



ETHIOPIA

CAN ELIMINATE HEPATITIS NATIONAL HEPATITIS ELIMINATION PROFILE

UPDATED MARCH 10 2023



Hepatitis B virus (HBV)

YES

HBV elimination goal ¹

Hepatitis C virus (HCV)

YES

HCV elimination goal ¹

THE HEALTH BURDEN OF VIRAL HEPATITIS

9.40%

Prevalence of HBsAg, 2020 ²

*Based on unpublished technical report on 2017
national HBV seroprevalence study and meta-analysis*



Prevalence

3.1% (2.2-4.4%)

Prevalence of anti-HCV, 2019 ⁵

Based on meta-analysis

NO DATA

New HBV infections



Incidence

NO DATA

New HCV Infections



6,348

HBV-related deaths, 2019 ⁴

5.9 (4.66 - 7.43)

Deaths per 100,000, 2019 ⁴



Mortality

9,433 (7,777-11,449)

HCV-related deaths, 2019 ⁴

8.77 (7.23 - 10.60)

Deaths per 100,000, 2019 ⁴

PROGRESS TOWARDS 2020 WHO ELIMINATION GOALS

PREVENTION OF NEW INFECTIONS AND MORTALITY

HBV Percentage change in new infections

NO DATA

WHO 2020 Target -30%

HBV Percentage change in deaths, 2015-2019

NO CHANGE

WHO 2020 Target -10% ⁴

HCV Percentage change in new infections

NO DATA

WHO 2020 Target -30%

HCV Percentage change in deaths, 2015-2019



17%



WHO 2020 Target -10% ⁴

Prevalence of HBsAg in children < 5 years (%)

1.3% (1.1-1.6)%

SDG 2020 Target 1% ⁴

ACCESS TO RECOMMENDED VACCINATION, TESTING AND TREATMENT

Hepatitis B vaccination coverage for newborns

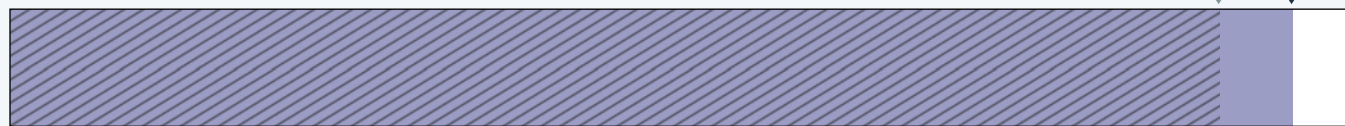
WHO 2020 Target 50%



NO DATA

96% HepB 3 dose vaccine coverage
for infants, 2020 ²¹ From DHIS2

WHO 2020 Target 90%



<1% Proportion of persons living
with **HBV** diagnosed, 2021 ²¹

WHO 2020 Target 30%



<1%

HBV

Proportion of diagnosed
HBV persons receiving
appropriate treatment, 2021 ²¹

NO DATA

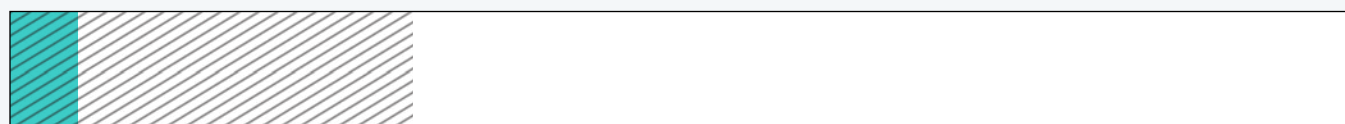


For persons who inject drugs
(PWID), number of sterile
needles per year, 2020 ⁷

WHO 2020 Target 200

<5% Proportion of persons living
with **HCV** diagnosed, 2021 ⁸

WHO 2020 Target 30%



Proportion of diagnosed persons
with HCV who have been cured

NO DATA





POLICY ENVIRONMENT FOR THE ELIMINATION OF HEPATITIS



ACHIEVEMENT



INNOVATIONS



ROADBLOCKS

STRATEGIC INFORMATION

Routine official reports to monitor HBV and HCV ²

Mortality

Incidence

Prevalence

A national HBV serosurvey has been conducted but not a national HCV serosurvey. The HBV serosurvey results are unpublished

