

# THE UNITED REPUBLIC OF TANZANIA

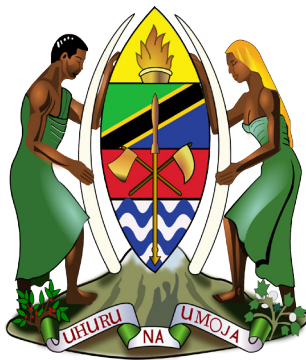
MINISTRY OF HEALTH,  
COMMUNITY DEVELOPMENT, GENDER, ELDERLY AND CHILDREN



**NATIONAL STRATEGIC PLAN  
FOR THE CONTROL OF VIRAL HEPATITIS  
2018/19 -2022/23**

**THE UNITED REPUBLIC OF TANZANIA**

**MINISTRY OF HEALTH, COMMUNITY DEVELOPMENT,  
GENDER, ELDERLY AND CHILDREN**



**NATIONAL STRATEGIC PLAN FOR  
THE CONTROL OF VIRAL HEPATITIS**

**2018/19-2022/23**

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## List of Abbreviations

AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Clinic
ART	Antiretroviral Treatment
CCHP	Comprehensive Council Health Plan
CHMT	Council Health Management Team
CMO	Chief Medical Officer
CSO	Civil Society Organisation
DHIS	District Health Information Systems
DNA	Deoxyribonucleic Acid
ELISA	Enzyme Linked Immuno-Absorbent Assay
FBO	Faith Based Organization
GoT	Government of Tanzania
HAV	Hepatitis A Virus
HBV	Hepatitis B Virus
HBsAg	Hepatitis B surface Antigen
HCV	Hepatitis C Virus
HCW	Health care worker
HDV	Hepatitis D Virus
HEV	Hepatitis E Virus
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HMT	Hospital Management Team
HSSP IV	Fourth Health Sector Strategic Plan
IDSR	Integrated Disease Surveillance and Response
IVD	Immunization and Vaccine Development
LGA	Local Government Authority
LIS	Laboratory Information System
LMU	Logistic management Unit
NHL-QATC	National Health Laboratory – Quality Assurance and Training Centre
M&E	Monitoring and Evaluation
MAT	Medication Assisted Therapy

MOHCDGEC	Ministry of Health, Community Development, Gender, Elderly and Children
MSD	Medical Supplies Department
MTEF	Medium Term Expenditure Frameworks
NACP	National AIDS Control Programme
NBS	National Bureau of Statistics
NBTS	National Blood Transfusion Services
NGO	Non – Governmental Organization
NIMR	National Institute of Medical Research
PDF	People’s Development Forum
PO-RALG	President’s Office Regional Authority and Local Government
PWID	People who inject drugs
RHMT	Regional Health Management Team
RNA	Ribonucleic Acid
SDG	Sustainable Development Goal
TB	Tuberculosis
THIS	Tanzania HIV/AIDS Indicator Survey
THMIS	Tanzania HIV/AIDS and Malaria Indicator Survey
TWG	Technical Working Group
VH	Viral Hepatitis
WHO	World Health Organization

## Foreword

Viral Hepatitis B and C are silent diseases often progress with few symptoms, even during advanced stages of disease, causing individual, social and economic harm.

Nevertheless, efficient prevention, detection and treatment options of viral hepatitis remain suboptimal. Data on the burden of Viral Hepatitis is limited.

However, recent surveys reveal the prevalence of Viral Hepatitis B among adult population is 4%, slightly lower to that of HIV/AIDS (4.7%).

Existing national efforts towards elimination of Viral Hepatitis are lagging behind, contrary to the global 2030 targets. On the other hand, we are determined to hasten the process of developing the Strategic Plan and implement it to meet the global targets and save lives of Tanzanians and improve the quality of life.

The National Strategic Plan for Viral Hepatitis in Tanzania intends to guide individuals and organizations from all sectors to strengthen collective national response to Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV) infections. The plan will institutionalize the necessary implementation strategies and tools for prevention, screening, diagnosis, treatment, and continuum of care. These are necessary for response within the health system which will give required attention.

The strategy describes the contribution of the health sector in prevention and control of viral hepatitis. It also promotes synergies between viral hepatitis and other health issues, and aligns the hepatitis response with other global health and development strategies, plans and targets. It positions the response to viral hepatitis within the context of universal health coverage an overarching health target of the 2030 Agenda for Sustainable Development.

This comprehensive framework will ensure coordination and alignment of all stakeholders' efforts as well as facilitate new or expanded collaborative activities among stakeholders working in Viral Hepatitis in the country. We invite and encourage the stakeholders to participate in implementation of this plan.



Dr. Zainab A.S. Chaula

**Permanent Secretary (Health)**

### **Acknowledgement**

The development of the National Strategic Plan for Control of Viral Hepatitis 2018/19-2022/2023 is a combined effort of the Ministry of Health, Community Development, Gender, Elderly and Children and other stakeholders. First and foremost, the Ministry acknowledges the valuable coordination offered by the Directorates of Preventive Health Services, Curative Services and Health Quality Assurance. Also, the Ministry appreciates the contribution from the President's Office – Regional Administration and Local Government.

Additionally, we acknowledge the full participation and technical expertise of individuals from institutions (Muhimbili National Hospital, Muhimbili University for Health and Allied Sciences, Bugando Medical Centre/Zonal Health Resource Centre – Lake Zone, and Ocean Road Cancer Institute).

This work would have been impossible without the technical support from WHO, US-CDC, UNICEF, MdM, and People's Development Forum (PDF). The Ministry would like to thank all these organizations for their contribution in constructing the document that has given life to efforts towards elimination of Viral Hepatitis in the country.

Finally, The Ministry acknowledges the Financial support from WHO, World Bank, and People's Development Forum (PDF).



Prof. Muhammad Bakari Kambi  
**Chief Medical Officer**



## Executive Summary

The national strategic plan for control of Viral Hepatitis (NSPVH) 2018/19 -2022/23 is guided by the Global Health Sector Strategy on Viral Hepatitis (2016-2021) and the African Regional Framework for Action on Prevention, Care and Treatment of Viral Hepatitis 2016-2021. The plan focuses on Hepatitis B and C viruses, guiding actions of all public and private institutions, individuals and the communities in the control of Viral Hepatitis in the country. The goal of the plan is to alleviate morbidity and mortality due to viral hepatitis while achieving elimination of viral hepatitis as a public health threat in Tanzania by 2030. Implementation of the viral hepatitis policies and activities in Tanzania will also be based on policies, guidelines and legislations available at national level.

The objectives of the NSPVH are to create awareness on Viral Hepatitis, prevention, care and treatment among policy makers, health care providers and communities; to strengthen preventive measures and halt transmission of viral hepatitis within the population; to ensure accessible, reliable and affordable screening, diagnostic, care and treatment services in the context of continuum of care and in accordance with universal health coverage; and to strengthen surveillance, monitoring and evaluation through integration of Viral Hepatitis in the existing reporting system as well as coordinate research agenda to assist in planning, monitoring, evaluation, evidence-based decision making and resource mobilization.

The strategic plan is guided by principles of Leadership for Ownership, fostering Partnership for sustainability; access and equity, integration for efficiency and focused actions for impact. The estimated cost of identified priority activities in this plan are summarized in the table below:

S/N	Strategic objective	Total Estimated (Tanzanian Shillings)				
		2018/19	2019/20	2020/21	2021/22	2022/23
1	Promote advocacy and increase awareness on viral hepatitis to enhance utilization of services	532,713,500	379,997,070	523,923,807	446,044,976	545,611,037
2	Strengthen preventive measures to halt transmission of viral hepatitis within the population	756,276,000	481,938,440	543,040,902	467,865,387	482,421,817
3	Establish access to diagnostic, care and treatment services to Viral Hepatitis in the context of continuum of care and in accordance with universal health coverage.	926,273,000	572,711,200	616,044,186	603,396,742	643,058,700
4	Strengthening strategic information systems and surveillance for monitoring, evaluation and evidence-based decision making	451,317,833	314,372,717	360,568,920	335,063,271	384,888,029
	<b>TOTAL</b>	<b>2,666,580,333</b>	<b>1,749,019,427</b>	<b>2,043,577,815</b>	<b>1,852,370,376</b>	<b>2,055,979,583</b>

## CHAPTER ONE

### Introduction

The National Strategic Plan for Viral Hepatitis in Tanzania intends to guide individuals and organizations from all sectors of society to strengthen collective national response to Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV) infections. The plan will institutionalize the necessary implementation strategies and tools for prevention, screening, diagnosis, treatment, and continuum of care. These are necessary for response within the health system which will give required attention. Furthermore, this comprehensive framework will ensure coordination and alignment of all stakeholders' efforts as well as facilitate new or expanded collaborative activities among stakeholders working in Viral Hepatitis in the country.

The plan focuses on viral hepatitis B and C, owing to the relative public health burden they represent compared to Viral Hepatitis A, D and E. On the other hand, other ongoing efforts in the country like sanitation campaigns directly control Viral Hepatitis A and E. The strategy describes the contribution of the health sector in prevention and control of viral hepatitis. It also promotes synergies between viral hepatitis and other health issues, and aligns the hepatitis response with other global health and development strategies, plans and targets. It positions the response to viral hepatitis within the context of universal health coverage –an overarching health target of the 2030 Agenda for Sustainable Development.

In developing the plan, the MOHCDGEC appointed a Viral Hepatitis focal point within the Epidemiology section of the Directorate of Preventive Services and formulated an expert working group. A meeting was convened by the Ministry to understand the situation and views of stakeholders in line with the strategic areas and collaboration that the country should take in fighting Viral Hepatitis. The recommendations from the stakeholders' perspectives were shared with the working group. The members of the working group were tasked to develop draft components of the action plan specific to their area of expertise and solicit inputs from other units within the ministry and outside. After the incorporation of the inputs the plan was shared again to stakeholders for their review.

### Background

Viral hepatitis is an inflammation of the liver, caused by five distinct hepatitis viruses (A, B, C, D, and E). The alphabetical naming of these viruses indicates the order in which they were discovered. Hepatitis viruses are either RNA viruses (hepatitis A, C, D and E) or DNA viruses (hepatitis B). Infection with hepatitis viruses can be a self-limiting type, or it could lead to chronic infection (lasting for six months or more). While all of these viruses cause liver disease, they vary significantly in terms of epidemiology, natural history, prevention, diagnosis, treatment and health outcomes.

## Natural History of Viral Hepatitis

*Hepatitis A virus (HAV)* is usually transmitted by the faecal-oral route, either through person-to-person contact or ingestion of contaminated food or water. Certain sex practices can also spread HAV. Infections are in many cases mild, with most people making a full recovery and remaining immune from further HAV infections. However, HAV infections can also be severe and life threatening. Most people in areas of the world with poor sanitation have been infected with this virus. Safe and effective vaccines are available to prevent HAV infection.

*Hepatitis B virus (HBV)* is transmitted through exposure to infectious blood, semen, and other body fluids. HBV can be transmitted from infected mothers to infants at the time of birth, or from family members to infants in early childhood or from child to child. Transmission may also occur through unsafe sexual intercourse, transfusions of HBV-infected blood and blood products, contaminated injections during medical procedures, and sharing of needles and syringes among injecting drug users. HBV also poses a risk to healthcare workers who sustain accidental needle-stick injuries while caring for HBV-infected people. A safe and effective vaccine is available to prevent HBV infection.

*Hepatitis C virus (HCV)* is mostly transmitted through exposure to infectious blood. This may happen through transfusions of HCV-infected blood and blood products, contaminated injections during medical procedures, and sharing of needles and syringes among injecting drug users. Sexual or interfamilial transmission is also possible, but is much less common. There is no vaccine against HCV. Both HBV and HCV can cause cancer to humans. Antiviral agents against HBV and HCV exist. Treatment of HBV infection has been shown to reduce the risk of developing liver cancer and death.

