

## Strategy 2:

# Tracking Health Sector Response



54. Hong Kong has maintained robust viral hepatitis surveillance systems for decades, monitoring acute infections, prevalence of chronic infections, and sequelae of viral hepatitis, such as liver cancer. Under the *Action Plan 2020-2024*, these systems were strengthened through the development of 12 Local Indicators. These metrics enable standardised tracking of diagnosis, treatment and immunisation coverage, as well as mortality impacts, forming an evidence base for policy formulation. These surveillance mechanisms support assessment regarding the progress towards the global WHO elimination targets while providing actionable insights into local epidemiological trends.
55. To achieve a more comprehensive assessment of the local disease burden, there is room to fortify the monitoring of the sequelae of viral hepatitis, for example, cases of incident liver cancer and liver transplants related to HBV and HCV infection, which have not yet been covered in the previous Action Plan. Moreover, there is a need to update the set of Local Indicators, following the new recommendations on maternal antiviral prophylaxis, newly established impact targets for PWID and the latest development in the global initiative related to the validation of triple elimination of MTCT of HIV, syphilis and HBV. Of a related note, sustained assessment of MTCT elimination efforts would require strengthened data linkages across maternal, neonatal, and immunisation programmes to validate achievement of global targets. Looking ahead, Hong Kong will systematically enhance its health information systems to drive evidence-based interventions.

## Strategy 2.1:

# Estimate burden due to chronic viral hepatitis

56. Chronic viral hepatitis imposes a multifaceted burden extending beyond infection prevalence to encompass life-altering sequelae including cirrhosis, liver cancer, and premature mortality. The PHS 2020-22 provides up-to-date prevalence estimates for HBV and HCV infections in Hong Kong's general population, revealing approximately 410 000 and 17 000 affected individuals, respectively. The existing Local Indicators framework tracks core epidemiological and mortality metrics, enabling ongoing assessment of the public health impact.
57. Chronic viral hepatitis also places significant pressure on Hong Kong's public healthcare system. In 2023, 182 100 patients with HBV infection utilised services in the HA. In the same year, 9 500 new cases of HBV infection and 1 302 new cases of HCV infection were documented in the HA. Between 2022 and 2024, the annual number of patients placed on the waiting list for liver transplantation ranged from 20 to 39 for HBV infection, and from 0 to 2 for HCV infection, highlighting the substantial healthcare resources required for managing advanced liver disease.
58. The measurement framework could be further expanded to cover the cascade of complications arising from chronic infection. The factsheet of liver cancer published by the Hong Kong Cancer Registry in 2024 included for the first time the distribution of incident HCC cases with prior documentation of HBV or HCV infection <sup>[11]</sup>, marking the start of systematic assessment regarding the linkage between viral hepatitis diagnoses and incident complications, as well as the long-term impact of treatment scale-up on reducing advanced liver disease.
59. Building on these mechanisms, the Population Health Survey 2025/26 will further update the prevalence situation of viral hepatitis and linkage to care through household surveys and health examinations. Moreover, the number of liver cancer cases and liver transplants related to HBV or HCV infection will be estimated through the enhanced data integration in cancer registries and by making use of the transplant databases, respectively.

## **Actions and activities**

- 2.1.1 Update the epidemiological situation of chronic HBV and HCV infection (Local Indicators 1 & 2) with the Population Health Survey 2025/26, which would include detailed analysis of the prevalence estimates, diagnosis rates and medical follow-up patterns among infected individuals.
- 2.1.2 Systematically estimate HBV/HCV-attributable liver cancer cases and liver transplantation events, supplementing evidence-based assessment of treatment impact on severe liver disease prevention.

## Strategy 2.2:

# Monitor trends in hepatitis B and C over time

60. Hong Kong's longitudinal surveillance has consistently tracked viral hepatitis trends through multiple mechanisms: statutory notifications for acute cases, seroprevalence data reported from selected adult communities (e.g. antenatal women, blood donors), and programme-specific monitoring. These data reveal significant progress, particularly for HBV infection, where the prevalence among antenatal women declined from >10% in the 1990s to 2.3% in 2024 and among new blood donors from 8.0% to less than 1.0% over the same period. These findings on viral hepatitis trends are synthesised and made publicly available in the annual surveillance reports.
61. Following the expansion of DAA treatment to all patients with HCV infection and the completion of two micro-elimination initiatives, monitoring of HCV infection and re-infection in populations with ongoing risk behaviours supports the evaluation of the effectiveness and sustainability of hepatitis C control efforts. Emerging transmission networks among MSM and people with HIV co-infection observed in the past decade require closer scrutiny, while the extent of hepatitis C treatment coverage among PWID is pivotal in determining the progress of hepatitis C elimination in Hong Kong.
62. Surveillance will be reinforced through continuous notification of acute infections and sentinel screening in adult communities, with focuses on populations with ongoing HCV transmission risk, and structured assessments among PWID, MSM, and cohorts of people with HIV to track incidence and treatment uptake. The analysis of epidemiological trends will continue through annual surveillance reports, integrating data from clinical programmes, research studies, and outbreak monitoring.

## Actions and activities

- 2.2.1 Maintain robust surveillance systems for acute viral hepatitis notifications and chronic infection monitoring in adult communities, ensuring continuous tracking of the epidemiological patterns.
- 2.2.2 Assess patterns of new HCV infections among key populations including people with HIV, men who have sex with men, and people who inject drugs to evaluate effectiveness of targeted interventions and treatment scale-up.
- 2.2.3 Disseminate annual surveillance reports, which provide the latest epidemiological information related to viral hepatitis from integrated analyses of surveillance data, research findings, and programme statistics.