Estimates of HBV and/or HCV economic burden ¹¹

Not Adopted

Monitoring of HBV and HCV diagnosis and treatment ¹²

Partially Adopted

A national registry is currently being rolled out to primary clinics



ROADBLOCKS

There is no nationwide survey that has measured the burden of HCV infection in different socioeconomic, geographic, and demographic subgroups. The only available studies are meta-analyses and surveys limited to specific population groups at the blood bank sites and healthcare facilities ²

Viral hepatitis is not included in the Integrated Disease Surveillance Response (IDSR) system ¹⁰

The well-developed strategic plan was not implemented and is already outdated despite specifying different targets to be achieved by the year 2020

PREVENTION OF MOTHER TO CHILDREN TRANSMISSION

Universal policy for hepatitis B vaccination of newborns within 24 hours of birth ¹

Partially Adopted

Hepatitis B birth dose introduction is currently being planned for

Recommendations for:

HBV testing of pregnant women ¹³

Adopted

HCV testing of pregnant women ^{1,13}

Adopted



ROADBLOCKS

Hepatitis B birth dose policy was approved in 2020 but has not been rolled out to the entire country

Limited guidance for linkage to treatment for HBV infected pregnant mothers is available



ACHIEVEMENTS

A hepatitis B birth dose pilot is currently underway, supported by the Ministry of Health and US CDC

ACCESS AND REGISTRATION OF MEDICINES AND TESTS

Registration of originator DAAs ¹⁴

Adopted

Eligible for generic DAAs ¹⁵

Adopted

Registration of generic DAAs ¹⁴

Adopted

Licensed point-of-care PCR testing to detect HBV and HCV ²

Adopted



ROADBLOCKS

High cost of diagnostics and treatments limits patient access. In 2020, HBV and HCV rapid tests cost \$4 USD and PCR tests cost \$ 127 USD. Treatment for HBV was \$30 USD per month and HCV medicines between \$500-1,224 USD

The National Essential Medicines List of Ethiopia does not include direct-acting antivirals (DAAs), and cost subsidies by the government are not available for HCV treatment ²

HBV Viral load determination is commonly not available in government hospitals & patients will need to visit private labs ¹⁶



ACHIEVEMENTS

A study on point-of-care viral load tests for hepatitis B in low-income settings (Ethiopia) was published ¹⁷



TESTING TO DIAGNOSE HBV AND HCV INFECTION

Testing recommendations for:

HBV: Risk-based ¹

Adopted

HBV: Universal

Not Adopted

HCV: Risk-based ¹

Adopted

HCV: Universal

Not Adopted

No patient co-pays for HBsAg and anti-HCV testing ²

Not Adopted



ROADBLOCKS

Testing policies have been developed but have not been implemented

Cost of diagnostics remains high



ACHIEVEMENTS

National Strategy developed in 2016 includes objectives to develop standard testing policies

ACCESS TO HBV AND HCV TREATMENT

HBV: National treatment guidelines ^{2,13}

Adopted

Simplified care: Simplified treatment and monitoring algorithm for primary care providers ¹³

Adopted

Simplified care: No patient treatment co-pays

Not Adopted



HCV: National treatment guidelines ^{2,13}

Simplified care algorithm: Less than 2 clinic visits during treatment

Adopted

Simplified care algorithm: Non-specialists can prescribe treatment ¹⁸

Not Adopted

Simplified care algorithm: No patient treatment co-pays

Not Adopted

No fibrosis restrictions ¹³

Adopted

No sobriety restrictions

Not Adopted

No genotyping ¹³

Adopted

No standard algorithm adopted yet. 2016 National Strategy put forth an objective to establish an algorithm



INNOVATIONS

Pilot program to improve care for hepatitis B in Ethiopia launched at St. Paul's Hospital Millennium Medical College



ROADBLOCKS

WHO criteria for HBV treatment initiation is not effective as most patients detected already have advanced liver disease ²²

There is no well structured established national system for linkage to care for those who test positive for HBV and/or HCV