*Hepatitis D virus (HDV)* infections occur exclusively in persons infected with HBV. The dual infection of HDV and HBV can result in more serious disease and worse outcomes. The hepatitis B vaccine provides protection from HDV infection.

*Hepatitis E virus (HEV)*, like HAV, is transmitted through consumption of contaminated water or food. HEV is a common cause of hepatitis outbreaks in the developing world and is increasingly recognized as an important cause of disease in developed countries. HEV infection is associated with increased morbidity and mortality in pregnant women and newborns. A safe and effective vaccine against HEV was licensed in January 2012 but is not yet widely available.

## Viral Hepatitis Burden

Viral hepatitis caused 1.34 million deaths in 2015, a number comparable to deaths caused by tuberculosis and higher than those caused by HIV. However, the number of deaths due to viral hepatitis is increasing over time, while mortality caused by tuberculosis and HIV is declining. All five hepatitis viruses can cause acute disease, but most viral hepatitis deaths in 2015 were due to chronic liver disease (720 000 deaths due to cirrhosis) and primary liver cancer (470 000

deaths due to hepatocellular carcinoma)<sup>1</sup>. Of those deaths, approximately 47% are attributable to hepatitis B virus, 48% to hepatitis C virus and the remainder to hepatitis A virus and hepatitis E virus<sup>2</sup>.

Globally, in 2015, an estimated 257 million people were living with chronic HBV infection, and 71 million people with chronic HCV infection<sup>3</sup>. Furthermore, it is estimated that about 1 400 000 new hepatitis A virus (HAV) infections occur globally each year and 20 million hepatitis E infections, over three million acute cases of hepatitis E, and 70 000 hepatitis E-related deaths<sup>1</sup>. Hepatitis D virus infects only those persons who already have HBV infection. This worsens the outcome of HBV infection than infection with HBV alone. There is a higher rate of liver failure in acute infections and a greater likelihood of developing liver cancer in chronic infections.

In Africa, the exact burden of hepatitis is not known but all countries in the region consider viral hepatitis an urgent public health issue. Hepatitis A, B, C and E are the types mostly found in the Region. The prevalence of hepatitis B is estimated at 5-7% in Central, Eastern and Southern Africa. Whereas the prevalence of hepatitis C is even considered higher in some areas, reaching levels of up to 10%. It is estimated that 19 million adults in the Region are chronically infected with hepatitis C<sup>2</sup>. Viral hepatitis is also a growing cause of mortality among people living with HIV in Africa. About 2.3 million people living with HIV are co-infected with hepatitis C virus and 2.6 million with hepatitis B virus.

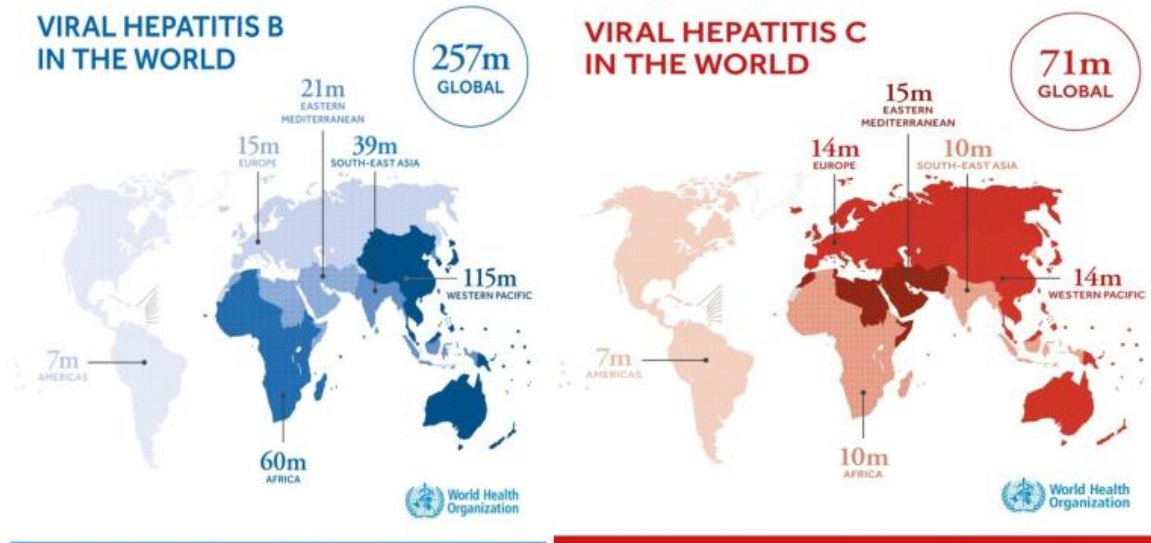
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<sup>1</sup> Global health sector strategy on viral Hepatitis, 2016-2021 WHO

<sup>2</sup> PREVENTION, CARE AND TREATMENT OF VIRAL HEPATITIS IN THE AFRICAN REGION: FRAMEWORK FOR ACTION, 2016–2020; REGIONAL COMMITTEE FOR AFRICA, Sixty-sixth session, Addis Ababa, Federal Democratic Republic of Ethiopia, 19–23 August 2016.

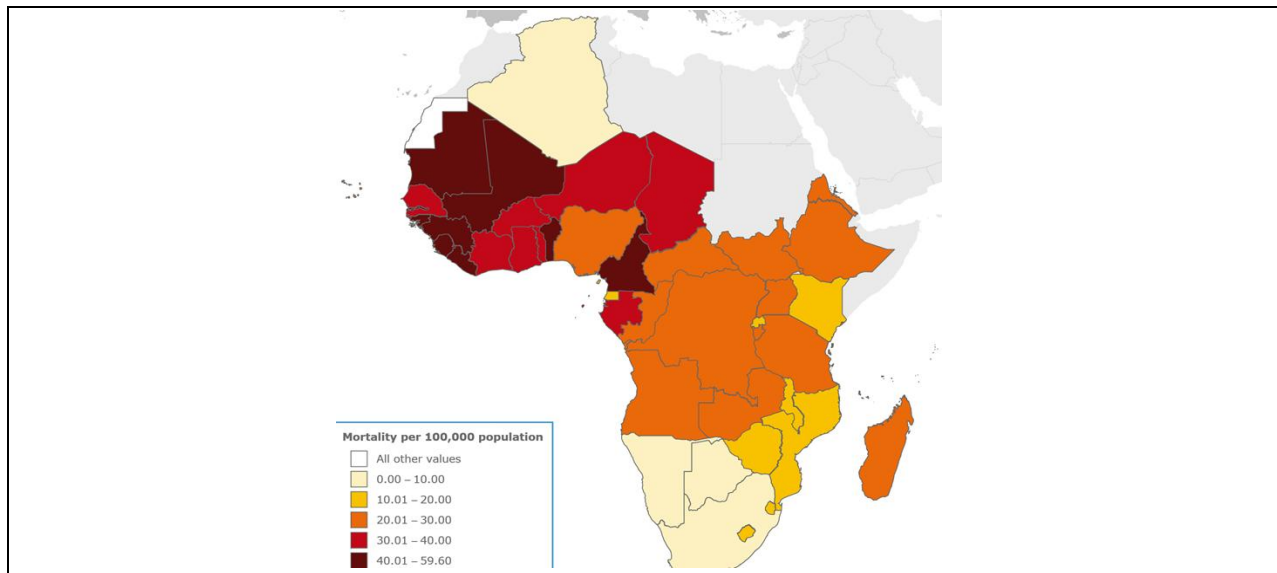
<sup>3</sup> WHO, GLOBAL HEPATITIS REPORT, 2017, <http://www.who.int/hepatitis/publications/global-hepatitis-report2017/en/>

**Figure 1: The global burden of Viral Hepatitis, affecting over 325 million people**



**Source: WHO Global Hepatitis Report 2017**

**Figure 2: Mortality per 100,000 contributed by Viral Hepatitis in African countries**



*Source: Stanaway et al, Lancet, 2016*

## 1.2 Situation Analysis

The United Republic of Tanzania which comprises of Tanzania Mainland and Zanzibar, occupies 945,087 square kilometers of land surface. Tanzania Mainland has 26 regions subdivided in 185 districts councils. Nearly 70% of Tanzanians are farmers, fishermen and pastoralists. The country is estimated to have a total population of 49 million<sup>4</sup>.

The Health Sector in the country is guided by national policies. The Tanzania Development Vision 2025 identifies health as one of the priority sectors. Among its objectives is the achievement of a high quality of life for all Tanzanians. The National Strategy for Growth and Poverty Reduction in Tanzania Mainland (MKUKUTA) provides the global direction for achievement of the Sustainable Development Goals (SDGs). A national Health Policy is in place and was updated in 2007, providing the Government's vision on long-term developments in the health sector. Tanzania Mainland is currently implementing its fourth Health Sector Strategic Plan (HSSP IV) for 2016 - 2020.

The health system in Mainland Tanzania operates with technical coordination and in-service training of health care workers from the Ministry of Health, Community Development, Gender, Elderly and Child (MoHCDGEC); administration and supervision of facilities by the President's Office – Regional and Local Government (PO-RALG); and using human resources provided with pre-service training under the authority of the Ministry of Education, Science and Technology. In addition, the health system is facilitated by ministries, departments and agencies which provide different services that support health. The public health sector is also augmented by services from non-state actors including faith-based organizations (FBOs), Community Service Organizations (CSOs), and other private sector actors, both formal and informal.

The country has a total of 8215 Health Facilities in which public health facilities are 6882 of which only 240 are hospitals. The Annual Population Growth Rate is estimated at 2.7% and with the life expectancy of 61 years at birth<sup>5</sup>. The THMIS report in 2014 showed an improvement of births at health facilities to 77% compared to 2010 report which it was 49%. Malaria, Tuberculosis and HIV are still reported to be the leading causes of mortality in the country. However, diagnostic challenges and reporting for diseases like chronic Viral Hepatitis may be hugely under-reported.

National data from the Tanzania HIV Impact Survey (THIS, 2017) is available on the burden of viral hepatitis in Tanzania which is at 4,3% for HBV and less than 2% for HCV. However, subpopulation studies in different parts of the country shows the prevalence of HBV to be 5.5-20% and HCV to be below 5%. The major sources of data in the country include Blood Donor Screening Centers, Dialysis units, Viral Hepatitis treatment centers, HIV program, research and surveys.

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<sup>4</sup> National Bureau of Statistics 2016 Projections

<sup>5</sup> National Bureau of Statistics 2012

Hospital based studies revealed that HBV prevalence ranges from 5-20% in high risk hospital based patients<sup>6</sup>. The cumulative prevalence of HCV positive antibody status among PWID receiving Opioid Replacement Therapy was shockingly found to be 75.6%<sup>7</sup>.

In the general community, HCV prevalence is estimated between 1.2-2%<sup>8,9</sup>. Literatures from Bugando Medical Center in Mwanza on the seroprevalence among HCWs revealed a prevalence of 7% for Chronic Hepatitis B Virus Infection<sup>10</sup>. In addition, needle stick injuries were high among HCW 52.9%<sup>11</sup>. It is estimated that, infection following a needle-stick injury from infected sources is 3% for HCV and 6-30% for HBV<sup>12</sup> Among adults People Living with HIV, the rapid screening for HBV seroprevalence showed rate of co-infection to be as high as 9.2% whereas HCV was at 3.7%<sup>13</sup>. Contrary, the prevalence of hepatitis co-infection among children according to 2017 data is reported as high as 15%, with HBV and HCV being 1.2% and 13.8% respectively<sup>14</sup>. In 2006, seroprevalence of HBsAg and HCV among blood donors at MNH in Dar es Salaam was found to be 8.8% and 1.5% respectively<sup>4</sup>. A further 10 years' data on blood screening from 2007-2016 at the National Blood Transfusion Service revealed a prevalence of HBsAg to range from 4.4-7.0% among blood donors.

