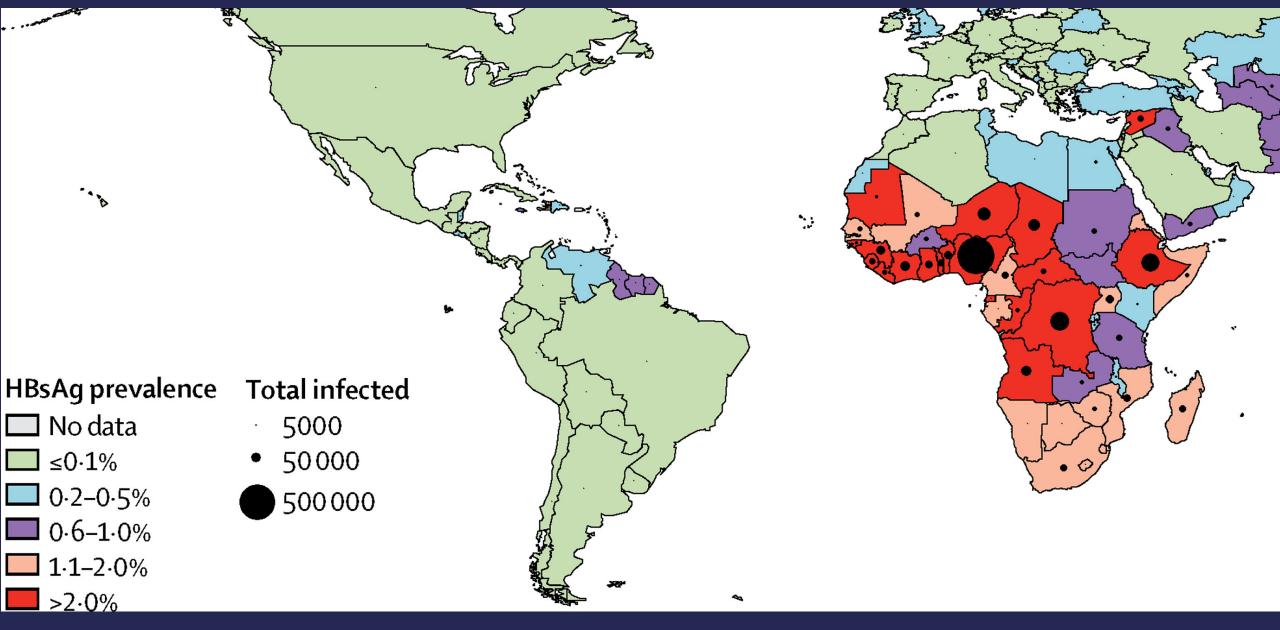


Eliminating Viral Hepatitis in Africa; Implementing the Viral Hepatitis Strategy

Overview

- Basic Epidemiology of HBV in Africa
 - Case examples: Ethiopia, Nigeria, DRC, Uganda
- World Organization Viral Hepatitis Scorecard
- Challenges to HBV
- Strengths
- Opportunities





Epidemiology

- Viral hepatitis in Africa is becoming a bigger threat than dying of AIDS, malaria or TB.
- Every day viral hepatitis complications claim the lives of at least 550 people a day more than 200,000 per year. One person dies of HBV every 2.5 minutes.

The overview of Viral Hepatitis in Africa



High prevalence of HBV infection (more than 5%) in the general population is seen in 30 of the 47 countries

-12 of which bear more than 65% of the regional burden



Highest HBV
prevalence in
children under 5 is
seen in 9 countries
and is associated
with lack of HBV
birth dose
vaccination and
suboptimal coverage
of the pentavalent
vaccination

