

**Toolkit 3**

Dossier of evidence: a summary of the evidence to support free, confidential and voluntary hepatitis B and hepatitis Ctesting

**Background information to the slide set**

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**Thank you for downloading the background information to the hepatitis dossier of evidence slide set**

The dossier of evidence has been developed to help support organisations, like yours, during European HIV-Hepatitis Testing Week. We see the hepatitis dossier of evidence being useful to you in two ways:

1. To improve and increase understanding within organisations around the necessity of increasing hepatitis testing activities
2. For advocacy purposes to support engagement with cooperating partners (such as government bodies, national and local hepatitis programme planners and coordinators, healthcare providers and civil society organisations) with the aim of gaining their support for endorsing regular hepatitis testing

This background information has been drafted to provide additional information that is not included on the slides and to help support you if you are presenting the dossier of evidence to relevant governing bodies, partners and organisations. The information included in both documents provides support and evidence to back up the key messages for European HIV-Hepatitis Testing Week.

This document includes:

Section 1 – List of abbreviations and definitions

Section 2 – Key messages for European HIV-Hepatitis Testing Week

Section 3 – Hepatitis B virus and hepatitis C virus: the basics

Section 4 – Know your epidemics: the situation of hepatitis B and hepatitis C in Europe

Section 5 – Late presentation for viral hepatitis

Section 6 – The importance of timely diagnosis of hepatitis B and hepatitis C

Section 7 – Barriers to hepatitis B and hepatitis C testing

Section 8 – Creating more testing opportunities

Section 9 – Conclusions

Section 10 – Template slides

This document aims to provide support and guidance only and it is not mandatory that your organisation uses the information outlined in this document, nor is it obligatory to use the dossier of evidence as part of your testing week activities. If you have any questions do get in touch: [hie.rigshospitalet@regionh.dk](mailto:hie.rigshospitalet@regionh.dk)

We are also active on [Facebook](https://www.facebook.com/EuroHIVtestweek?ref=hl) and [Twitter](https://twitter.com/HIVheptestweek). Please tell us about your plans, share information and photos, and tweet us to help build anticipation and excitement for the week.

Section 1 – List of abbreviations and definitions

Abbreviations used in this document

ECDC European Centre for Disease Prevention and Control

EEA European Economic Area

EFTA European Free Trade Association

EU European Union

GBD Global Burden of Disease

HBV Hepatitis B virus

HBsAg Hepatitis B surface antigen

HCV Hepatitis C virus

HIV Human immunodeficiency virus

MSM Men who have sex with men

MSM/DU Men who have sex with men/drug users

MSM/IDU Men who have sex with men/ injection drug users

NGO Non-governmental organisation

PLHIV People living with HIV

PWID People who inject drugs

RDT Rapid Diagnostic Test

START Strategic Timing of AntiRetroviral Treatment

STI Sexually transmitted infection

SW Sex worker

WHO World Health Organization

# Definition of countries in the WHO European Region

**Western Europe:** Andorra, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, Monaco, Netherlands, Norway, Portugal, San Marino, Spain, Sweden, Switzerland, United Kingdom.

**Central Europe:** Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Hungary, the former Yugoslav Republic of Macedonia, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia, Turkey.

**Eastern Europe:** Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan.

**Section 2 – Key messages for the testing week**

**Overview of the key messages**

Included in this section are the key messages for European HIV-Hepatitis Testing Week. However, in this dossier of evidence, the messages for only Hepatitis B and C are included. For the messages developed for HIV, please refer to the key messages in *the HIV dossier of evidence* ([Toolkit 3a](http://www.testingweek.eu/get-involved/european-hiv-hepatitis-testing-week-materials)).

The overarching goal of the European HIV-Hepatitis Testing Week is to increase awareness of the benefits of HIV and hepatitis testing so that more people become aware of their HIV and/or hepatitis status. The information included in the dossiers of evidence provide the data to support the rationale for this and the key messages for the European HIV-Hepatitis Testing Week.

Overarching message

HIV in Europe is calling on the European community to unite for a week during November to increase awareness regarding the benefits of HIV and hepatitis testing; in order for more people to become knowledgeable about their risks, understand that there is effective treatment available and are aware of their HIV and/ or hepatitis status.

Core messages

European HIV Testing Week has expanded to include hepatitis testing in 2015 because hepatitis C and B are common among people at risk of and among those living with HIV. These viruses are transmitted in many of the same ways HIV is transmitted—through injection drug use and condomless sex.