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<sup>6</sup>Hoffmann, Christopher J., and Chloe L. Thio. "Clinical implications of HIV and hepatitis B co-infection in Asia and Africa." *The Lancet infectious diseases* 7.6 (2007): 402-409.

<sup>7</sup>Nyandindi, Cassian L. *HIV Serostatus, Hepatitis C and Depression Among Injection Drug Users in Kinondoni Municipality, Dar es Salaam, Tanzania*. Diss. Muhimbili University of Health and Allied Sciences, 2011.

<sup>8</sup>Tess, Beatriz H., et al. "Seroprevalence of hepatitis C virus in the general population of northwest Tanzania." *The American journal of tropical medicine and hygiene* 62.1 (2000): 138-141.

<sup>9</sup>Matee, Mecky IN, Pius M. Magesa, and Eligius F. Lyamuya. "Seroprevalence of human immunodeficiency virus, hepatitis B and C viruses and syphilis infections among blood donors at the Muhimbili National Hospital in Dar es Salaam, Tanzania." *BMC public health* 6.1 (2006): 21.

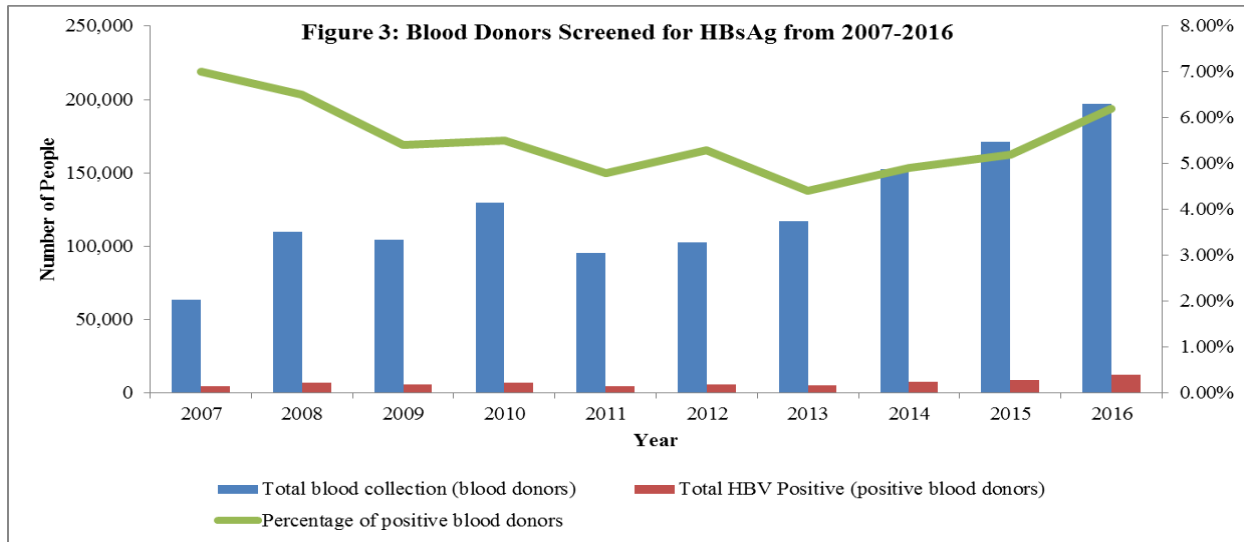
<sup>10</sup>Mueller, A., et al. "Prevalence of hepatitis B virus infection among health care workers in a tertiary hospital in Tanzania." *BMC infectious diseases* 15.1 (2015): 386.

<sup>11</sup>Manyele, S. V., H. A. M. Ngonyani, and E. Eliakimu. "The status of occupational safety among health service providers in hospitals in Tanzania." *Tanzania journal of health research* 10.3 (2008): 159-165.

<sup>12</sup>Prüss-Üstün, Annette, Elisabetta Rapiti, and Yvan Hutin. "Estimation of the global burden of disease attributable to contaminated sharps injuries among health-care workers." *American journal of industrial medicine* 48.6 (2005): 482-490.

<sup>13</sup>Franzeck, Fabian C., et al. "Viral hepatitis and rapid diagnostic test based screening for HBsAg in HIV-infected patients in rural Tanzania." *PloS one* 8.3 (2013): e58468.

<sup>14</sup>Telatela, Safila P., Mecky I. Matee, and Emmanuel K. Munubhi. "Seroprevalence of hepatitis B and C viral co-infections among children infected with human immunodeficiency virus attending the paediatric HIV care and treatment center at Muhimbili National Hospital in Dar-es-Salaam, Tanzania." *BMC Public Health* 7.1 (2007): 338.



Source: Ten year report National Blood Transfusion Service

In the country, it is estimated that less than 10% of the population receive screening for Hepatitis B surface Antigen and HCV Antibody. The detection rate for Hepatitis B and C countrywide from experts' opinion is estimated to be below 30% with reference from antenatal clinics, other hospital based clinics and inpatient clients.

Since most of the cases are detected through blood donation screening, HIV management, dialysis, Injectable drug users, this sidelines cases which do not fulfill the criteria resulting in patients being detected at the terminal stage of illnesses.

The country does not have national care and treatment guideline, for viral hepatitis management albeit ELISA and rapid tests are the mainstay for diagnosis and recently PCR testing has been introduced at high level diagnostic centers. Treatment services are only available at the Muhimbili National Hospital since 2016. HBV patients receive life-long ART treatment through project support whereas HCV patients have to pay for the treatments with a few covered by health insurers. The drugs are commercially available but it is estimated that only 5% of patients have access to treatment. For HCV the management cost is estimated at US \$ 1,000 but clinicians explain that cost may vary depending on the complication and disease progression. The situation is further complicated by the lack of enough trained human resource to manage chronic viral hepatitis, lack of enough gastroenterology or viral hepatitis centers in the country and lack of clear referral system for chronic hepatitis patients.

Only Hepatitis B Vaccine is offered in the routine immunization program to infants. The vaccine was introduced in 2003 and the coverage has sustainably been high above 90% for the last five years. Despite the policy of vaccinating HCWs and other risk groups being available, there is no clear guidance on whether one should be screened first or not. On the other hand, limitation of data on perinatal transmission of Hepatitis B vaccine hinders advocacy on Hepatitis Birth dose introduction.



Despite being a global public health problem, expert opinions in the country estimates less than 10% of the general population to be aware of chronic viral hepatitis and its sequel. Furthermore, only 10% of physicians know correct management of Chronic Viral Hepatitis and less than 10% of health care workers are aware of the management in case of accidental exposure.

The prevention strategies for viral hepatitis have usually been embedded in the context of existing health programs (HIV/AIDS, Immunization, Blood Screening) and activities are quite fragmented even within the programs.

Lack of a well-established coordinated mechanism for control of viral hepatitis results in inadequate control and preventive strategies at the subnational levels; lack of key stakeholders' involvement in the control initiatives and lack of community awareness and resource mobilization initiatives put the entire population at risk of contracting infection and even dying without accessing necessary interventions for the disease.

**Analysis of strength, weakness, opportunity and challenges (SWOC) for Viral Hepatitis Prevention and Control**

<b>Strength</b>	<b>Weakness</b>
<ul style="list-style-type: none"> <li>• Availability of National Programs that address components of Viral Hepatitis Prevention (HIV/AIDS, Immunization and Blood Safety)</li> <li>• Availability of motivated staff at all levels</li> <li>• Availability of Reporting systems (Integrated Diseases Surveillance and Response System (IDSR), MTUHA, DHIS2.</li> <li>• Availability of leadership and coordination structures down to the lower levels</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of National data on the burden of Viral Hepatitis to guide the response</li> <li>• Viral hepatitis is not among the reported diseases in IDSR</li> <li>• Lack of diagnostic and treatment guidelines for Viral Hepatitis</li> <li>• Lack of enough resources to support Viral Hepatitis interventions</li> <li>• Lack of Community awareness on Viral Hepatitis</li> </ul>
<b>Opportunities</b>	<b>Challenges</b>
<ul style="list-style-type: none"> <li>• Availability of Global guidance on addressing Viral Hepatitis interventions</li> <li>• Availability of stakeholders’ goodwill to collaborate with the Government to support Viral Hepatitis Interventions</li> <li>• Availability of Local Media, Social Media and Health Promotion Unit to raise awareness on Viral Hepatitis</li> <li>• Availability of diagnostics and newer medications with mild side effects in the country</li> </ul>	<ul style="list-style-type: none"> <li>• Scarce financial resources</li> <li>• Competing priorities</li> <li>• Inadequate Human Resource for Health and high staff attrition</li> </ul>

## CHAPTER TWO

### GUIDANCE OF THE STRATEGIC PLAN

The National Viral Hepatitis Strategic Plan (NVHSP 2018/19-2022/2023) is guided by the Global Health Sector Strategy on Viral Hepatitis (2016-2021) and African Regional Framework for Action on Prevention, Care and Treatment of Viral Hepatitis 2016-2021.

The strategic plan focuses on Hepatitis B and C viruses which are the two most common. The Plan guides the actions of all public and private institutions, individuals and the communities in the control of Viral Hepatitis in the country.

#### **Vision**

A Tanzanian society in which everyone with viral hepatitis infection has access to safe, affordable and effective preventive, diagnostic, care and treatment services.

#### **Goal**

To alleviate morbidity and mortality due to viral hepatitis while combating and achieving control over viral hepatitis as a public health threat in Tanzania by 2030.

#### **Objectives of the plan**

1. To promote advocacy among policy makers and increase awareness on viral hepatitis prevention, care and treatment among health care providers and the community to enhance utilization of services
2. To strengthen preventive measures and halt transmission of viral hepatitis within the population.
3. To ensure accessible, reliable and affordable screening, diagnostic, care and treatment services in the context of continuum of care and in accordance with universal health coverage
4. To strengthen surveillance, through integration of Viral Hepatitis in the existing reporting system as well as coordinate research agenda to assist in planning, monitoring, evaluation, evidence-based decision making and resource mobilization.

#### **Guiding Principles**

The following key principles will guide the strategic plan;

##### **a) Leadership for Ownership**

This is the first strategic plan for Viral Hepatitis in the country. There are already preventive and control initiatives that exist at the national and sub-national levels that are not well coordinated and monitored. The plan aims to ensure coordination on multiple fronts and provide oversight to enhance universal access on prevention and control efforts. Guidance is important in developing, adopting and applying new technologies, tools and approaches including research that will lead the country towards viral hepatitis elimination by 2030.

**b) Fostering Partnership for sustainability**

A strong coalition involving all sectors of society and ensuring that all partners align their support to the national hepatitis response as set out by the government will eventually result to achievement of country key targets on Viral Hepatitis. A desired partnership aims to further enhance mutual trust and complementarily among stakeholders. The inter-sectoral cooperation where all key stakeholders work together will create sustainable, locally-appropriate solutions to limit the burden posed by viral hepatitis on health care systems, society and, most importantly, infected persons and their communities.

**c) Access and Equity**

Universal Health coverage is the overarching framework to ensure that all people obtain the viral hepatitis services they need without suffering financial hardship when paying for them. Emphasis will be on increasing access to screening, diagnostic testing, referrals, treatment and support for people infected with Chronic Viral Hepatitis.

**d) Integration for efficiency**

This plan aims to integrate hepatitis services into existing health systems and strategies, avoiding stand-alone viral hepatitis programmes and strengthening the interface between the health sector and other sectors in the country. For example, in the country there are existing interventions like the MAT for PWID that target prevention of HIV transmission, this intervention also has impact in the prevention of hepatitis transmission.