There is on and off availability of DAAs due to supply chain disruptions

Task-shifting for HBV and HCV treatment is needed as there are few gastroenterologists/ hepatologists in Ethiopia

HEALTH EQUITY AND ADDRESSING DISPARITIES

National strategy addresses populations most affected ¹

Adopted

National anti-discrimination laws against people living with hepatitis B and/or C ¹⁹

Not Adopted



National policy for adult hepatitis B vaccination ¹³

Partially Adopted

For healthcare workers and vulnerable populations

National policy for:

Harm reduction for persons who inject drugs (PWID) ¹

Partially Adopted

Harm reduction is included in the national strategy but it is not implemented

Syringe exchange in federal prisons ¹⁹

Not Adopted

Number of needles/syringes per PWID per year ⁷

0

WHO 2020 Target 200

Number of opioid substitution therapy recipients per 100 PWID ⁷

0

Decriminalization of possession of syringes & paraphernalia ¹⁹

Not Adopted

Decriminalization of drug use ¹⁹

Not Adopted

FINANCING

Public budget line for HBV and HCV testing and treatment ¹

Adopted

Funds from the Global Fund for TB, AIDS, and Malaria used for co-infected patients, when relevant

Adopted



ROADBLOCKS

The National Strategy for Prevention and Control of Viral Hepatitis is estimated to cost \$87,115,332 over five years. Initially, the program was to rely on the national health insurance scheme but this is not fully functional

The Ministry of Health has many competing priorities to fund with limited resources, including HIV, TB, malaria and maternal child health ⁸

NEXT STEPS TOWARD ELIMINATION



Establish management information system for testing ⁸



Build capacity at all levels for HBV and HCV testing and treatment, including training gastroenterology specialists, general medical practitioners, and nurses to treat HCV ^{8,10}



Introduce nationally the hepatitis B birth dose vaccine



Develop guidance for linkage to treatment for HBV infected pregnant mothers ⁸



Establish a policy for routine HBV and HCV testing & linkage-to-care



Develop locally relevant treatment criteria for HBV treatment initiation ²²



Assess options for community-based programs, such as TB/HIV and antenatal care, to provide testing and linkage-to-care



Make available all testing technologies & commodities as per the national guidelines



Increase government financing for the hepatitis program ⁸

SOURCES

1. Ethiopia Federal Ministry of Health. National Strategic Plan for Prevention and Control of Viral Hepatitis in Ethiopia, 2021-2025. <https://www.globalhep.org/sites/default/files/content/resource/files/2022-05/Final%20Hep%20NSP%202021-2025%20Aug%2027.pdf>
2. Presentation by Mengistu Erkie and Hanna Abera (2020). Scaling-up hepatitis testing to achieve the SDGs: Challenges and opportunities from the COVID-19 response. Coalition for Global Hepatitis Elimination. <https://www.globalhep.org/webinars/scaling-hepatitis-testing-achieve-sdgs-challenges-and-opportunities-covid-19-response>
3. World Health Organization (2017). Global hepatitis report, 2017. <https://www.who.int/publications/i/item/global-hepatitis-report-2017>
4. Institute of Health Metrics and Evaluation (2019). Global Burden of Disease 2019. <https://www.globalhep.org/country-progress/ethiopia>
5. Belyhun, Y., Maier, M., Mulu, A. et al (2016). Hepatitis viruses in Ethiopia: a systematic review and meta-analysis. BMC Infect Dis 16, 761. <https://bmcinfectdis.biomedcentral.com/articles/10.1186/s12879-016-2090-1#citeas>
6. World Health Organization and Unicef. Hepatitis B vaccination coverage (n.d.). WHO Immunization Data portal. <https://immunizationdata.who.int/pages/coverage/hepb.html?CODE=ETH&ANTIGEN=&YEAR=>
7. Harm Reduction International (2016). Global State of Harm Reduction. Harm Reduction International. <https://www.hri.global/contents/1739>
8. Ethiopia Federal Ministry of Health (2021). Health Sector Transformation Plan II 2020/21-2024/25. <https://www.familyplanning2020.org/sites/default/files/HSTP-II.pdf>
9. Taye BW (2019). A Path to Ending Hepatitis C in Ethiopia: A Phased Public Health Approach to Achieve Micro-Elimination. Am J Trop Med Hyg;101(5):963-972. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6838594/>
10. Centers for Disease Control and Prevention (2010). https://www.cdc.gov/globalhealth/healthprotection/idsr/pdf/technicalguidelines/idsr-technical-guidelines-2nd-edition_2010_english.pdf