With advancements in treatment, people today living with HIV and/or Hepatitis can live well with a long life expectancy, while those with hepatitis C can be cured. Therefore, it is highly recommended to know your status as soon as possible

**Key messages – general audiences**

***Treatment and Prevention***

* It’s better to know your status as soon as possible because today people with hepatitis B are living a long life expectancy when treatment starts early, and those with hepatitis C can be cured.
* Knowing your status can also help prevent you from passing on the viruses to others.
* **Hepatitis C** treatment advances mean that a cure is now available.

**Hepatitis B** treatment exists to prevent liver cancer and liver cirrhosis. There is also a vaccine to help prevent you from getting infected with HBV.

***Prevalence***

* **Hepatitis C:** In the WHO European Region, it is estimated that 15 million people are living with hepatitis C; however, only a small minority of people receive treatment. In the WHO European Region, the average treatment rate is estimated at only **3.5%.**
* **Hepatitis B:** It’s estimated that around 13.3 million people are living with hepatitis B in the WHO European Region. Approximately 15–40% of infected individuals will develop cirrhosis, liver failure or hepatocellular carcinoma.

**Key messages – healthcare workers**

* Help ensure you and your teams can effectively assess individuals for hepatitis testing by offering training on the risk-factors.
* When people are diagnosed with hepatitis late, they are **less likely** to respond well to treatment and **more likely** to have health and treatment complications.
* A positive hepatitis test result requires that your patient is linked to appropriate care and treatment.
* Hepatitis testing should be voluntary, confidential and offered in a wider range of settings than is presently available. Other settings may include: healthcare and community-based settings and via outreach programmes by peers and/or medical staff.
* Late diagnosis of hepatitis is more costly for the healthcare system.

**Key messages – pharmaceutical industry**

* European HIV-Hepatitis Testing Week presents a unique opportunity to promote your company and market its products, whilst simultaneously demonstrating a high level of corporate social responsibility through donating rapid testing kits to participating partners in 2016.

**Key messages – Government Bodies**

* Robust data collection and surveillance of hepatitis transmission on a country level is key to understanding how to develop cost-effective, targeted testing initiatives and strategies that help to reduce the number of new infections in your country.
* New testing technology offers a variety of cost-effective rapid testing kits that are now available across Europe and should be used to improve access to testing.
* Hepatitis testing guidelines should state that hepatitis testing can take place in the community, as well as healthcare settings, using blood testing kits or oral swabs.
* Increasing access to, and acceptance of, free, confidential and voluntary hepatitis testing, including linkage to treatment and care, need to be a priority for governments across Europe.
* Early diagnosis of hepatitis C can increase the chances of a successful course of treatment and limit cross-infection.
* Routine hepatitis testing is critical for early diagnosis and survival, because people can go without symptoms for decades, making it a silent killer. Worldwide, infections with hepatitis C and B viruses cause an estimated 57% of cases of liver cirrhosis and 78% of cases of primary liver cancer.
* Late presentation for hepatitis care is more costly for the healthcare system.
* Guilt and fear associated with hepatitis, reinforced by societal stigma, can prevent people from getting tested, resulting in lost treatment opportunities.

**Access to treatment**

* **Late diagnosis** and **delayed access to treatment** are the two most important factors associated with ongoing transmission of hepatitis and preventable related illnesses and death.
* Once diagnosed, people living with hepatitis C must have access to treatment. A cure is now possible for **80–100%** of people.
* Early diagnosis and early treatment helps reduce and prevent continued transmission of hepatitis C to others.

**Key messages – supporting organisations**

* We are in need of your continued support for European HIV-Hepatitis Testing Week 2016.
* Through united efforts, on a national and international level, we aim to ensure that more people become aware of their HIV and hepatitis status by providing access to free and safe HIV and/or hepatitis tests.

**Section 3 – Hepatitis B virus and hepatitis C virus: The Basics**

This section includes an overview of the content contained on **slides 3 to 10**.

Hepatitis B virus (HBV) and hepatitis C virus (HCV) are both viruses that attack the liver, causing scarring of the liver tissue (cirrhosis), liver cancer, liver failure and death. Damage to the liver can occur over a period of many years without outward signs of illness, and a person infected with HBV or HCV might not learn about his or her disease until it has progressed to an advanced stage.

While there are some similarities in how HBV and HCV manifest in those living with the infection, the two diseases are entirely distinct from each other.