**e) Focused actions for impact**

The National VH Strategic Plan has taken into consideration the Global guidance, which advocates for a public health approach based on simplified and standardized interventions and services that can readily be taken to scale and bringing them nearer to the population in need. Similarly, the country plan has taken priorities to interventions that can be undertaken based on local epidemiology, contexts, needs and capacities.

## CHAPTER THREE

### STRATEGIC OBJECTIVES

#### **Strategic objective 1: Promote advocacy and increase awareness on viral hepatitis to enhance utilization of services**

The most effective approach to combat viral hepatitis is to fully engage all players starting with political leaders and policy makers. This will ensure increased political will and commitment; creation of a favourable policy environment and allocation of adequate resources for viral hepatitis programming.

Furthermore, it is important to engage with the community so that they can understand the disease and suggest feasible ways of tackling it. Specifically, control of viral hepatitis transmission necessitates targeting specific groups with increased risks and those who propagate transmission of viral hepatitis (e.g., HCWs, HBV/HCV infected patients and their family members, barbers, PWID). Despondently, many of these persons are not aware of Viral Hepatitis infection status, unfamiliar with the modes of transmission, and they unknowingly transmit infection to their loved one and clients.

Knowledge of risk factors and disease processes can be empowering, motivating behaviour change and preventing of viral hepatitis transmission. Increased community awareness is therefore fundamental to reducing the burden of this disease. In Tanzania, community structures including community leaders and organizations are easy targets to raise awareness. However, these groups need to be well equipped in reaching individuals in a more coordinated, evidence-based approach to communicate prevention messages for sustainable behavioural change. Additionally, communication concerning viral hepatitis prevention must be consistent, culturally appropriate and designed to decrease stigmatization of infected patients.

#### **Priority Area 1: Advocacy**

<i>Specific Objective: Engage political leaders and policy makers in advocating for viral hepatitis preventive and curative services</i>	
<b>Strategic interventions</b>	<b>Activities</b>
1.1 Forge for political support in addressing Viral Hepatitis	1.1.1 Prepare policy briefs on viral hepatitis for policy makers 1.1.2 Conduct sensitization meetings on viral Hepatitis for all regional, district, ward and village leaders including influential people 1.1.3 Share viral hepatitis information and updates in the political platforms in the country eg. UHURU torch and existing integrated campaigns 1.1.4 Commemorate World Hepatitis Day at national

	<p>and sub-national levels</p> <p>1.1.5 Enhance collaboration with the private sector stakeholders to promote partnerships for viral hepatitis activities</p> <p>1.1.6 Conduct advocacy among decision makers on the need to introduce HepB vaccine birth dose</p>
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## Priority Area 2: Raising Awareness

<b><i>Specific Objective: Increase public awareness on Viral Hepatitis</i></b>	
<b>Strategic interventions</b>	<b>Activities</b>
1.2. Increase community awareness on viral hepatitis and reduce stigma and discrimination	<p>1.2.1. Develop, print and disseminate Information Education and Communication (IEC) materials on viral hepatitis B and C prevention, care and treatment</p> <p>1.2.2. Create demand for Viral Hepatitis services through dissemination of prevention, care and treatment information by mass media, social media and community campaigns</p> <p>1.2.3. Foster collaboration with other implementing partners in Viral Hepatitis B and C to improve services uptake and provision</p> <p>1.2.4. Conduct viral hepatitis B and C campaigns in educational, religious and correctional institutions</p> <p>1.2.5. Collaborate with Ministry of Labour and any other relevant ministries to advocate for viral hepatitis prevention at the work place</p> <p>1.2.6. Partner with community groups, NGOs, FBOs and CSOs to increase awareness to high risk groups about viral hepatitis and promote access to prevention, care and treatment services</p>

**Strategic objective 2: Strengthen preventive measures to halt transmission of viral hepatitis within the population.**

Recognising the ambitious nature of this plan in reducing transmission of Viral Hepatitis in the country, the priority given to prevention efforts are emphasized. Effective prevention efforts will be strategic, targeting evidence-based practices; rationalizing sustainable prevention strategies including vaccination, blood safety, Infection Prevention and Control-Injection Safety will significantly reduce the risks of infection. Immunization will target children at birth, children under five years of age and high risk groups such as, healthcare workers, people who inject drugs (PWID) and travellers needing special considerations).

**Priority Area 1: Vaccination**

<b><i>Specific Objective: Preventing Hepatitis B transmission through vaccination(primary prevention)</i></b>	
<b>Strategic interventions</b>	<b>Activities</b>
2.1 Vaccination against Hepatitis B for Children, health care workers and other high risk groups	2.1.1 Vaccinate Health Care Workers against Hepatitis B 2.1.2 Introduce Hepatitis B Birth Dose into routine childhood immunization services 2.1.3 Procure Hepatitis B vaccine and related commodities for health care workers and other high risk groups 2.1.4 Print and Disseminate Hepatitis B vaccination SOPs for adults 2.1.5 Introduce cost sharing mechanisms for Hepatitis B vaccination of adults at most risk of infection

**Priority Area 2: Blood Safety**

<b><i>Specific Objective: To Prevent Transmission of HBV and HCV through Blood Transfusion (this will be conducted in collaboration with NBTS)</i></b>	
<b>Strategic interventions</b>	<b>Activities</b>
2.2 Strengthen clinical evaluation and HBV and HCV risk factors assessment before blood donation including referral for those found to be infected	2.2.1 Conduct refresher training to service providers on adherence to Standard Operating Procedures on screening Blood Donors as outlined by NBTS 2.2.2 Orient service providers on referral system mechanism, networking and management of blood donors infected with HBV and HCV
2.3 Ensure 100% of all donated blood units are screened in a quality-assured manner as per WHO standards for HBV and HCV	2.3.1 Conduct supportive supervision to strengthen quality control measures for laboratory testing of HBV and HCV at NBTS at zonal level 2.3.2 Strengthen existing courier system for blood sample transportation to ensure universal testing in a quality-assured manner 2.3.3 To train health facility staff on cold chain and blood sample management to preserve integrity of samples

### Priority Area 3: Infection Prevention and Control-Injection Safety (IPC-IS)

<b>Specific Objective: Promote Infection Prevention and Control-Injection Safety (IPC-IS) in and out of health care settings</b>	
<b>Strategic interventions</b>	<b>Activities</b>
2.4 Strengthen Infection Prevention and Control-Injection Safety in health facilities, National Blood Transfusion Services, Port health centres and the community	<p>2.4.1 Conduct refresher training on IPC including PEP among Quality Improvement Teams (QIT) so that they cascade the training to the rest of HCWs.</p> <p>2.4.2 Provide Post Exposure Prophylaxis (PEP) services for prevention of Hepatitis B infection among healthcare workers.</p> <p>2.4.3 Conduct sensitization meetings with HMT, CHMT and RHMT on supply of adequate PPE, appropriate syringes and waste segregation equipment for infection control in all work places.</p> <p>2.4.4 Liaise with respective directorate for inclusion of needle stick injury, vaccination for health care workers, hepatitis PEP, birth dose, into the existing checklist utilized by RHMTs and CHMTs during supportive supervision for improved viral hepatitis prevention in health care settings</p> <p>2.4.5 Incorporate needle stick injuries and other exposures at workplaces within existing health information systems in order to monitor the burden of exposure to hepatitis and other blood borne pathogens.</p>

### Priority Area 4: Key and Vulnerable Groups (People Who Inject Drugs, Pregnant women, and Travellers needing special circumstances i.e. (people under military assignments or attending international events or travelling to endemic areas, pilgrims etc)

<b>Specific Objective: Enhancing access on viral hepatitis preventive services among Key and Vulnerable Groups</b>	
<b>Strategic interventions</b>	<b>Activities</b>
2.5 Ensure that people who inject drugs pregnant women, and Travellers needing special considerations, have access to viral hepatitis prevention services.	<p>2.5.1 To improve access to viral hepatitis screening, testing, linkage to care and treatment for PWID attending harm reduction services and/or in MAT clinics as part of a comprehensive package on harm reduction services</p> <p>2.5.2 To utilize Needle Syringe Exchange demonstration project in HIV/AIDS Program for prevention of viral hepatitis</p> <p>2.5.3 Improve access to viral hepatitis prevention services to travellers in need of special considerations (people under military assignments or attending international</p>



	<p>events or travelling to endemic areas, pilgrims etc)</p> <p>2.5.4 To improve access to viral hepatitis screening and referral to care and treatment services for pregnant women attending Reproductive and Child Health clinics (RCH)</p>
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**Strategic Objective 3: Establish access to diagnostic, care and treatment services to Viral Hepatitis in the context of continuum of care and in accordance with universal health coverage.**

People who receive early diagnosis, referral to care and initiation of effective treatments for HBV and HCV are less likely to develop liver cirrhosis and liver cancer. This Plan pays particular attention to addressing the challenges that people face in accessing Hepatitis B and C diagnostic and treatment services. Further, the plan aims to strengthen linkages of other co-morbidities among Chronic HBV and HCV infected patients to appropriate management of those diseases. Similarly, this will be applicable from other clinics like HIV Care and Treatment and PWID clinics. Additionally, integration of services will be highly advocated to improve patients’ adherence to medical treatment and retention to care.

Efforts will further be taken to address stigma and discrimination for people living with chronic HBV and HCV infections so as to improve adherence to medications, outcome and quality of life. To realize these aspects, participation of key actors in and out of the health system is required; including the public sector, private providers, other organizations as well as diverse civil society and affected communities.

**Priority Area 1: Diagnostics**

<b><i>Specific Objective: Improve screening and provide quality viral hepatitis testing for early identification of infected persons in the course of the disease</i></b>	
<b>Strategic interventions</b>	<b>Activities</b>
3.1 Strengthen countrywide laboratory system to provide quality diagnosis of acute and chronic hepatitis.	<p>3.1.1 To update existing standard laboratory practice manuals for screening and diagnosis of viral hepatitis</p> <p>3.1.2 To conduct training, supervision and monitoring of Laboratory Health Care Workers to support the implementation of Viral Hepatitis Screening and/or diagnostic testing.</p> <p>3.1.3 To strengthen laboratory capacity to offer viral hepatitis testing at different levels through Diagnostic services</p> <p>3.1.4 To procure rapid diagnostic tests for hepatitis B and C as well as upgrade existing Gene Xpert machines to accommodate VH testing</p> <p>3.1.5 To improve on National Forecasting Quantification,</p>

	<p>procurement and timely delivery of VH commodities</p> <p>3.1.6 Incorporate VH lab information management system into the existing reporting systems</p> <p>3.1.7 To provide HBV and HCV screening and testing services to at risk population.</p>
3.2 Improve quality assurance, and external quality control measures for laboratory testing of viral hepatitis.	<p>3.2.1 Incorporate a quality assurance mechanism into the existing system for HIV to promote quality implementation of viral hepatitis screening and testing recommendations.</p> <p>3.2.2 Participate in external laboratory quality assurance activities and</p> <p>3.2.3 Conduct periodic review of laboratory data for quality improvement.</p>