11. Bane, A. et al (2014). "Healthcare cost and access to care for viral hepatitis in Ethiopia." International Journal of Innovation and Applied Studies: 1718-1723. <http://www.ijias.issr-journals.org/abstract.php?article=IJIAS-14-310-01>
12. Communication with Dr. Hailemichael Desalegn, St. Paul's Millenium Hospital, Addis Ababa on 5 March 2022.
13. Ethiopia Federal Ministry of Health (Forthcoming in 2022). National Viral Hepatitis Clinical Guidelines.
14. HepCoalition. (n.d.). mapCrowd. <https://mapcrowd.org/en/compare-data>
15. MedsPaL. (n.d.). MedsPaL Database. [https://www.medsPAL.org/?countries%5B%5D=Ethiopia&disease_area%5B%5D=Hepatitis+C+\(HCV\)&page=1](https://www.medsPAL.org/?countries%5B%5D=Ethiopia&disease_area%5B%5D=Hepatitis+C+(HCV)&page=1)
16. Presentation by Hanna Abera (2021). Models of Testing and Treatment for Hepatitis B in High Prevalence Settings in sub-Saharan Africa. Hep test Webinar Series by the Coalition for Global Hepatitis Elimination. <https://www.globalhep.org/sites/default/files/content/webinar/files/2021-05/Hep%20Test%20Webinar%204%20-%20Presentation-%20HBV%20Testing%20in%20Ethiopia-Abera.pdf>
17. Woldemedih, GM, Rueegg CS, Desalegn H, et al. (2021). Validity of a point-of-care viral load test for hepatitis B in a low-income setting. Journal of virological methods; 289: 114057. [https://linkinghub.elsevier.com/retrieve/pii/S0166-0934\(20\)30309-8](https://linkinghub.elsevier.com/retrieve/pii/S0166-0934(20)30309-8)
18. Shiferaw F, Letebo M, Bane A (2016). Chronic viral hepatitis: policy, regulation, and strategies for its control and elimination in Ethiopia [published correction appears in BMC Public Health. 2016 Oct 10;16(1):1065]. BMC Public Health;16(1):769. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4982409/>
19. Georgetown HIV Policy Lab (n.d.). Ethiopia. <https://hivpolicylab.org/et/>
20. World Health Organization, Regional Office for Africa. (2019). Viral Hepatitis Scorecard. https://www.afro.who.int/sites/default/files/2019-07/Viral_Hepatitis_Scorecard_2019_v3_Print_Single_SC_A4%20%282%29.pdf
21. Communication with Dr. Wegene Adugna, Ethiopia Federal Ministry of Health on 26 April 2022.
22. Abera H, Desalegn H, Berhe N, et al (2019). The WHO guidelines for chronic hepatitis B fail to detect half of the patients in need of treatment in Ethiopia. J Hepatol;70(6):1065-1071. [https://linkinghub.elsevier.com/retrieve/pii/S0168-8278\(19\)30116-3](https://linkinghub.elsevier.com/retrieve/pii/S0168-8278(19)30116-3)

WORKING TOGETHER, WE WILL **ACHIEVE ELIMINATION.**



COALITION
FOR **GLOBAL
HEPATITIS
ELIMINATION**

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.

The Coalition thanks Dr. Hailemichael Desalegn and Hanna Abera from St. Paul's Millenium Hospital, Dr. Mengistu Erkie from the Ethiopia Gastroenterology Association, and Mr. Wegene Adugna from the Ministry of Health for their input and feedback on the development of this National Hepatitis Elimination Profile.

FOR MORE INFORMATION:
GLOBALHEP.ORG
GLOBALHEP@TASKFORCE.ORG

TASKFORCE.ORG
330 W. PONCE DE LEON AVENUE
DECATUR GA 30030