**Hepatitis B** virus may cause only short-term (acute) illness followed by a full recovery, or it may cause incurable chronic illness. There is a strong correlation between age and likelihood of chronic illness: most people who are infected early in life develop chronic HBV, while most people who are infected as adults only experience the acute form of the disease. An effective HBV vaccine exists, and many, but not all, Member States of the World Health Organization (WHO) European Region have universal infant HBV vaccination programmes. (As of this writing, the countries without universal infant HBV vaccination programmes are Denmark, Finland, Iceland, Norway, Sweden and the United Kingdom.)

HBV is spread through exposure to infected blood and other body fluids, and children born to HBV-infected mothers are at high risk of acquiring HBV if they do not undergo timely vaccination. Other modes of transmission include sexual contact and the reuse of needles and syringes. People also can acquire HBV through exposure to contaminated objects such as razors, toothbrushes and tattooing equipment. Although chronic HBV cannot be cured, there are treatment regimens that can slow the progression of the disease and improve health outcomes.

**Hepatitis C** virus also has both an acute and a chronic form, but in the case of HCV, chronic disease is much more likely to occur in adults than in children. 15 to 45 percent of people who acquire HCV clear the virus naturally without medical interventions (World Health Organization 2014), and some will clear the virus without even knowing they were infected. Those who do not clear the virus within six months will be considered chronically infected.

There is **no vaccine** against HCV. It is commonly spread through the reuse of injection equipment, among people who inject drugs, and by sharing razors, toothbrushes and tattooing equipment. HCV is also increasing at high rates due to recreational drug use in the gay community. Therefore it is important we recognise risk behaviors among MSM who use drugs, MSM/DU and MSM who inject drugs MSM/IDU

In addition to drug use and drug injecting, HCV is also spread in medical settings due to the inadequate sterilisation of medical equipment and the transfusion of unscreened blood where appropriate infection prevention control measures are not followed. Less common modes of transmission include sexual transmission and mother-to-child transmission.

Treatment for HCV has greatly improved over the years with the most recent approved drugs for HCV treatment all have very high cure rates (>90%). The virus is typically eliminated after the patient has completed a 12-week or 24-week drug regimen.

HBV and HCV both have a major worldwide health impact. The Global Burden of Disease (GBD) initiative estimated that HBV and HCV caused **26%** and **29%** of deaths from cirrhosis in 2013, respectively. The GBD analysis of liver cancer deaths in 2013 attributed **37%** of such deaths to HBV, and **42%**, to HCV. The two diseases together caused **more deaths than HIV in 2013** (GBD 2013 Mortality and Causes of Death Collaborators 2015).

**Section 4 – Know your epidemics: the situation of hepatitis B and hepatitis C in Europe**

This section includes an overview of the content contained on **slides 11 to 22**.

Data limitations make it difficult to precisely measure the burden of disease from HBV and HCV in Europe, but the available evidence confirms that both viruses are causing epidemics of considerable magnitude. At the same time, HBV and HCV disease patterns appear to vary greatly across European countries.

It is estimated that **1.8%** of adults in the WHO European Region carry the hepatitis B surface antigen (HBsAg) (Hope et al. 2014), which almost always signals chronic HBV infection. Two-thirds of these cases are in the countries outside of the European Union (EU) and European Free Trade Association (EFTA) (Hope et al. 2014).

As Table 1 indicates, HBsAg prevalence varies greatly across the WHO European Region.

**Table 1. HBsAg prevalence in countries with data representing the general population\***

|  |  |
| --- | --- |
| Country | HBsAg prevalence (%) |
| Albania | 9.0 |
| Belgium | 0.7 |
| Cyprus | 0.9 |
| Czech Republic | 0.6 |
| Finland | 0.2 |
| Germany | 0.6 |
| Greece | 2.1 |
| Ireland | 0.1 |
| Italy | 1.4 |
| Kazakhstan | 3.8 |
| Netherlands | 0.1 |
| Romania | 5.6 |
| Russian Federation | 1.5 |
| Serbia | 2.4 |
| Slovakia | 0.6 |
| Spain | 1.0 |
| Sweden | 0.2 |
| Turkey | 3.4 |
| Ukraine | 1.3 |
| Uzbekistan | 13.3 |

\* Adapted from Hope et al. 2014.

In 2014, 22 442 cases of hepatitis B virus infection were reported in 30 EU/EEA Member States. Of these cases, 11.9% were acute, 64% were chronic, 22.4% were ‘unknown,’ and 1.7% could not be classified (ECDC 2016).

