**The Health Burden of Viral Hepatitis**

- **Hepatitis B virus (HBV)**
  - **NO**
    - HBV elimination goal
  - **YES**
    - Elimination of HBV mother to child transmission goal

- **Hepatitis C virus (HCV)**
  - **2030**
    - HCV elimination goal

**Prevalence**

- **0.52%**
  - Prevalence of HBsAg, 2017
  - Based on modeled data

**Prevalence of chronic HCV, 2017**

- **0.53%**
  - Based on modeled data

**Incidence**

- **6,064**
  - New HBV cases, 2020
  - As in most cases the diagnosis does not occur at the time of infection, Brazil adopts the concept of detection rate, which indicates the date on which the diagnosis of the infection was known. This estimate reflects the number of confirmed cases.

- **9,286**
  - New HCV cases, 2020
  - As in most cases the diagnosis does not occur at the time of infection, Brazil adopts the concept of detection rate, which indicates the date on which the diagnosis of the infection was known. This estimate reflects the number of confirmed cases.
PROGRESS TOWARDS 2020 WHO ELIMINATION GOALS

PREVENTION OF NEW INFECTIONS AND MORTALITY

**HBV** Percentage change in new infections, 2015-2020 ³

-138%

WHO 2020 Target -30%
New cases based on detection rate (time when cases were diagnosed/reported).

**HBV** Percentage change in deaths, 2015-2020 ³

-20%

WHO 2020 Target -10%

**HCV** Percentage change in new infections, 2015-2020 ⁴

-63%

WHO 2020 Target -30%
New cases based on detection rate (time when cases were diagnosed/notified)

**HCV** Percentage change in deaths, 2015-2020 ³

-31%

WHO 2020 Target -10%

Prevalence of HBsAg in children < 5 years (%), 2019 ⁵

0.12 (0.1-1.6)

SDG 2020 Targets 1% ⁵

This number was heavily impacted by Covid 19, it is well below the averages of previous years
**ACCESS TO RECOMMENDED VACCINATION, TESTING AND TREATMENT**

- **63%** Hepatitis B vaccination coverage for newborns, 2020
  - WHO 2020 Target 50%

- **77%** HepB 3 dose vaccine coverage for infants, 2020
  - WHO 2020 Target 90%

- **Proportion of persons living with HBV diagnosed**
  - WHO 2020 Target 30%
  - NO DATA

- **NO DATA**
  - Proportion of diagnosed HBV persons receiving appropriate treatment

- **NO DATA**
  - For persons who inject drugs (PWID), number of sterile needles per year
    - WHO 2020 Target 200
    - Note that the prevalence of injecting drug use is very small in Brazil. The use of oral drugs is much more common.

- **▼ 38,745**
  - Number of people receiving HBV treatment, 2021
  - 2018: 35,356
  - 2019: 37,527
  - 2020: 38,822
  - 2021: 38,745
Proportion of persons who have cleared HCV infection

NO DATA

Proportion of persons living with HCV diagnosed

NO DATA

▼ 5,965
Number of people receiving HCV treatment, 2021

16,966 19,219 5,965
2018 2019 2020 2021

POLICY ENVIRONMENT FOR THE ELIMINATION OF HEPATITIS

ACHIEVEMENTS

Routine official reports to monitor HBV and HCV

Estimates of HBV and/or HCV economic burden

Monitoring of HBV and HCV diagnosis and treatment

INNOVATIONS

Strategic Information

Mortality  Incidence  Prevalence

Partially Adopted  Only for HBV

Adopted

ROADBLOCKS
INNOVATIONS
Development and start of implementation of the Information System that will allow better logistical and clinical follow-up of patients being treated for hepatitis B, C and D.

ACHEIVEMENTS
Information system with “Sistema de Informações”

PREVENTION OF MOTHER TO CHILDREN TRANSMISSION

Policy for hepatitis B vaccination of newborns

Adopted

Recommendations for:

- HBV testing of pregnant women
  Adopted
- HCV testing of pregnant women
  Adopted

ACHIEVEMENTS
Technical note that informs distribution of prophylactic TDF for the prevention of HBV vertical transmission in UDM since 2019 - facilitating access to the drug

Development of an investigation protocol for cases of vertical transmission of viral hepatitis.

INNOVATIONS
A mathematical modeling approach to estimate the vertical transmission of HCV in Brazil was carried out. From 2007 to 2017, it was estimated that there were about 81,000 pregnant women with hepatitis C. Of the 81,000 children exposed to the hepatitis C virus, approximately 5,800 children may have become infected with the hepatitis C virus.

ROADBLOCKS
During the COVID-19 pandemic, vaccine coverage for the hepatitis B birth dose dropped from 77% in 2019 to 63% in 2020.