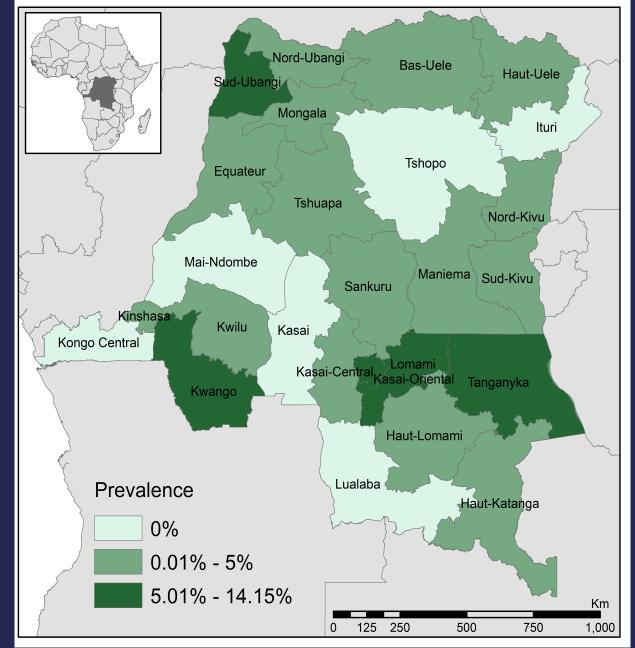


Only 28 of the 47 countries have developed a national hepatitis strategic plan (this is an increase from 3 in 2015)

- most plans remain in draft form and are not finalized/published



Uganda has free HBV screening and is on track to reach 2020 targets for screening and community awareness



*

DRC overall prevalence: 3.3% (1.8-4.7%)

• Adults: 3.7% (1.9-5.5)

Children: 2.2% (0.3-4.1)



Comparison to U.S. Prevalence (2013): 0.3%

Province-level, weighted HBV prevalence, measured by HBsAg positivity

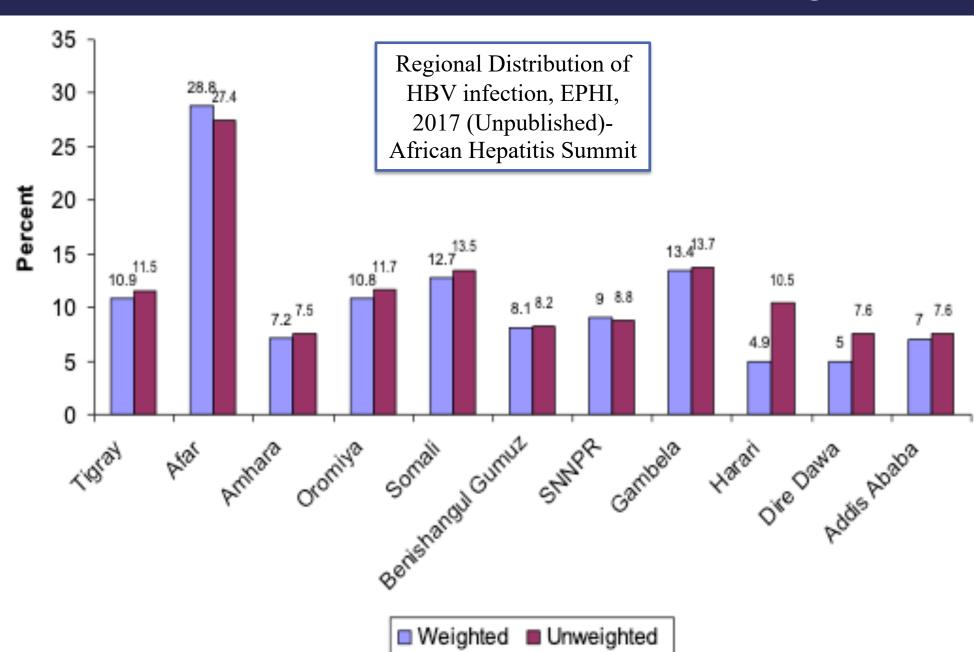
Thompson P, Parr JB, Holzmayer V et al. 2018 *AJTMH*; Schweitzer et al 2015