## Priority Area 2: Care and Treatment

<i>Specific Objective: Improve quality of care and treatment for persons infected with viral hepatitis</i>	
<b>Strategic interventions</b>	<b>Activities</b>
3.3 Establish viral hepatitis care and treatment centres across all relevant health care settings at regional levels	<p>3.3.1 To develop implementation plan for expanding access to care and treatment services for viral hepatitis in both Public and Private health facilities</p> <p>3.3.2 To sensitize RHMT, CHMT and HMT on integration of VH care and treatment in their respective hospitals</p> <p>3.3.3 To develop standard clinical guidelines and job aids for diagnosis and treatment of VH</p> <p>3.3.4 To print and disseminate developed guidelines to the facilities which offer care and treatment services</p> <p>3.3.5 To provide treatment for patients with HBV and</p> <p>3.3.6 Provide treatment for patients with HCV infection</p>
3.4 Provide training and support for health care providers to manage and treat people with VH	<p>3.4.1 To develop on job training manual for care and treatment of viral hepatitis</p> <p>3.4.2. To conduct trainings, supervision and monitoring to identified health care providers on management of viral hepatitis.</p>
3.5 Integrate current therapies for chronic viral hepatitis in National Essential Medicine List for sustainable supply.	<p>3.5.1 To involve and notify the National Essential Medicine List and Standard treatment guidelines for integration of recommended Anti-viral drugs for Viral hepatitis</p> <p>3.5.2. To incorporate the procurement of Hepatitis B and C Anti-viral drugs into the existing national Integrated Logistics System.</p>
3.6 Enhance treatment adherence and support	<p>3.6.1 To educate patients on treatment and the importance of adhering to medications</p> <p>3.6.2 To develop set of standards for patients follow up and care</p>

### Priority Area 3: Linkage and Referrals

<b><i>Specific Objective 1: Identify potential stakeholders dealing with viral hepatitis for linkage in the national programme on viral hepatitis</i></b>	
<b>Strategic interventions</b>	<b>Activities</b>
3.7 Establish and develop guidance for linkage to involve key stakeholders in viral hepatitis care.	3.7.1 Map and establish collaborative network between key stakeholders in viral hepatitis 3.7.2 Prepare protocol to guide stakeholders in linking suspected/confirmed cases from other clinics (PWID, TB and HIV clinics, Prisons, correctional centres) to Hepatitis Clinics
<b><i>Specific Objective 2: To establish referral system to ensure effective access to care</i></b>	
<b>Strategic interventions</b>	<b>Activities</b>
3.8 Create systems and tools to enhance referral to care of all viral hepatitis infected persons.	3.8.1 To establish standard referral network 3.8.2 Sensitize/orient health care workers on viral hepatitis referral network 3.8.3 To develop tools for referral and feedback processes within the national viral hepatitis care programme.

### Strategic objective 4: Strengthening strategic information systems and surveillance for monitoring, evaluation and evidence based decision making

*Information* is a fundamental pillar of this plan in order to fill the huge existing gap in the country. The availability of data will pave way to focus for impact and the use will guide in the development of tailored and targeted plan at national and sub-national levels. Data will help in

- i. Understanding the context of Viral Hepatitis in the country;
- ii. Selection of combination interventions;
- iii. Understanding the way in which interventions are implemented and delivered;
- iv. Monitoring and evaluation of outcomes;
- v. Mid-term adjustments required to address problems as they emerge; and
- vi. Ensuring that the responses are on track to achieve the National Strategic Plan's goals, objectives and targets.

### Priority Area 1: Understanding the context of viral hepatitis in the country and plan for viral hepatitis control

<b><i>Specific Objective: Understanding epidemic pattern, population needs and available services for Viral Hepatitis Control</i></b>	
<b>Strategic interventions</b>	<b>Activities</b>
4.1 Collect baseline information to guide in response planning	4.1.1 Use THIS results to estimate prevalence of Chronic Infections with HBV and HCV in the population

	<p>4.1.2 Estimate population in need of treatment</p> <p>4.1.3 Map and review the status of key prevention interventions</p> <p>4.1.4 Incorporate viral hepatitis indicators in IDSR guideline.</p>
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## Priority area 2: Programme data

<i>Specific Objective 1: Routinely monitor programme performance indicators</i>	
<b>Strategic interventions</b>	<b>Activities</b>
4.2 Monitor coverage for interventions	<p>4.2.1 Monitor immunization coverage for third dose of Hepatitis B vaccine among infants</p> <p>4.2.2 Monitoring of Hepatitis B birth dose</p> <p>4.2.3 Incorporate testing and treatment indicators in the Viral Hepatitis database</p> <p>4.2.4 Incorporate testing and treatment indicators in HMIS including target setting</p> <p>4.2.5 Capacitate health workers at different levels to analyze and use their own data</p>

## Priority Area 3: Viral Hepatitis Surveillance

<i>Specific Objective 1: Improve viral hepatitis surveillance in the country</i>	
<b>Strategic interventions</b>	<b>Activities</b>
4.3 Strengthen the National, Zonal, Regional and Districts capacity to collect and report viral hepatitis surveillance data	<p>4.3.1 Develop, print and distribute protocol, sentinel surveillance, reporting tools for data collection and standard case definition for acute viral hepatitis</p> <p>4.3.2 To collect data from sentinel surveillance sites for Viral Hepatitis to enhance case reporting (surveillance for laboratory-confirmed, type-specific viral hepatitis) in order to describe trends and identify risk factors for infection</p> <p>4.3.3 Conduct national surveillance among pregnant women attending ANC to determine the burden of hepatitis</p> <p>4.3.4 To disseminate information on Viral Hepatitis at national and sub-national levels for action</p>
4.4 Establish Viral Hepatitis sentinel surveillance in sites with diagnostic capacity, (MNH, MZRH, BMC, KCMC, Benjamin Mkapa, Private Health Facilities and Regional Referral Hospitals for selected regions)	<p>4.4.1 To capacitate health care providers to identify individuals at risk and for serological evidence or complete diagnosis, and reporting to the existing structures.</p> <p>4.4.2 To develop protocol for Sentinel Surveillance</p>

		of Viral Hepatitis.
		4.4.3 To identify requirements and resources needed for surveillance activities in the sites.
4.5	Establish National estimates of Viral Hepatitis Incidence, Prevalence and Mortality	4.5.1 To determine incidence, prevalence and mortality through health facilities caring for patients with cirrhosis and hepatocellular carcinoma, national vital statistics or cancer registries

#### Priority Area 4: Operational Research

<i>Specific Objective 1: Set priorities in viral hepatitis epidemiological and operational research</i>	
<b>Strategic interventions</b>	<b>Activities</b>
4.6 Conduct viral hepatitis epidemiological and operational researches in the areas of prevention, detection, care and treatment of viral hepatitis	<p>4.6.1 Conduct epidemiological and operational researches on viral hepatitis.</p> <p>4.6.2 To develop and share research agenda on viral hepatitis with relevant stake holders during annual meetings.</p> <p>4.6.3 Disseminate research results through publications, bulletins and conferences to inform policy makers and implementers.</p>

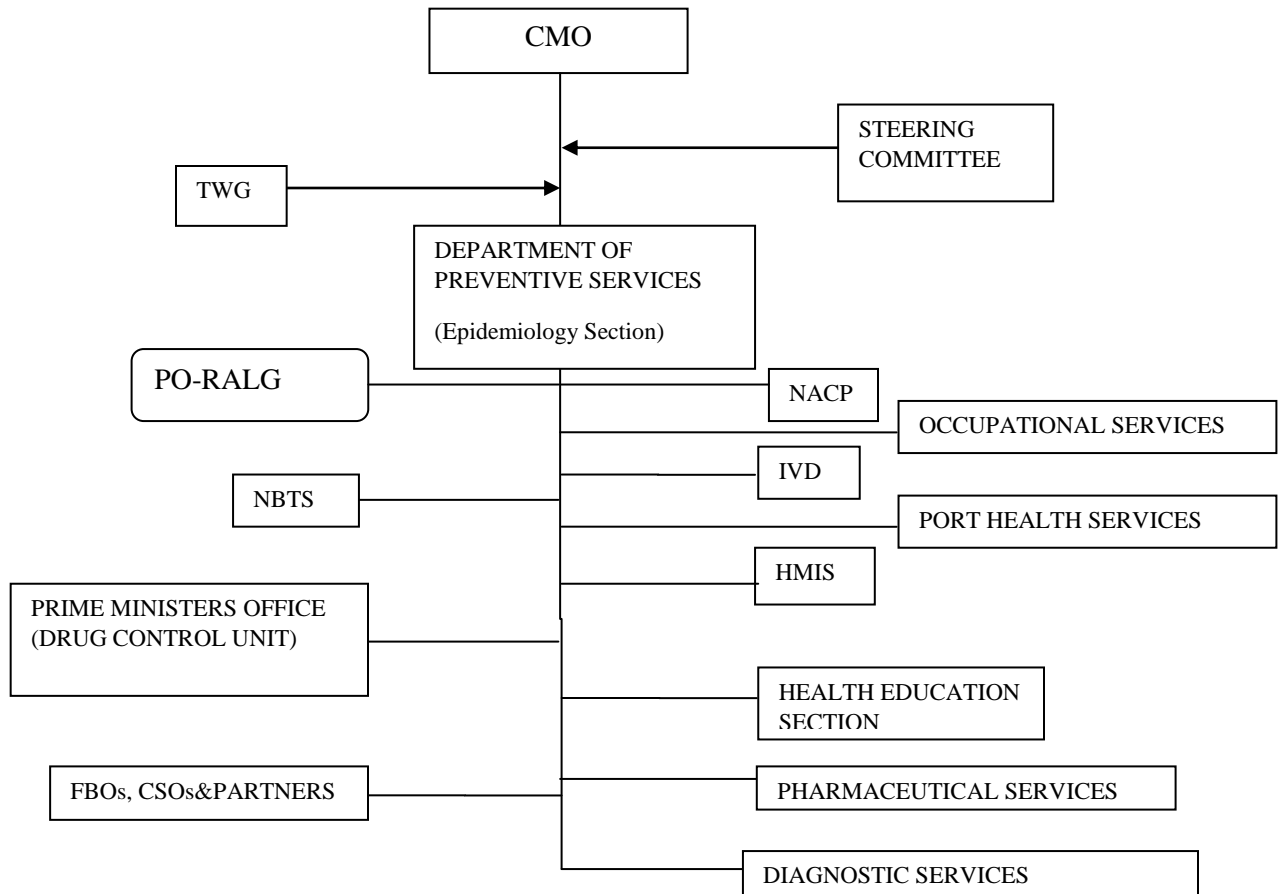
#### Priority area 5: Monitoring and Evaluation

<i>Specific Objective 1: Routine monitoring and evaluation of the strategic plan implementation outcomes.</i>	
<b>Strategic interventions</b>	<b>Activities</b>
4.7 Integrate Monitoring and Evaluation for Viral Hepatitis control in the existing systems	<p>4.7.1 Periodically assess utilization of testing and treatment services for viral Hepatitis.</p> <p>4.7.2 Evaluate progress in the implementation of the strategic plan.</p> <p>4.7.3 To conduct biomarker surveys to monitor diseases trends</p> <p>4.7.4 To monitor quality of surveillance including epidemiological data and address critical gaps</p>

## CHAPTER FOUR

### IMPLEMENTATION OF THE STRATEGIC PLAN

#### Institutional and regulatory framework



#### Regulatory Framework

The viral hepatitis policies and activities in Tanzania will be based on policies, guidelines and legislations available at national and international levels.

#### National Policy, Legislations and Guidelines

The MOHCDGEC has a national health policy which states on prevention and management of both communicable and non-communicable diseases of which viral hepatitis and liver cancer are among. Also there are several Legislations, guidelines and Strategies which have intervened on the prevention and control of the Viral Hepatitis. Among the key are; National Strategy for Growth and Reduction of Poverty (NSGRP II or MKUKUTA II); HSSP IV; Strategic plan for

Prevention of HIV, HBV and TB at workplace; HIV and AIDS Strategies Plan IV User Guide on Viral Hepatitis B and C and screening and management among blood donors.

### **International Policies and Guidelines**

Preparation of the Tanzania strategy for viral hepatitis has been guided by international strategies such as; Sustainable Development Goals (SDGs) no 3 which aims to “*End the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases*”, as well as World Health Organization (WHO) Global Health Sector Strategy on viral hepatitis, 2016–2021 and other guidance from the Africa Region Committee; Framework for Action (2016-2021) on Prevention and Control of Viral Hepatitis, Resolution AFR/RC66/12.