In many European countries, high HBsAg prevalence has been documented among people who inject drugs (PWID) (Hahné et al. 2013; Hope et al. 2014). Other populations that appear to be disproportionately affected by HBV in some European countries include sex workers (SW) and men who have sex with men (MSM) (Hahné et al. 2013; Hope et al. 2014).

Migrant and refugee populations warrant careful consideration in the response to HBV in Europe. The ongoing movement of people from regions with higher HBV prevalence appears to be making a substantial contribution to HBV prevalence in countries that receive large numbers of migrants. An analysis of data from 18 European countries found that chronic HBV prevalence levels among migrants ranged from **4% to 7%** – well higher than prevalence in the general population in Europe overall. Germany, Italy and the United Kingdom had particularly large estimated numbers of migrants with chronic HBV: 284,000, 201,500 and 193,500, respectively (Rossi et al. 2012).

It is estimated that 2.0% of adults in the WHO European Region have HCV RNA (Hope et al. 2014), which in most cases is associated with chronic HCV infection. Two-thirds of HCV RNA-positive people are living in non-EU/EFTA countries (Hope et al. 2014). In 2004, 23% of liver transplants performed in 25 European countries were attributable to HCV (Mühlberger et al. 2009).

Chronic HCV levels, like chronic HBV levels, vary greatly across the WHO European Region (Table 2).

**Table 2. HCV RNA prevalence in countries with data representing the general population\***

|  |  |
| --- | --- |
| Country | HCV RNA prevalence (%) |
| Albania | 3.0 |
| Belgium | 0.6 |
| Bulgaria | 1.3 |
| France | 1.3 |
| Georgia | 6.7 |
| Germany | 0.4 |
| Greece | 1.0 |
| Italy | 5.2 |
| Kazakhstan | 1.0 |
| Kyrgyzstan | 1.6 |
| Netherlands | 0.4 |
| Poland | 1.9 |
| Romania | 3.5 |
| Russian Federation | 3.6 |
| Serbia | 0.5 |
| Spain | 2.0 |
| Sweden | 0.4 |
| Tajikistan | 0.5 |
| Turkey | 0.7 |
| Ukraine | 12.0 |
| United Kingdom | 0.7 |
| Uzbekistan | 13.1 |

\* Adapted from Hope et al. 2014.

In 2014 35 321 cases of hepatitis C virus infection were reported in 28 EU/EEA Member States. Of these cases, 1.3% were acute, 13.3% were chronic, 74.7% were ‘unknown,’ and 10.7% were not classified (ECDC 2016).

Injecting drug use is a major driver of the European HCV epidemic (WHO Regional Office for Europe 2015). Researchers have estimated that in several European countries, more than 80% of PWID carry the antibodies that indicate current or past HCV infection (Nelson et al. 2011).[[1]](#footnote-1) PWID HCV antibody prevalence levels were found to range from 5% to 90% in a review that analysed data from 34 European countries. Across 13 countries with general population data available for comparison, antibody prevalence levels among PWID were on average **47 times higher** than those in the general population (Hahné et al. 2013). Another review estimated that 44% of PWID in the WHO European Region are HCV RNA-positive (Hope et al. 2014).

Other European populations that may be at elevated risk for hepatitis C include migrants, prisoners, homeless people, SWs, PLHIV, and MSM. However, there has not been extensive research on HCV prevalence in these populations.

**Section 5 – Late presentation for viral hepatitis**

This section includes an overview of the content contained **on slides 23 to 24**.

A better understanding of the testing policies and strategies is needed. In October 2015, a consensus definition of late presentation for viral hepatitis was reached:

**Definition 1:**

Advanced HBV, HCV or HDV associated liver disease is clinically defined by presence of hepatocellular carcinoma or decompensated cirrhosis (jaundice, hepatic encephalopathy, clinically detectable ascites, variceal bleeding).

**Definition 2:**

Late presentation of HBV or HCV associated liver disease is defined as a patient with chronic hepatitis B or C and significant fibrosis (≥F3 assessed by APRI score >1.5, FIB-4 >3.25, Fibrotest > 0.59 or alternatively a FibroScan >9.5 kPa) with no previous antiviral treatment.

This definition, if implemented by policy makers, health authorities and researchers, will contribute to understanding the magnitude of the proportion of late presenters for viral hepatitis.

**Section 6 – The importance of timely diagnosis of hepatitis B and hepatitis C**

This section includes an overview of the content contained on **slides 25 to 31**.