Burden of viral hepatitis in the WHO Africa Region -

Ethiopia

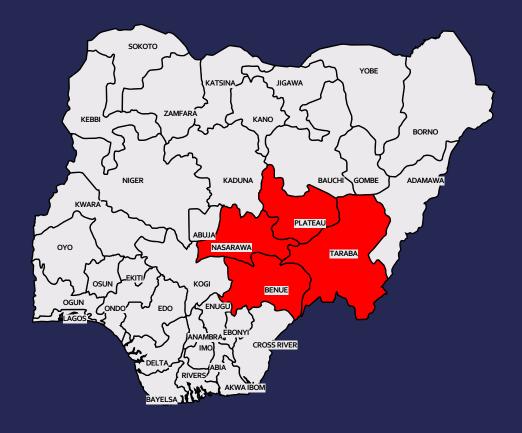
Population level prevalence of HBsAg - 9.4%

Total population 105 million (2017)



Nigeria

- Nigeria has an estimated prevalence of 11% for Viral Hepatitis B
- Recent data suggests a strong geographical disparity; certain states in the North Central region such as Nasarawa have reported prevalence as high as 17%²
- Approximately 26 million Nigerians are infected with hepatitis B or C viruses, all of whom are at a risk of developing chronic complications including liver cirrhosis

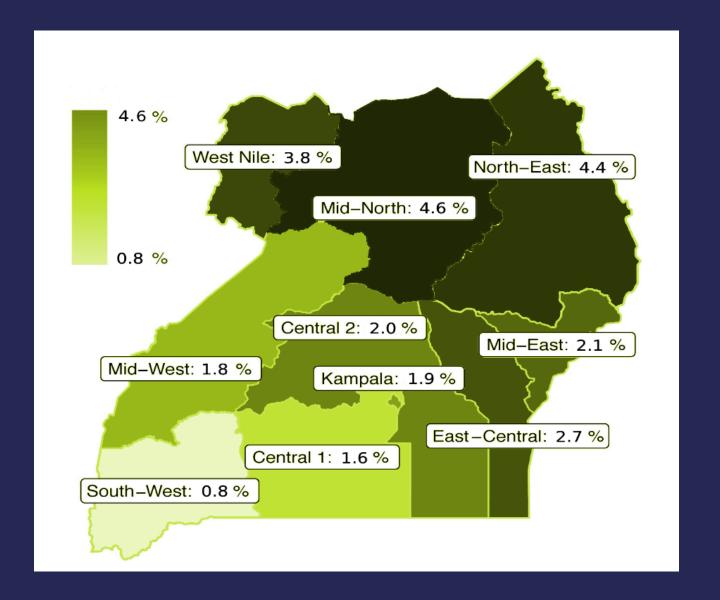


- 1. Department of Public Health, Nasarawa MoH, 2017
- 2. Prevalence study of Hepatitis B and C in Nigeria, Federal Ministry of Health, 2013

Uganda

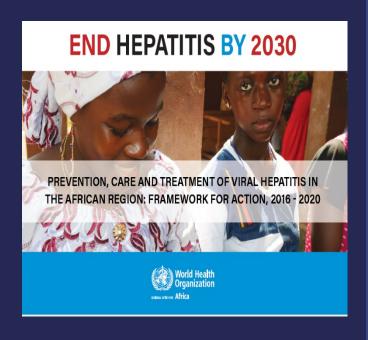
- Massive testing since 2015
- ~4 million tested countrywide
- 255,000 infected

- Treatment procured by government
 - Tenofovir and entecavir produced locally



World Health Organization Hepatitis Scorecard

- In 2016, the 47 member states of the WHO Africa region endorsed the viral hepatitis framework to guide implementation of the global strategy in Africa (2016-2020)
- Endorsed 2020 and 2030 targets