## Strategy 2.3:

# Make measurement for the Local Indicators

63. The 12 Local Indicators established under *the Action Plan 2020-2024* provide a standardised framework for tracking Hong Kong's progress towards WHO elimination targets. Developed with reference to the WHO core indicators and local context, these metrics have enabled consistent monitoring of diagnosis, treatment, prevention, and mortality outcomes <sup>[16]</sup>.
64. The *Consolidated Guidelines on Person-Centred Viral Hepatitis Strategic Information* published by the WHO in 2024 update the metadata standards and measurement methodologies, in light of the latest developments in viral hepatitis elimination <sup>[17]</sup>. Our current indicator set requires expansion for a more comprehensive assessment of efforts in the prevention and control of viral hepatitis, for example, by including new indicators on prevention (e.g. antenatal hepatitis B screening coverage) and high-risk group interventions (e.g. opioid agonist therapy coverage among PWID). Data extraction feasibility also needs optimisation amidst advancements in electronic health records.
65. The Local Indicators will be reviewed and updated to incorporate the WHO's latest recommendations and address local data gaps. New indicators will include hepatitis B testing coverage among pregnant women, antiviral therapy uptake in high-viral-load mothers, and harm reduction service coverage for PWID. The eHealth+ One Health Data Repository will be leveraged to automate data collation where possible, ensuring rigorous adherence to WHO measurement protocols. Historical consistency will be preserved to maintain comparability across reporting periods (2015, 2020, 2025, 2030), facilitating longitudinal assessment of elimination efforts.

## Actions and activities

- 2.3.1 Review and update the set of Local Indicators (Annex IV) to incorporate additional context-specific metrics including antenatal hepatitis B screening coverage, antiviral therapy uptake in eligible pregnant women, and harm reduction service coverage for people who inject drugs.
- 2.3.2 Enhance measurement methodologies through strategic utilisation of the eHealth+ One Health Data Repository, evaluating electronic health record capabilities to implement WHO-recommended standards for data quality and comparability.
- 2.3.3 Ensure longitudinal consistency in indicator measurement across reporting periods (2015, 2020, 2025 and 2030) by maintaining standardised definitions as far as possible for comparable assessment of the elimination progress over time.

## Strategy 2.4:

# Evaluate the progress towards elimination of mother-to-child transmission of HBV

66. Hong Kong has implemented comprehensive measures since the 1980s to eliminate MTCT of HBV, including universal antenatal screening, universal neonatal vaccination (since 1988), administration of hepatitis B immunoglobulin (HBIG) for babies born to mothers with hepatitis B, and targeted antiviral prophylaxis for high-risk mothers (fully implemented by 2020). The combined evidence of decreasing HBsAg prevalence among pregnant women and low breakthrough infection rates (0.3%) observed in the PVST programme indicates potential attainment of global MTCT elimination targets.
67. Sustaining elimination requires robust systems validated against international standards. The WHO's "triple elimination" framework (HIV, syphilis and hepatitis B) recommends rigorous assessment of four foundational pillars: data quality, laboratory quality, programme integration, and equity/community engagement <sup>[18]</sup>. Formal evaluation of these dimensions is needed to verify and maintain Hong Kong's elimination status.
68. A comprehensive assessment will be conducted on MTCT elimination foundations using the WHO's validation toolkit. This includes auditing data completeness across antenatal, neonatal, and immunisation registries; verifying laboratory quality assurance for HBsAg and HBV DNA testing; evaluating service accessibility and uptake disparities; and assessing community awareness and stigma barriers. Ongoing monitoring of antenatal HBsAg prevalence and prophylaxis coverage will continue. Evidence demonstrating the achievement of all WHO process and impact targets will be compiled to support formal application for validation of MTCT elimination.

## Actions and activities

- 2.4.1 Conduct systematic evaluation of foundational MTCT elimination requirements on data quality, laboratory, programme, and equity in service access using WHO validation tools.
- 2.4.2 Collate and analyse MTCT programme data including antenatal prevalence, intervention coverage, and breakthrough infection rates to assess Hong Kong's achievement of WHO process and impact targets for formal validation.

## Strategy 2.5:

# Strengthen information exchange regarding prevention and control of viral hepatitis

69. Hong Kong actively contributes to global viral hepatitis elimination efforts, aligning local strategies with WHO frameworks and participating in regional knowledge exchange. Data from our surveillance systems and experience from the launch of Action Plan initiatives can inform discussions on implementation science, particularly regarding MTCT prevention and primary care integration.
70. Regional and international collaboration will be strengthened through sharing Hong Kong's implementation experience—including successes and challenges—at forums like the WHO Western Pacific Regional Committee and other regional and international conferences, where peer feedback for programme enhancement can be exchanged. Meanwhile, emerging global evidence regarding the prevention, care, and treatment of viral hepatitis will be structurally reviewed, facilitating timely deployment of the latest recommendations into local policy.

## Actions and activities

- 2.5.1 Present Hong Kong's Action Plan implementation experiences at regional and international forums to facilitate knowledge exchange and obtain expert feedback for programme refinement.
- 2.5.2 Compile data related to the progress of viral hepatitis elimination periodically through established mechanisms for reporting to the WHO as per request and contributing to global monitoring of viral hepatitis elimination efforts.
- 2.5.3 Continuously monitor international advancements in hepatitis prevention, care, and treatment to identify international recommendations applicable to Hong Kong's context.