### **Roles and responsibilities**

#### **Ministry responsible for Health**

1. Lead, guide and coordinate hepatitis response
2. Develop policy, guidelines, legislations and strategies related to Viral Hepatitis
3. Ensure the implementation of the policies, guidelines and strategies related to Viral Hepatitis to high possible standard.
4. Supervise implementations of interventions related to Viral Hepatitis
5. Collaborate with development partners and others stakeholders related to Viral Hepatitis
6. Facilitate capacity buildings both in human resources as well as infrastructure.
7. Spearhead and coordinate all activities related to Viral Hepatitis.
8. Monitoring and evaluation of the progress of implementation of viral hepatitis activities
9. Mobilize financial resources through local and international mechanism.
10. Ensure provision of quality medical and diagnostic services.
11. Coordinate, facilitated and supervise procurement and distribution of diagnostics, treatment and prevention commodities country wide.

#### **Steering Committee**

Collectively, a Steering Committee for Viral Hepatitis Prevention and Control in the country will:

1. Participate in lobbying for resource mobilization necessary for the implementation of the plan.
2. Take on responsibility to monitor implementation of the plan and achievement of the desired outcomes.
3. Ensure that the implementation of Viral Hepatitis Strategies among key stakeholders aligns with the agreed National Plan.
4. Provide management support, direction and advice in line with the implementation of the interventions.
5. Ensure that strategies to address potential threats/risks to the plan success have been identified, costed and approved, and that the threats/risks are regularly re-assessed

### **Technical Working Group**

The TWG will compose Professionals with knowledge and experience in viral hepatitis interventions. There will be a balance mix of representations in the area of prevention, control, care and treatment including community mobilization.

The TWG will be responsible for;

- i. Provide technical advice on development and implementation of policies and strategies
- ii. Assist in fund mobilizations
- iii. Assist in creating awareness on viral hepatitis
- iv. Oversee implementation of guidelines and strategies

### **Development Partners**

Development Partners include bilateral organizations, multilateral organizations and private foundations. These partners are organized and coordinated through Development Partners Group for Health (DPG-Health) and they do complement Government efforts to improve Health Systems in the country. The complete list of Development Partners supporting the health sector is in the Annual Public Expenditure Review (PER) Health and these will also be involved in mobilization of resources to support the implementation of the strategic plan.

### **Implementing Partners**

These are both international and domestic Non-Government Organizations (NGOs) and Faith Based Organizations (FBOs) and Civil Society Organizations (CSOs). The plan will map through steering committee will map all the implementing partners supporting Viral Hepatitis interventions and additionally encourage Immunization, HIV/AIDS and Health Systems Partners to extend support to viral hepatitis prevention and control.

### **PO-RALG**

The President's Office Regional Administration and Local Government through health department oversee the functionality and reporting of Regional and Council Health Management Teams in line with the implementation of Viral Hepatitis Prevention and Control Strategies.

### **RHMT**

1. Lead the overall response to Viral Hepatitis at the regional level
2. Supervise, coordinate, monitor and evaluate Viral Hepatitis prevention, diagnosis, care and treatment in the region.
3. Provide technical support to CHMTs for incorporation into CCHP and implementation of intervention prevention, diagnosis, care, treatment at the council level.
4. Promote capacity development of health workers for provision of Viral Hepatitis prevention, diagnosis, care, treatment at the district level.



5. Ensure availability and adherence to national guidelines and standards related Viral Hepatitis.
6. Support CHMTs to collect, compile, analyze, interpret and disseminate data of Viral Hepatitis.
7. Receive, compile, analyze, use and disseminate data on Viral Hepatitis from the councils and send to the National Level.
8. Coordinate partners and implementer on implementation of activities related to Viral Hepatitis.

### **CHMTs**

1. Lead the overall response to Viral Hepatitis at the council level.
2. Coordinate and collaborate with stakeholders the planning and implementation of viral hepatitis prevention, care and treatment in the Council.
3. Plan and incorporate viral hepatitis activities into the council plan
4. Implementation, Monitoring & Evaluation and Supervision of viral hepatitis prevention, care, and treatment activities at the Council level.
5. Implement national guidelines and standards for Viral Hepatitis prevention, care and treatment
6. Ensure availability of Viral Hepatitis commodities and maintenance of equipment
7. Provide technical support to health facilities (district hospital, health centres, dispensaries) including voluntary agencies and private health facilities in the council for quality delivery of Viral Hepatitis services.
8. Develop capacity of Health workers for quality viral hepatitis prevention, care and treatment.
9. Ensure mechanism for community involvement in Health sector viral hepatitis prevention, care, Treatment and support services in place.
10. Collect, compile, disseminate and use of viral hepatitis related information and send them to the higher level.

### **Health Facilities**

1. Provide health Information and education on Viral Hepatitis to the community.
2. Provide prevention, care and treatment according to the guidelines.
3. Ensure collection and analysis of data for their own use and for forwarding to high level.

### **Community**

1. Implement actions from plan.
2. Mobilize people to be aware of Hepatitis services and access them
3. Mobilize resources for implementation Viral Hepatitis.
4. Management of the Plan

At the National level all the activities will be coordinated by the Ministry of Health Community Development Gender Elderly and Children through Epidemiology section. The focal point at the Ministry will coordinate all activities pertaining to Viral Hepatitis Prevention and Control in the country this include developing policy guidelines, planning, monitoring and evaluation, mobilizing both human and financial resources at the National level.

### **Financing Mechanisms**

The ministry will strengthen the existing available government financing mechanisms for viral hepatitis as well as attract and coordinate other resources from various stakeholders both within and outside the country. Therefore, there will be multiple financing mechanisms for the viral hepatitis activities including but not limited to:

1. Increasing government funding through MTEF of the ministry of health MOHCDGEC, PORALG and CCHP of the local government authorities.
2. Development partners' contributions.
3. Public private partnerships: Individual donations and fund raising activities.
4. Health insurance and community health funding.
5. Subsidization of diagnostics and medicines.

### **RISK MITIGATION**

The success of this plan depends on other factors and assumptions made during SWOT analysis. In order to achieve results will much depend on these factors. Resources availability and technical capacity will be key, leadership and coordination; and availability of diagnostics and treatment in the country.

<b>Risk</b>	<b>Mitigation of Risk</b>
1. Availability of Resource to implement Preventive and Control measures	<ol style="list-style-type: none"> <li>1. Government to set resources</li> <li>2. Advocate for Partners support</li> </ol>
2. Limited Diagnostic and Therapeutic facilities in the country	
3. Competing priorities in setting financial resources by the country	<ol style="list-style-type: none"> <li>1. Viral Hepatitis prevention and control activities to be included in the CCHP.</li> </ol>

## LOGICAL FRAMEWORK

<b>STRATEGIC OBJECTIVE 1: Promote advocacy and increase awareness on viral hepatitis to enhance utilization of services</b>			
<b>Priority Area Addressed: Advocacy</b>			
<b>Expected Impact</b>			
Viral Hepatitis eliminated as a public health problem by 2030			
<b>Expected Outcome</b>			
Viral hepatitis awareness increased and services utilization enhanced			
<b>Expected Output</b>			
Political leaders and policy makers engaged in advocating for viral hepatitis preventive and curative services			
<b>Strategic intervention 1.1: Forge for political support in addressing Viral Hepatitis</b>			
<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>	<b>Assumptions</b>
1.1.1 Prepare policy brief on viral hepatitis for policy makers	Policy brief in place Number of policy brief meetings conducted	Minutes and reports of the meetings, available at the Ministry	Political will, resources, and evidenced data available
1.1.2 Conduct sensitization meetings on viral Hepatitis for all regional, district, ward and village leaders including influential people	Number of meetings conducted Proportion of regions and districts that have been sensitized on viral hepatitis	Minutes and reports of the meetings available at the Ministry	
1.1.3 Share viral hepatitis information and updates in the political platforms in the country eg. UHURU torch and existing integrated campaigns	Number of campaigns and political for where information on VH is part of the agenda	Reports available at the Ministry	Political will and resources are available
1.1.4 Commemorate World Hepatitis Day at national and sub-national levels	Number of media sessions conducted Number of people screened at commemoration day	Reports available at the Ministry	
1.1.5 Enhance collaboration with the private sector stakeholders to promote partnerships for viral hepatitis activities	Number and type of private stakeholders identified who support VH activities Number of partnership established on VH Number of meetings with private sector stakeholders	Document showing number, type and location of private sector stakeholders  Minutes and meeting reports	

1.1.6 Conduct advocacy among decision makers on the need to introduce Hepatitis B birth dose vaccination	Hepatitis B vaccine birth dose introduced in the country		
<b>Priority Area Addressed: Raising Awareness</b>			
<b>Expected Impact</b>			
To eliminate viral hepatitis as a public health problem by 2030			
<b>Expected Outcome</b>			
Viral hepatitis awareness increased and services utilization enhanced			
<b>Expected Output</b>			
Public awareness on Viral Hepatitis increased			
<b>Strategic Intervention 1.2: Increase community awareness on viral hepatitis and reduce stigma and discrimination</b>			
<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>	<b>Assumptions</b>
1.2.1. Develop, print and disseminate Information Education and Communication (IEC) materials on viral hepatitis B and C prevention, care and treatment	Number of work sessions conducted for IEC materials development	Minutes and reports of the work sessions available at the Ministry Report(s) for IEC materials development	
	Number and type of IECs materials developed	Printed IECs materials available at the Community/Health Facilities/Ministry Issuing and receipt list available at the Ministry	
	Number of dissemination sessions conducted	Minutes and reports of the dissemination sessions available at the Ministry	
1.2.2 Create demand for Viral Hepatitis services through dissemination of prevention, care and treatment information by mass media, social media and community campaigns	Number of clients seeking hepatitis services within the different entry point	HMIS/EMR at available at the Health Facilities/Ministry	
1.2.3 Foster collaboration with other implementing partners in Viral Hepatitis B and C to improve service uptake and provision	Number of clients seeking hepatitis services	HMIS/EMR at available at the Health Facilities/Ministry	
	Number and types of implementing partners engaged	Minutes and reports of the meeting involving other implementing partners available at the Ministry	

<p>1.2.4 Conduct Viral hepatitis B and C campaigns in educational, religious and correctional institutions</p>	<p>Number of campaigns conducted for IEC materials development  Proportion of educational schools that are aware of information on viral hepatitis  Proportion of correctional services institutions that are aware of information on viral hepatitis</p>	<p>Reports of the sessions available at the Ministry</p>	
<p>1.2.5 Collaborate with Ministry of Labour and any other relevant ministries to advocate for viral hepatitis prevention at the work place</p>	<p>Number or proportion of Ministries engaged   Number of advocacy sessions conducted with different ministries</p>	<p>Reports available at the Ministry   Reports of the advocacy sessions available at the Ministries</p>	
<p>1.2.6 Partner with community groups, NGOs, FBOs and CSOs to increase awareness to high risk groups about viral hepatitis and promote access to prevention, care and treatment services</p>	<p>Number of community groups, NGOs, FBOs and CSOs identified as partners   Number of meetings with community groups, NGOs, FBOs and CSOs conducted</p>	<p>Document showing type, number and location of community groups, NGOs, FBOs and CSOs available at the ministry  Implementation reports from identified community groups, NGOs, FBOs and CSOs available at the Partners/Ministries   Reports available at the Ministry</p>	