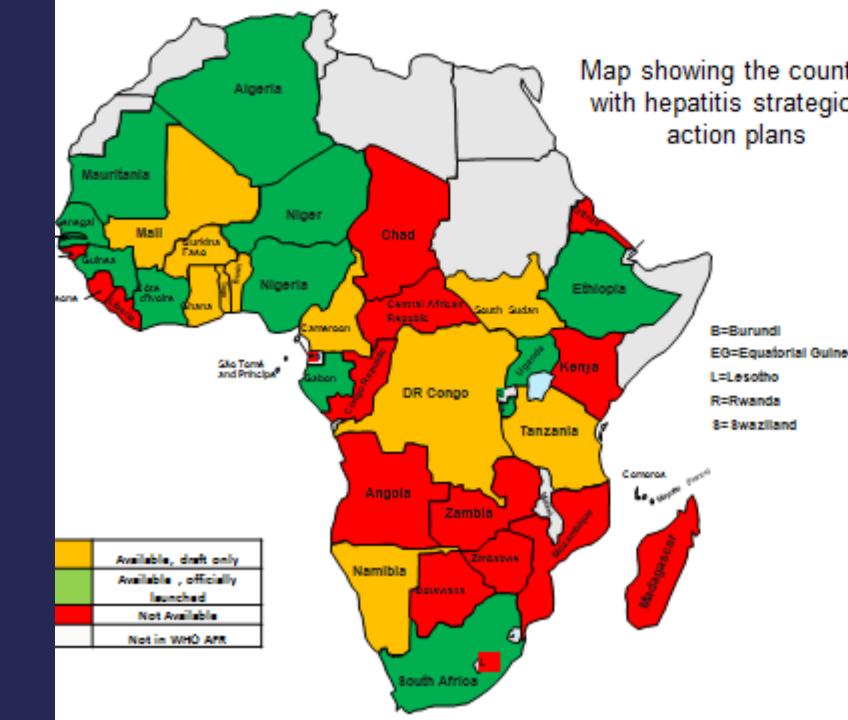
2020 Targets

- 1. National Strategic Plans- All
- 2. HBV vaccine coverage > 90%
- 3. Hepatitis B birth dose- 25 countries
- 4. Diagnosis of chronic HBV/HCV > 20%
- 5. Treatment of HBV (1 million)
- 6. Treatment of HCV (300,000)
- 7. HBV vaccine coverage in HCW >90%
- 8. Routine HBV/HCV in Blood transfusion services
- 9. Injection safety (50% safe devices)
- 10. Harm reduction

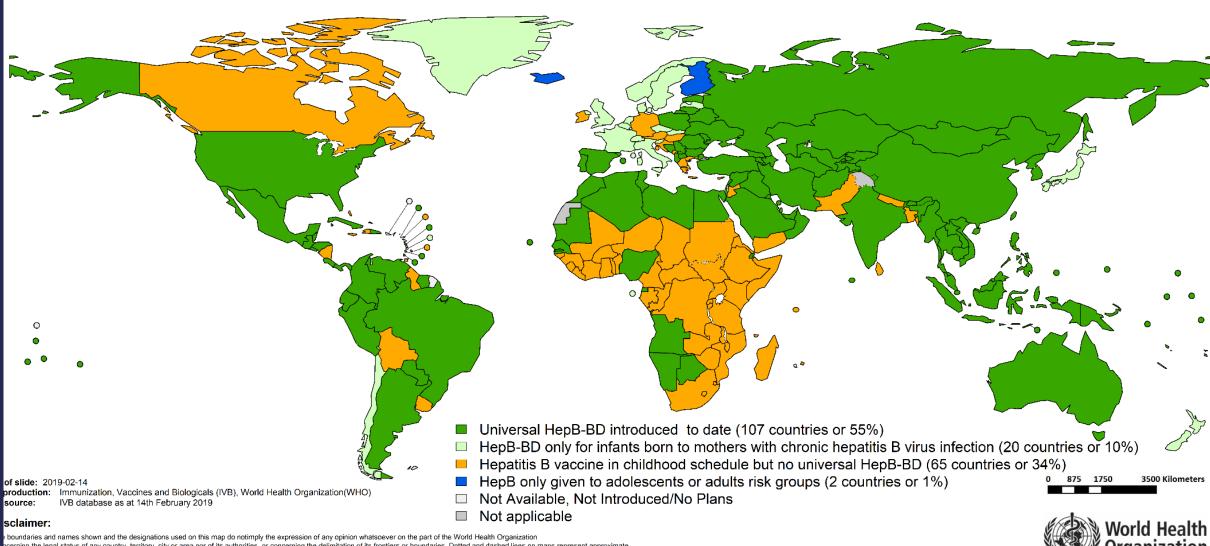
Scorecard	Рори	lation	Children <5 yrs			Policy			Treatment		
	82	ooos)	nce*2015	on of 0000s)	nce (**	c plan for		overage	sting	is immes	ay 2018
Member state	% HBsAg Prevalence	Estimated number of chronic carriers('000s)	% HBsAgPrevalence*2015 estimates	Estimated number of chronic carriers('000's)	Anti-HCV prevalence (** viraemic prev alence)	National Strategic plan for Viral Hepatitis	HBVBirth dose implemented	HEP B3 national coverage >90%	2020 HBV/HCV testing target on tract	National Hepatitis treatment programmes	World Hepatitis Day 2018
Algeria	1,8	695	0,2	10	0.2						
Angola	9,4	2351	4,9	229	0.4						
Benin	11	1191	5,6	95	4,8						
Botswana	1,3	31	0,2	1	0,1						
Burkina Faso	10,1	1820	4,3	135	1.3**						
Burundi	6,4	711	2,6	53	1.0**						
Cabo Verde	5,2	27	0,7	0	0,1						
Cameroon	4,4	1034	1,9	71	0.7**						
Central African Republic	10,2	499	6,6	47	0.3**						
Chad	4,9	684	3,1	81	1.1**						
Comoros	4,3	34 439	2,0	2	1,4						
Congo	9,5	1377	4,1	31	1,8						
			0	Score	ecard						
Eritroa	1,9	96	0,7	6	0,8						
Eswatini	2.1	26	0.9	1	0.0						
Ethiopia	5.7	5647	2,6	381	0.6**						

