Eliminate hepatitis B. Prevent liver cancer. Save 1 million lives each year.
Every year almost 1 million lives are tragically lost from diseases caused by the hepatitis B virus and many more are affected by the consequences of the epidemic: a reduced quality of life, lower productivity and loss of family members. Hepatitis B virus (HBV) infection is the leading cause of liver cancer worldwide, which causes nearly 10% of all cancer deaths. Today, we have a chance to eliminate hepatitis B as a public health threat, with a profoundly positive impact on individuals, families, communities, economies and health systems. HBV infection is preventable by vaccination and effective treatments are available. The roadmap to elimination of chronic HBV as a public health threat and liver cancer prevention is feasible and cost-effective, and mapped out by the World Health Organization (WHO) in 2016. The only missing element is strong political will to fulfil the global commitment made in 2016 by WHO members, which aims to eliminate hepatitis B as a public health threat by 2030. To reach full efficacy, the measures outlined in this briefing should be integrated into national hepatitis elimination plans and within the Universal Health Coverage framework.

The rights of hepatitis patients, like me, are basic human rights and we need to ensure that they are upheld. Without action by governments and health systems we will not be the last generation affected by this disease and countless more lives will be lost needlessly.

Dee Lee
Community worker living with hepatitis B in China

Hepatitis B causes:

- 900,000 deaths every year
- One death every 40 seconds
- The majority of liver cancers

But we can eliminate it, we already have:

- A low cost vaccine
- A global commitment to elimination
- Effective treatments
What we need

Political will

Integration with UHC

Roll-out of the birth dose vaccine

Innovative financing

Development and roll-out of a cure

Recommendations for achieving elimination

Prevention:

- **Safe, quality-assured and effective vaccines can be provided at low cost** when political will is present. Vaccination against HBV has already prevented an estimated 310 million infections.
- **HBV infection often occurs at birth or during early childhood, resulting in chronic infection.** It is imperative that the birth-dose vaccine (from US $0.20/person) be included in all maternal and child health programs. Vaccination programs at birth, household and catch-up vaccination for those most at risk, including health care workers, must be expanded, particularly in sub-Saharan Africa, Asia and South America.
- **Birth-dose vaccination should be complemented by immunoglobulin and antiviral therapy for pregnant women** with a high viral load.
- **Safe injection and infection control practices** in all settings, as well as comprehensive packages for people who inject drugs are essential.

Test, Treat & Monitor:

- **Testing for HBV should be expanded and integrated** with sexual and reproductive health services, and community-based services including HCV and HIV programs and primary care networks. Investments are needed to develop and validate rapid, sensitive point-of-care diagnostics including HBV DNA quantitative assays. Testing should be combined with counselling and linkage to care, as well as household education for prevention. Stigma and discrimination must be addressed to encourage testing and treatment.
- **All individuals infected with HBV should be assessed for viral activity and liver disease severity and screened for liver cancer.** Task shifting processes should be defined and simplified for diagnosis, treatment and monitoring.
- **Every person who can benefit from treatment should receive it** until curative regimens are developed and available. Governments should follow their national guidelines to meet the local epidemic while global guidelines are being reviewed. Large-scale trials and cohorts representative of most affected communities and both sexes should be funded to ensure treatment guidelines have an optimal public health impact.
  - Current HBV treatments can prevent the development of liver disease and reduce the risk of liver cancer. Treatments are safe and cost-effective, with low risk of development of antiviral resistance. As for HIV, effective treatment can reduce transmission to almost zero. Generic formulations are available and pooled procurement can make treatment available for only US $23 per person per year. HBV treatment can easily be integrated with HIV programs, for co-infections and mono-infections, as the same medicines are used against both viruses.
  - **Pediatric formulations and long-acting antivirals should be prioritized.**
- **For these actions to succeed, education and public awareness activities are essential.**
Cure

- **Appropriate public investment are vital** to accelerate discovery research on curative therapies. Although current treatments reduce the risk for liver cancer, they are often long-term, and a significant risk of cancer progression remains.

- **Given scientific advances, there is substantial hope for new, curative treatments** which will reduce the duration of treatment significantly and hopefully further reduce the cancer risk. These may also help address the stigma that results from living with a chronic infectious disease.

The elimination of hepatitis B as a public health threat, endorsed by the World Health Assembly, can be achieved by 2030. Together, we must act now to reach this goal, and ensure that the necessary actions to achieve are included in national strategic responses and global health programmes. To learn more about how to prevent liver cancer and eliminate hepatitis B, contact@ice-hbv.org.

References

1. WHO Global Hepatitis Report 2017
2. Global Health Sector Strategy (GHSS) on viral hepatitis 2016–2021
4. WHO, UNODC, UNAIDS technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users 2012
5. WHO Guidelines for HBV Treatment 2015