection has been in place since 1978 and 1991, respectively, to prevent transfusion-related transmission of these two hepatitis viruses. Robust infection control guidelines—including standard precautions, hepatitis B vaccination for healthcare workers, and protocols for managing occupational exposures—have substantially minimised nosocomial transmission. These measures align with the WHO 2030 targets for 100% safe blood supplies and injections.

77. To prevent nosocomial transmission of blood-borne viruses, various local infection control guidelines have been published by the DH. These include guidance on Standard Precautions, hepatitis B vaccination and documentation of post-vaccination serology for healthcare workers, and management of occupational exposure, including medical evaluation for testing, treatment, and post-exposure prophylaxis as appropriate. These widely adopted infection control measures in local healthcare settings have substantially reduced healthcare-related transmission of HBV and HCV.

78. Despite these infection control measures, a cluster of HCV infections was reported in a public hospital in 2024, where healthcare-related transmission could not be excluded. In response, a series of strengthened measures were implemented in the HA, including a comprehensive review of lancing device use and disinfection protocols, reinforcement of proper blood-taking practices and aseptic techniques through regular audits and refresher training sessions, and promotion of early prescription of HCV treatment to minimise the risk of onward transmission.

79. To address evolving risks, existing safeguards will be reinforced. Blood safety frameworks will undergo review in response to the latest developments regarding safe blood supplies. Regular infection control training for healthcare workers will continue, emphasising aseptic techniques, sharps handling, and exposure management. The 2014 guidelines on post-exposure prophylaxis for blood-borne pathogens [22] will be updated, with reference to new clinical evidence and revised international practices.

Actions and activities

3.2.1 Uphold blood safety protocols through continuous quality assurance monitoring and periodic review of new developments.

3.2.2 Provide regular infection control training for healthcare workers covering standard precautions, aseptic techniques, sharps safety, and exposure management to minimise occupational transmission risks of HBV and HCV.

3.2.3 Update guidelines on post-exposure management for blood-borne pathogens published in 2014 to incorporate new clinical evidence and take into consideration revised international practices.

Strategy 3.3:

Reduce risk and disease burden in key populations

80. Key populations refer to defined groups at increased risk of viral hepatitis due to specific higher-risk behaviours, irrespective of epidemic type or local context. These may include PWID, MSM and sex workers.

81. As recommended by the WHO, essential health interventions, which have demonstrated direct impact on viral hepatitis prevention, include—

    (a) harm reduction, including opioid agonist maintenance therapy;
    (b) condoms and lubricants;
    (c) prevention of vertical HBV transmission;
    (d) hepatitis B vaccination; and
    (e) addressing chemsex [23].

    These interventions have all been in place in Hong Kong, under specific clinical or health promotional settings operated by the DH or the HA, to reduce the burden of viral hepatitis in key populations. For example, over 350 000 condoms were distributed annually to various community stakeholders to promote safer sex, while information on HIV/AIDS, STI and viral hepatitis is available on the websites hosted by the Special Preventive Programme, DH. Methadone clinics under the DH provide methadone maintenance and treatment programmes to opioid-using PWID as a harm reduction measure, where the average daily attendances at methadone clinics reached 2 700 in 2024.

82. Hong Kong will intensify accessible, non-stigmatising services for these groups. A comprehensive package—including opioid agonist therapy, HBV vaccination, and condom/ lubricant distribution—will be expanded through collaborative efforts with community partners. Moreover, scaling up HCV testing and DAA treatment for key populations will be prioritised, in recognition of the benefits of treating and curing HCV infection to reduce onward transmission [24,25]. To realise this "treatment-as-prevention" strategy, identification of HCV re-infection and linkage to prevention, care and retreatment will be embedded in service delivery.

Actions and activities

3.3.1 Enhance accessibility of prevention services, with reference to the comprehensive package of interventions recommended by the WHO, including hepatitis B vaccination, harm reduction programmes, and risk-reduction counselling for key populations, such as PWID, MSM and sex workers.