Although it would be difficult to accurately calculate levels of undiagnosed HBV and HCV in the European Region because of data limitations, the available evidence suggests that this is a problem of immense proportion.

In a study that developed consensus HCV estimates for selected countries by drawing on a variety of data sources, estimated numbers of HCV cases appeared to be much higher than diagnosed numbers of HBV cases in some European countries. For example, 42,000 people in the Czech Republic were estimated to be HCV RNA-positive in 2012 while the total number of diagnosed cases for the same year was 13,000. In Germany, 275,000 people were estimated to be HCV RNA-positive in 2012, but diagnosed cases for the same year totaled only 160,000 (Bruggmann et al. 2014).

Another study comparing reported and estimated numbers of HCV cases in seven EU countries indicated that well **more than half** of people with HCV may be unaware of their infection (Merkinaite, Lazarus, and Gore 2008).

The public health rationale for encouraging more people to learn their HBV and HCV status is based on **three**key points.

* First, there are drugs that have been proven to work against both viruses. The effectiveness of HBV and HCV treatment has been clearly documented. The antiviral drugs used to treat chronic HBV have been shown to slow the development of cirrhosis, reduce liver cancer and improve long-term survival (WHO 2015). The newest HCV treatment regimens are capable of curing the vast majority of cases of chronic HCV (Feeney and Chung 2014).
* Second, people with chronic HBV and HCV will not access these drugs if they do not know that they need them. Both HBV and HCV can remain asymptomatic while causing progressively worse liver damage over a period of many years. Chronically infected people who learn about their disease status early enough may have the opportunity to interrupt this process by initiating treatment.
* Finally, people who are aware that they have chronic HBV and HCV may be more likely to take measures to prevent onward transmission of the infection.

Findings in the field of health economics further suggest the importance of identifying more people with HBV and HCV before they develop more severe liver problems.

The two drugs that have been shown to work best against HBV, entecavir and tenofovir, are not affordable, and since HBV cannot be cured, people who are prescribed these drugs may need to continue taking them indefinitely. Nonetheless, studies in countries such as Belgium, Brazil, China, Italy, Poland, Spain, the United Kingdom and the United States have concluded that both treatments are cost-effective (Buti et al. 2013). It is important to consider cost-effectiveness questions on a country-by-country basis since drug prices and other factors that affect the cost of disease management may vary greatly from one country to another.

The situation in the field of hepatitis C treatment is less clear-cut, but emerging evidence supports an economic argument for getting more people to take drugs that can cure their HCV disease. The newest drug regimens have excellent cure rates, but there has been a public outcry about their high cost. Making HCV treatment more affordable is currently a topic of intense interest in health advocacy and policy circles worldwide. Meanwhile, recently published analyses from France, (Leleu, Blachier, and Rosa 2015) Germany, (Gissel et al. 2015) Switzerland (Pfeil et al. 2015) and the United Kingdom (Cure, Guerra, and Dusheiko 2015) suggest that there are a number of scenarios in which it is cost-effective to treat people with HCV, even at current prices.

**Section 7 – Barriers to hepatitis B and hepatitis C testing**

This section includes an overview of the content contained on **slides 32 to 36**.

Some of the research on barriers to hepatitis B and hepatitis C testing has highlighted key factors that can affect a person’s willingness to present for testing. These include an absence of recognised symptoms of illness, a belief that personal risk of infection is low, perceptions of stigma, fear of having blood drawn, and cultural values and beliefs (Barocas et al. 2014; Hu, Pan, and Goodwin 2011; Sahajian et al. 2011; Zuure, Heijman, et al. 2011).

Other factors that may affect a person’s decision-making around testing include a lack of information about where to go for testing, reluctance or inability to miss work for a medical appointment, inability to communicate in the health care provider’s language and uncontrolled drug addiction (Jordan et al. 2013; Zacharias et al. 2015; Hu, Pan, and Goodwin 2011; Swan et al. 2010)

Research on the perceptions and experiences of health care providers has indicated that some general practice physicians may forego opportunities to test patients for hepatitis C because of time constraints or because they forget to offer the test (Anderson et al. 2009). There may also be institutional factors that have a limiting effect on service accessibility, such as testing costs and distance to testing facilities (Zacharias et al. 2015; Zuure, Davidovich, et al. 2011).

Additional issues preventing testing may also include legal barriers and policy that prevents access to treatment until later stages of illness develop, illicit drug use and homelessness.