ACCESS AND REGISTRATION OF MEDICINES AND TESTS

HCV: Registration of orginator medicines

Adopted

Eligible for generic medicines

Not Eligible
**ACHIEVEMENTS**

*Training of nurses to expand the tracking and diagnosis of viral hepatitis; The department issued a technical note to guide the performance of professional nurses in the strategy for accessing the diagnosis of hepatitis B and C. The document provides legal support for nurses to carry out rapid tests and request additional exams; nursing care in the care of viral hepatitis in health units; support in care, teaching and research; the possibility of these professionals to identify people with hepatitis B and C or at risk of infection.*

**INNOVATIONS**

*A demonstrative study for the use of the oral fluid anti-HCV test was initiated.*

**ROADBLOCKS**

*Due to COVID-19, there was a 28% reduction in distributed rapid tests for hepatitis B and 42% for hepatitis C in 2020, resulting in a decrease in new diagnoses and, therefore, in the number of treatments.*

**TESTING TO DIAGNOSE HBV AND HCV INFECTION**

Testing recommendations for:

- **HBV**: Risk-based
  
  - Persons aged 20 and over who have not been properly vaccinated

- **HCV**: Risk-based

- **HBV**: Single test for people aged 40 and over

- **HCV**: Single test for people aged 40 and over

- No patient co-pays for HBsAg and anti-HCV testing

**HCV**: Registration of generic medicines

Licensed point-of-care PCR testing to detect HBV and HCV

Adopted

Adopted
**ACCESS TO HBV AND HCV TREATMENT**

<table>
<thead>
<tr>
<th><strong>HBV</strong></th>
<th>Local treatment guidelines</th>
<th><strong>Adopted</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Simplified care: Simplified treatment and monitoring algorithm for primary care physicians</td>
<td><strong>Not Adopted</strong></td>
</tr>
<tr>
<td></td>
<td>Simplified care: No co-payments for treatment</td>
<td><strong>Adopted</strong></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th><strong>HCV</strong></th>
<th>Local treatment guidelines</th>
<th><strong>Developed</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Simplified care algorithm: Less than 2 clinic visits during treatment</td>
<td><strong>Adopted</strong></td>
</tr>
<tr>
<td></td>
<td>Simplified care algorithm: Non-specialists can prescribe treatment</td>
<td><strong>Adopted</strong></td>
</tr>
<tr>
<td></td>
<td>Simplified care algorithm: No patient treatment co-pays</td>
<td><strong>Adopted</strong></td>
</tr>
<tr>
<td></td>
<td>No fibrosis restrictions</td>
<td><strong>Adopted</strong></td>
</tr>
<tr>
<td></td>
<td>No sobriety restrictions</td>
<td><strong>Partially Adopted</strong></td>
</tr>
<tr>
<td></td>
<td>No genotyping</td>
<td><strong>Not Adopted</strong></td>
</tr>
</tbody>
</table>

**ACHIEVEMENTS**

All restrictions on the treatment of HCV have been removed, making treatment universally accessible. Guidelines for the treatment of hepatitis B have also been simplified to improve and remove barriers.

Hepatitis drugs were on the list of essential drugs, now being distributed through the list of strategic drugs, which allows for a simplified distribution, as happens in the treatment of people living with HIV.

Treatment of cases of hepatitis C without cirrhosis in primary health care, with prescription by non-specialist physicians.
### ROADBLOCK

The COVID-19 pandemic had a major impact on the program. Brazil’s goal was to treat 50,000 patients with hepatitis C by 2020, but it treated only 19,219 patients. The country is already mobilizing to establish strategies to resume testing actions to diagnose and treat more people.

### HEALTH EQUITY AND ADDRESSING DISPARITIES

- National strategy addresses populations most affected (i.e., IDU, indigenous, homosexual men, co-infected etc.)
  
  - **Adopted**

- National anti-discrimination laws against persons living with hepatitis B and/or C
  
  - **Partially Adopted**

- National policy for adult hepatitis B vaccination
  
  - **Universal**

- National policy for:
  - Harm reduction for persons who inject drugs (PWID)
    
    - **Adopted**

  - Syringe exchange in federal prisons
    
    - **Not Adopted**

  - If “yes”, number of federal prisons that implement needle exchange
    
    - **No Data**

  - Number of needles/syringes per PWID per year
    
    - **No Data**

  - Number of opioid substitution therapy recipients per 100 PWID
    
    - **No Data**

  - Decriminalization of possession of syringes & paraphernalia
    
    - **Not Adopted**

  - Decriminalization of drug use
    
    - **Not Adopted**

  - Decriminalization of hepatitis infection
    
    - **No Data**

The Brazilian labor courts have determined that discriminatory dismissal of employees may result in reinstatement and compensation for pain and suffering. For example, the dismissal of an employee with HIV or any other serious illness is considered discriminatory and invalid, and the employee is entitled to reinstatement.
FINANCING

Public budget line for HBV and HCV testing and treatment  

Global Fund for Tuberculosis, AIDS and Malaria funds used for co-infected patients as relevant

Adopted

Adopted

INNOVATIONS

Procurement of medicines for hepatitis C through competition and cost-minimization criteria.

NEXT STEPS TOWARD ELIMINATION

1. Establish mandatory notification of pregnant women and children exposed to hepatitis B and C.
2. Strengthen training for physicians who are not specialists in the treatment of hepatitis C.
3. Expand databases to monitor hepatitis policy.
4. Train nurses to diagnose viral hepatitis.

SOURCES

This National Hepatitis Elimination Profile (N-HEP) was developed by the Coalition for Global Hepatitis Elimination. Funding for this N-HEP was provided by Gilead Sciences. The Coalition for Global Hepatitis Elimination retained final control over the content.

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