<b>STRATEGIC OBJECTIVE 2: Strengthen preventive measures to halt transmission of viral hepatitis within the population</b>			
<b>Priority Area Addressed: Vaccination</b>			
<b>Expected Impact</b>			
Viral Hepatitis eliminated as a public health problem by 2030			
<b>Expected Outcome</b>			
Preventive measures strengthened, to halt transmission of viral hepatitis within the population			
<b>Expected Output</b>			
Hepatitis B transmission prevented through vaccination			
<b>Strategic intervention 2.1: Vaccinate Children, health care workers and other high risk groups against Hepatitis B</b>			
<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>	<b>Assumptions</b>
2.1.1 Vaccinate Health Care Workers against Hepatitis B	Proportion of Health Care Workers who received 3 doses of Hepatitis B vaccine	Reports of vaccination of health workers	Vaccines and funds available
2.1.2. Introduce Hepatitis B Birth Dose into routine childhood immunization services	Proportion of health facilities providing the monovalent HBV birth dose Proportion of new-borns who received Her B birth dose (Hep B birth dose coverage) % of new-borns vaccinated with 24 hours of delivery	HMIS and DHIS 2 database	Political will, Vaccines and funds available
2.1.3 Procure hepatitis B vaccine and related commodities for Health Care Workers and other high risk groups	Number of Hepatitis B vaccine doses and commodities procured  Proportion of Health Care Workers having received 3 doses of Hepatitis B vaccination	Ledgers, reports from IVD  Reports of vaccination of health workers	Resources available
2.1.4 Print and Disseminate Hepatitis B vaccination SOPs for adults	Number of SOPs printed and disseminated	Available SOPs at implementation site	Resources available
2.1.5 Introduce cost sharing mechanisms for Hepatitis B vaccination for people at high risk of HBV infection	Number of insurance companies covering for hep B vaccines	Document showing a list of insurance companies financing Hep B vaccination	Insurance companies and people sensitized
	Proportion of people at high risk able to pay for hep B vaccine	HIMS and DHIS2	

<b>Priority Areas Addressed:</b> Blood safety			
<b>Expected Impact</b>			
Viral Hepatitis eliminated as a public health problem by 2030			
<b>Expected Outcome</b>			
Preventive measures strengthened, to halt transmission of viral hepatitis within the population			
<b>Expected Output</b>			
Transmission of HBV and HCV through Blood Transfusion prevented			
<b>Strategic Intervention 2.2:</b> Strengthen clinical evaluation and assess risk factors for Viral hepatitis before blood donation including referral for those infected			
<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>	<b>Assumptions</b>
2.2.1 Conduct refresher training to service providers on adherence to Standard Operating Procedures on screening Blood Donors as outlined by NBTS	Number of trainings conducted	Training reports	
	Number of service providers trained	Training reports	
2.2.2 Orient service providers on referral system mechanism, networking and management of blood donors infected with HBV and HCV	Number of trainings conducted to providers	Training reports	
	number of service providers trained	Training reports	
	Proportion of blood donors found with HBV and or HCV who are successfully linked to care and treatment services	HIMS and DHIS2 NBTS HMIS	Referral forms will be utilized follow up will be documented
<b>Strategic Intervention 2.3:</b> Ensure all donated blood units are screened for HBV and HCV in a quality-assured manner			
<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>	<b>Assumptions</b>
2.3.1 Supportive supervision to strengthen quality control measures for laboratory testing of HBV and HCV at NBTS at zonal level	number of supportive supervisory visits conducted	supervision reports	
2.3.2 Strengthen the existing courier system for blood sample transportation to ensure all units collected are universally tested in a quality-assured manner	Number of zonal blood banks strengthened	Sample rejection reports from testing laboratories.	
	Proportion of samples received at testing centres in adequate and quality condition.		

2.3.3 Train staff at LGAs health facilities on cold chain and blood sample management to preserve the integrity of samples	number of trainings conducted and trainees trained proportion of LGAs practicing proper cold chain and blood sample management	training reports	Insurance companies and people sensitized
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<b>Priority Areas Addressed:</b> Infection Prevention and Control-Injection Safety (IPC-IS)			
<b>Expected Impact</b>			
Viral Hepatitis eliminated as a public health problem by 2030			
<b>Expected Outcome</b>			
Preventive measures strengthened, to halt transmission of viral hepatitis within the population			
<b>Expected Output</b>			
Infection Prevention and Control-Injection Safety (IPC-IS) promoted, in- and out of health care settings			
<b>Strategic Intervention 2.4: Strengthen</b> Infection Prevention and Control-Injection Safety (IPC-IS) in health facilities, NBTS, Port health centers and the community			
<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>	<b>Assumptions</b>
2.4.1 Conduct refresher training on IPC including PEP among Quality Improvement Teams (QIT) so that they cascade the training to the rest of HCWs	number of trainings conducted and trainees trained  Proportion of QIT that have been trained on IPC including PEP	training reports	
2.4.2 Provide Post Exposure Prophylaxis (PEP) services for prevention of HBV infection among healthcare workers	Proportion (number) of HCW receiving PEP after Hep B infection exposure	HMIS and DTIS database	
2.4.3 Conduct sensitization meetings with HMT, CHMT and RHMT on supply of adequate PPE, appropriate syringes and waste segregation equipment for infection control in all work places	number of sensitization meetings conducted	Meeting reports	
	Proportion (number) of the HMT, CHMT and RHMT members sensitized Proportion of HMTs that are practicing IPC according to national guidelines	Meeting reports	



2.4.4 Liaise with respective directorate for inclusion of needle stick injury, vaccination for health care workers, hepatitis PEP, birth dose, into the existing checklist utilized by RHMTs and CHMTs during supportive supervision for improved viral hepatitis prevention in health care settings	proportions (number) of the RHMTs and CHMTs with checklists addressing viral hepatitis (vaccination, PEP, birth dose)	Supportive supervision reports	
	Number of supportive supervisions conducted	Supportive supervision reports	
	Existing HMIS able to report the needle stick injuries and other exposures	HMIS database	
2.4.5 Incorporate needle stick injuries and other exposures at work places within existing health information system in order to monitor the burden of exposure to hepatitis and other blood borne pathogens.	The number of needle stick injuries	Reports from working places	

**Priority Areas Addressed: Key and Vulnerable Groups**

**Expected Impact**

Viral Hepatitis eliminated as a public health problem by 2030

**Expected Outcome**

Preventive measures strengthened, to halt transmission of viral hepatitis within the population

**Expected Output**

Access on viral hepatitis preventive services among key and vulnerable groups enhanced

**Strategic Intervention 2.5:** Ensure that people who inject drugs, pregnant women and travellers in special circumstances, have access to viral hepatitis prevention services

Activities	Indicators	Means of verification	Assumptions
2.5.1 Improve access to viral hepatitis screening, testing, linkage to care and treatment for PWID attending harm reduction services and/or in MAT clinics as part of a comprehensive package on harm reduction services	proportion ( or number)of the PWIDs attending harm reduction services/MAT clinics with access to VH services	Register/database	

2.5.2 Utilize Needle Syringe Exchange demonstration project in HIV/AIDS Program for prevention of viral hepatitis	Proportion (number) of HIV/AIDS CTCs offering needle syringes exchange to PWIDs	Register/database	
	Proportion of people at HIV/AIDS clinics received needle exchange demonstration,	Register/database	
	number of platforms in Needle Syringe Exchange demonstration that are also being used for viral hepatitis	Activity report	
2.5.3 Improve access to viral hepatitis prevention services to travellers in special circumstances such as those travelling to endemic countries, pilgrims, people participating in international events and those under military assignments.	Number of travellers receiving viral hepatitis prevention services	Port Health vaccination reports	
2.5.4 Improve access to viral hepatitis screening and referral to care and treatment services for pregnant women attending Reproductive and Child Health (RCH) clinics.	Proportion (number) of RCH clinics which offer viral hepatitis screening	Database	
	Proportion (number) of pregnant women attending RCH clinics who have an HBV test done and receive results	Database	
	Number of women attending RCH clinic found positive accessing treatment services	Referral forms/registers	
<b>STRATEGIC OBJECTIVE 3: Establish access to diagnostic, care and treatment services to Viral Hepatitis in the context of continuum of care and in accordance with universal health coverage</b>			
<b>Priority Areas Addressed: Diagnostics</b>			
<b>Expected Impact</b>			
Viral Hepatitis eliminated as a public health problem by 2030			
<b>Expected Outcome</b>			
Access to <i>diagnostic, care and treatment</i> services to Viral Hepatitis established			
<b>Expected Output</b>			

Quality of screening and testing of infected persons with viral hepatitis improved			
<b>Strategic intervention 3.1 : Strengthen countrywide laboratory system to provide quality diagnosis of acute and chronic hepatitis</b>			
<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>	<b>Assumptions</b>
3.1.1 Update existing standard laboratory practice manuals for screening and diagnosis of viral hepatitis	Updated manual in place, Number of copies of updated manuals printed and distributed	Updated manual used during screening and diagnosis, report of working session to update manual	
3.1.2 Conduct training, supervision and monitoring of Laboratory Health Care Workers to support the implementation of Viral Hepatitis Screening and/or diagnostic testing.	Number of trainings conducted, number of supervisory visits conducted, Proportion of laboratory HCWs trained	Training and supervision reports	
3.1.3 Strengthen laboratory capacity to offer viral hepatitis testing at different levels through Diagnostic services	Proportion of laboratories with capacity to perform viral hepatitis diagnostic testing	Supervision reports	
3.1.4 Procure rapid diagnostic tests for hepatitis B and C and upgrade existing Gene Xpert machines to accommodate VH testing	# people screened for HBV and received results # people screened for HCV and received results Proportion of Gene expert machines testing for viral hepatitis	Supervision reports	Resource availability
3.1.5 Improve National Forecasting Quantification, procurement and timely delivery of VH commodities	Number of tests kits procured	Stock and supply report	Resource availability
	Functioning National Forecasting Quantification System (NHFQS)	Supervision reports	Resource availability
3.1.6 Incorporate VH laboratory information management system into the existing reporting systems	Functioning Laboratory management information system with VH information	Viral hepatitis laboratory indicators observed in the existing reporting system	
3.1.7 Provide HBV and HCV screening and testing services to at risk population	Proportion of people at risk of HBV and HCV who are aware of their status		

<b>Strategic intervention 3.2: Improve quality assurance and external quality control measures for laboratory testing of viral hepatitis</b>			
<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>	<b>Assumptions</b>
3.2.1 Incorporate a quality assurance mechanism into the existing system for HIV to promote quality implementation of viral hepatitis screening and testing recommendations.	Presence of functional EQA	EQA report	
3.2.2 Participate in external laboratory quality assurance activities	Proportion of laboratories enrolled in EQA	EQA report	
3.2.3 Conduct periodic review of laboratory data for quality improvement	Number of review sessions conducted	Review report	
<b>Priority Areas Addressed: Care and Treatment</b>			
<b>Expected Impact</b>			
Viral Hepatitis eliminated as a public health problem by 2030			
<b>Expected Outcome</b>			
Access to <i>diagnostic, care and treatment</i> services to Viral Hepatitis established			
<b>Expected Output</b>			
Quality of care and treatment for persons infected with viral hepatitis improved			
<b>Strategic intervention 3.3: Establish Viral Hepatitis care and treatment centres across relevant health care settings at regional level</b>			
<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>	<b>Assumptions</b>
3.3.1 Develop implementation plan for expanding access to care and treatment services for viral hepatitis in both Public and Private health facilities	Implementation plan in place	Reports from care and treatment centres	Resource availability
	Number of health facilities offering care and treatment services for viral hepatitis		