**Section 8 – Creating more testing opportunities**

This section includes an overview of the content contained on **slides 37 to 41.**

The dynamics of HBV and HCV testing uptake have not been extensively studied as of this writing, and there is an urgent need to develop the evidence base that will guide public health practice in this realm. In the meantime, it may be useful to consider lessons that are emerging from recent research.

A 2014 review focusing on community-based HBV testing programmes identified the following as factors that contribute to programme effectiveness:

* “Community awareness and education.”
* “Using community networks and grassroots work to promote programmes.”
* “Ethnic and language-specific programme promotion.”
* “Bilingual or culturally aware staff delivering interventions.”
* “Making effective use of ethnic media to publicise events and resources.”
* “Offering flexible and varied screening options at suitable times and places (Robotin and George 2014).”

A 2013 review of interventions that sought to increase uptake of HCV testing among high-risk groups concluded that approaches such as promoting HCV testing in primary care, offering dried blood spot testing as an alternative to venipuncture, and the integration of testing services within non-specialist community settings all may be effective (Jones et al. 2014). A 2014 review of research on HCV screening programmes targeting the general population concluded that a pre-screening assessment of HCV risk factors may increase the efficiency of these programmes in populations that have low disease prevalence (Zuure et al. 2014). A 2015 review concluded that targeted HCV testing interventions have the potential to increase HCV diagnosis and treatment uptake (Aspinall et al. 2015).

Until best practices are developed to inform the design of HBV and HCV testing programmes, service providers may find it beneficial to draw on key aspects of HIV testing guidance.

Several principles that the WHO has put forth to guide HIV testing are particularly relevant (WHO Regional Office for Europe 2010). These principles suggest that HBV and HCV testing:

* Should be voluntary and with the informed consent of the person being tested.
* Should protect the confidentiality of the person being tested.
* Should include adequate pre-test and post-test counselling.
* Should be linked to broader efforts to achieve universal access to comprehensive, evidence-based prevention, treatment, care and support.
* Should be tailored to different settings, populations and client needs.
* Should meet the needs of vulnerable populations at higher risk, and expand beyond clinical settings to involve civil society and community-based organizations in providing testing services.
* Should be accompanied by efforts to ensure supportive social, policy and legal environments.

**Section 9 – Conclusions**

This section includes an overview of the content contained on **slides 42 to 44**.

It is estimated that 1.8% of adults in the WHO European Region carry the hepatitis B surface antigen and that 2.0% have HCV RNA. Well more than half of people with HCV may be unaware of their infection. There is greater variability among countries with people who inject drugs who are disproportionally affected. Past harm reduction efforts have not been able to prevent new viral hepatitis infections, though the HBV vaccine has been highly effective. Scaling up of testing is therefore essential, and new and dedicated initiatives are needed to turn the epidemic around.

Successful increase of viral hepatitis testing, and linkage to treatment and care initiatives will not only result in rapid decreases in morbidity and mortality among patients, it will also reduce the number of new infections by decreasing on-going virus transmission and consequently lessen the economic burden in health systems.

To be most effective, these efforts should target barriers to HBV and HCV testing at three different levels: **patient level**, **healthcare provider** and **institutional/policy level**.

The specific kinds of barriers vary from country to country and should be targeted after careful analysis in individual countries.

* Populations at high risk of hepatitis should be targeted with focused interventions in healthcare systems;
* National hepatitis testing guidelines should be implemented and take an ethical approach based on human rights principles;
* Training and awareness raising is crucial in order to normalise hepatitis testing in the healthcare system;
* Laws that are jeopardising viral hepatitis prevention efforts should be abolished;
* Monitoring and evaluation systems should be implemented and help ensure high quality HBV and HCV testing.

**Section 10 – Template slides**

This section includes an overview of the template slides that are included in the slide deck. These can be edited by you with some or all of the information suggested on the slides.

**Slide 19 and Slide 20: Know your HBV and HCV epidemic**

This is a template slide for you to insert data on national statistics such as HCV incidence and HIV prevalence from your own country.

**Slide 32: Barriers to HBV and HCV testing**

This is a template slide for you to insert information about local barriers to testing.

Further reading

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Further reading

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1. Since antibodies may be present in cases of acute infection that will resolve naturally, and also remain in people who underwent successful treatment for HCV, antibody prevalence does not directly indicate the level of chronic HCV prevalence in a population. Antibody prevalence data are often reported because they are more widely available than HCV RNA prevalence data. [↑](#footnote-ref-1)