#1 National Strategic Plan

- 28 countries have developed NSP
- However only 13 have been officially published
- Others in advanced draft stage awaiting completion



Hepatitis B Birth dose (HepB-BD) vaccination strategies by country, updated as of October 2019



ncerning the legal status of any country, territory, city or area nor of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate rder lines for which there may not yet be full agreement. rld Health Organization, WHO, 2019. All rights reserved



Common Barriers to Birth Dose Introduction



Lack of funding



Births taking place outside health facilities



Vaccine storage/cold chain limitations



Insufficient local disease burden data



Limitations in capacity to develop national policies and guidelines (i.e. functional NITAGs needed)

#4 & #5 Hepatitis Testing, Treatment and Care

2020 targets

The public health approach

- Diagnosis of chronic HBV/HCV > 20%
- Treatment of 1 million people with HBV
- Treatment of 300,000 with HCV

Coverage

- Small-scale demonstration projects or treatment access programme
- Free nationwide hepatitis B and/or C testing and treatment in Rwanda & Uganda

Barriers/Challenges for HBV in Africa

- Limited data availability and challenges with record keeping
- Low population awareness, hepatitis B myths and misconceptions
- Birth dose has not been utilized
- Access to treatment at an affordable price
- Medical infrastructure is centralized limited technology (fibroscan, lab testing for HBV-DNA, liver transplantation, limited number of specialists)
- High drop-out rates for vaccination
- Initiation of treatment/follow-up testing
- Simplified treatment algorithm is needed

Strengths

- Robust HIV systems in place
- Resources and funding tend to have a big impact
- Countries are prioritizing viral hepatitis
- Medications are being manufactured in countries (Egypt, Uganda)
- Several demonstration projects have shown there is interest regionally (Gambia, Uganda, Nigeria, Ethiopia)

References

- 1. The Lancet Gastroenterology & Hepatology 2018 3, 383-403DOI: (10.1016/S2468-1253(18)30056-6)
- 2. Hepatitis Scorecard for the WHO Africa Region Implementing the hepatitis elimination strategy.

 https://www.afro.who.int/publications/hepatitis-scorecard-who-africa-region-implementing-hepatitis-elimination-strategy
- 3. Thompson P, Parr JB, Holzmayer V et al. 2018 *AJTMH*; Schweitzer et al 2015.
- 4. Department of Public Health, Nasarawa MoH, 2017
- 5. Prevalence study of Hepatitis B and C in Nigeria, Federal Ministry of Health, 2013