3.3.2 Sensitize RHMT, CHMT and HMT on integration of VH care and treatment in their respective hospitals	Number of sensitization meetings conducted	Meeting reports	
3.3.3 Develop standard clinical guidelines and job aids for diagnosis and treatment of VH	Standard clinical guideline and job aids in place	Guidelines and job aids in use at care and treatment centres	
3.3.4 Print and disseminate developed guidelines to the facilities which offer care and treatment services	Number of guidelines printed and disseminated	Supervision report	
	Proportion of health facilities with viral hepatitis treatment guidelines	Meeting reports	
3.3.5 To provide treatment for patients with HBV infection	# and % of HBsAg +ve patients assessed for treatment eligibility  Proportion or Number of eligible people who are receiving treatment for HBV infection  Proportion or Number of eligible people treated and retained in care	Patient registers	
3.3.6 To provide treatment for patients with HCV infection	# and % of anti-HCV patients who undergo a confirmatory test  % of patients with chronic HCV who are linked to care and treatment # and % of patients with chronic HCV who are receiving treatment  # and % of patients with chronic HCV treated and cured	Patient registers	

<b>Strategic intervention 3.4: Provide training and support for health care providers to manage and treat people with VH</b>			
3.4.1 Develop on job training manual for care and treatment of viral hepatitis	On job training manual developed and in place	Training report, supervision report	
3.4.2. Conduct trainings, supervision and monitoring to health care providers on management of viral hepatitis.	Number of training sessions conducted	Training report	
	Number of supervisory visits conducted	Supervision report	
<b>Strategic intervention 3.5: Integrate current therapies for chronic viral hepatitis into the National Essential Medicine List for sustainable supply</b>			
3.5.1. Involve and notify the National Essential Medicine List and Standard treatment guidelines for integration of recommended Anti-viral drugs for Viral hepatitis	Updated edition of National STG integrated includes Anti-viral drugs for viral hepatitis	Anti-viral drugs for viral hepatitis included in STG	
3.5.2. Incorporate the procurement of Hepatitis B and C Anti-viral drugs into the existing national Integrated Logistics System	Updated National Logistics system includes Hepatitis B and C Anti-viral drugs	Hepatitis B and C Anti-viral drugs procured through national Integrated Logistics System	
<b>Strategic intervention 3.6 Enhance treatment adherence and support</b>			
3.6.1 Educate patients on treatment and the importance of adhering to medications	Number of patients who undergo adherence counselling sessions	Counselling session reports	
3.6.2 Develop set of standards for patients follow up and care	Presence of SOPs in care and treatment centres	Supervision reports	
<b>Priority Areas Addressed: Linkage and referrals</b>			
<b>Expected Impact</b>			
Viral Hepatitis eliminated as a public health problem by 2030			
<b>Expected Outcome</b>			
Access to <i>diagnostic, care and treatment</i> services to Viral Hepatitis established			
<b>Expected Output</b>			
Potential stakeholders dealing with viral hepatitis identified for linkage in the national programme on viral hepatitis			
<b>Strategic intervention 3.7: Establish and develop guidance for linkage to involve key stakeholders in viral hepatitis care established</b>			
<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>	<b>Assumptions</b>

3.7.1 Map and establish collaborative network between key stake holders in viral hepatitis	Number of collaborations established, number and type of stakeholders identified, number of meetings with stakeholders held	Minutes of meetings with stakeholders, Documents with information on location, type and number of stakeholders involved in VH	Partners available
3.7.2 Prepare protocol to guide stakeholders in linking suspected/confirmed cases from other clinics (PWID, TB and HIV clinics, Prisons, correctional centres) to Hepatitis Clinics	Protocol in place	Activity report	
<b>Expected Output</b>			
Referral system established, to ensure effective access to care			
<b>Strategic intervention 3.8:</b> Create system and tools to enhance referral to care of all VH infected persons			
<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>	<b>Assumptions</b>
3.8.1. Establish standard referral network	Number of established referral centers	Document showing established referral centres	
3.8.2 Sensitize/orient health care workers on viral hepatitis referral network	Number of sensitization/orientation meetings held	Sensitization/orientation meetings report	
3.8.3. Develop tools for referral and feedback processes within the national viral hepatitis care programme	Number and types of referral tools developed	Surveillance report, activity report, referral tools in use	

<b>STRATEGIC OBJECTIVE 4: Strengthening strategic information systems and surveillance for monitoring, evaluation and evidence based decision making</b>
<b>Priority Area Addressed:</b> Understanding the context of viral hepatitis in the country and plan for viral hepatitis control
<b>Expected Impact</b>
Viral Hepatitis eliminated as a public health problem by 2030
<b>Expected Outcome</b>
Strategic information systems and surveillance strengthened for evidence based decision making
<b>Expected Output</b>
Epidemic pattern, population needs and available services for Viral Hepatitis control understood
<b>Strategic intervention 4.1 :</b> Collect baseline information to guide in response planning

<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>	<b>Assumptions</b>
4.1.1 Use THIS results to estimate prevalence of Chronic Infections with HBV and HCV in the general population and in sub-populations	Prevalence of chronic HBV and HCV estimated using THIS	Report produced	Quality data available
4.1.2 Estimate the population in need of treatment	Number of people infected with HBV and HCV estimated by region and by sub population	Report submitted to the preventive services at the MOH	Resources available, quality data available
4.1.3 Map and review the status of key prevention interventions	-Workshop conducted -No. of key interventions	Minutes and report available	
4.1.4 Incorporate Viral hepatitis indicators in IDSR guideline	Number of workshops conducted IDSR Guidelines with viral hepatitis indicators in place	Presence of viral hepatitis in IDSR guideline-online and printed	
<b>Priority Area Addressed: Programme data</b>			
<b>Expected Impact</b>			
Viral Hepatitis eliminated as a public health problem by 2030			
<b>Expected Outcome</b>			
Strategic information systems and surveillance strengthened for evidence based decision making			
<b>Expected Output</b>			
Programme performance indicators routinely monitored			
<b>Strategic intervention 4.2 : Monitor coverage for interventions</b>			
<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>	<b>Assumptions</b>
4.2.1 Monitor immunization coverage for third dose of Hepatitis B vaccine among infants	Immunization coverage for third dose of HBV vaccines among infants	Reports from data base	Reports available timely
4.2.2 Monitoring of Hepatitis B birth dose	% of newborns vaccinated within 24 hours of birth Immunization coverage for HBV vaccine birth dose	Reports from data base	Reports available timely
4.2.3 Incorporate testing and treatment indicators in the viral hepatitis data base	Type/list and number of indicators incorporated in data base	Indicators observed in data base	IT person availed



4.2.4 Incorporate testing and treatment indicators in HIMS including target setting	Type/list and number of indicators incorporated in HIMS	Indicators observed in HIMS	IT person availed
4.2.5 Capacitate health workers at the different levels to analyze and use their own data	Number of health workers capacitated # or % of facilities capable of conducting comprehensive data analysis and with evidence of local data use	Training report	IT person availed
<b>Priority Areas Addressed: Viral Hepatitis Surveillance</b>			
<b>Expected Impact</b>			
Viral Hepatitis eliminated as a public health problem by 2030			
<b>Expected Outcome</b>			
Strategic information systems and surveillance strengthened for evidence based decision making			
<b>Expected Output</b>			
Viral Hepatitis Surveillance in the country improved			
<b>Strategic intervention 4.3 : Strengthen the national, zonal, regional and district capacity to collect and report viral hepatitis surveillance data</b>			
<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>	<b>Assumptions</b>
4.3.1 Develop, print and distribute protocol for sentinel surveillance, reporting tools for data collection and standard case definition for acute viral hepatitis	Number of tools developed and distributed	Tools used at data collection sites	
4.3.2 To collect data from sentinel surveillance sites for Viral Hepatitis to enhance case reporting (surveillance for laboratory-confirmed, type-specific viral hepatitis) in order to describe trends and identify risk factors for infection	Number of site visits	Reports	
4.3.3 Conduct national surveillance among pregnant women attending ANC to determine the burden of Viral Hepatitis	Proportion of pregnant women attending ANC with HBV and HCV	Study report	At least 80% attend ANC
4.3.4 To disseminate information on Viral Hepatitis at national and sub-national levels for action	Number of dissemination meetings done	Annual reports	Resources available
<b>Strategic intervention 4.4: Establish Viral Hepatitis sentinel surveillance in sites with diagnostic capacity, (BMC, MNH, KCMC, Benjamin Mk</b>			

<b>gooapa, MZRH, Private Health Facilities and Regional Referral Hospitals for selected regions)</b>			
<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>	<b>Assumptions</b>
4.4.1 Capacitate health care providers to identify individuals at risk and for serological evidence or complete diagnosis, and reporting to the existing structures	Number of HCW capacitated	Training report	
4.4.2 Develop protocol for sentinel surveillance of viral hepatitis	Number of sentinel surveillance sites abiding to the protocol	Developed protocol disseminated and utilized	
4.4.3 To identify requirements and resources needed for surveillance activities in the sites	Documentation of required resources	Suppotive supervision report	
<b>Strategic intervention 4.5: Establish National estimates of Viral Hepatitis Incidence, Prevalence and Mortality</b>			
<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>	<b>Assumptions</b>
4.5.1 Determine incidence, prevalence and mortality through health facilities caring for patients with cirrhosis and hepatocellular carcinoma, national vital statistics or cancer registries	Estimates available	Published data, reports	
<b>Priority Areas Addressed: Operational research</b>			
<b>Expected Impact</b>			
Viral Hepatitis eliminated as a public health problem by 2030			
<b>Expected Outcome</b>			
Strategic information systems and surveillance strengthened for evidence based decision making			
<b>Expected Output</b>			
Priorities set for viral hepatitis epidemiological and operational researches			
<b>Strategic intervention 4.6: Conduct viral hepatitis epidemiological and operational researches in the areas of prevention, detection, care and treatment of viral hepatitis</b>			
<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>	<b>Assumptions</b>
4.6.1 Conduct epidemiological and operational research on viral hepatitis	Number of researches on viral hepatitis conducted	Research articles published	Resources available
4.6.2 Develop and share research agenda on viral hepatitis with relevant stake holders during annual meetings	Research agenda for viral hepatitis developed and shared	Minutes of the meeting for developing research agenda	
4.6.3 Disseminate research results through publications, bulletins, conferences to inform policy makers and implementers	Number of manuscripts, bulletins and conference presentations	Manuscripts, bulletins and presentations done	

<b>Priority Areas Addressed: Monitoring and evaluation</b>			
<b>Expected Impact</b>			
Viral Hepatitis eliminated as a public health problem by 2030			
<b>Expected Outcome</b>			
Strategic information systems and surveillance strengthened for evidence based decision making			
<b>Expected Output</b>			
Monitoring of the implementation of the Viral Hepatitis Strategic Plan and Evaluation of the outcomes done routinely			
<b>Strategic intervention 4.7 : Integrate monitoring and evaluation of Viral Hepatitis control in the existing systems</b>			
<b>Activities</b>	<b>Indicators</b>	<b>Means of verification</b>	<b>Assumptions</b>
4.7.1 Periodically assess utilization of testing and treatment services for viral Hepatitis	Number of people tested and treated	Analyzed data from testing and treatment	High uptake of testing and treatment services
4.7.2 Evaluate progress in the implementation of the strategic plan	Mid- and end-term reviews conducted	Mid- and end-term review report	Resources available
4.7.3 Conduct biomarker surveys to monitor disease trends	Data on disease trend	Survey report	
4.7.4 Monitor quality of surveillance including epidemiological data and address critical gaps	Timeliness, completeness and accuracy of data collected.	Supervision report	

## OPERATIONAL PLAN

### STRATEGIC OBJECTIVE1: Promote advocacy and increase awareness on viral hepatitis to enhance utilization of services

Sub-activity	Time					Location /Implementation level	Responsible Person (s)	Source of funds
	2018/19	2019/20	2020/21	2021/22	2022/23			
Prepare Policy briefs on viral hepatitis for policy makers						National	MOHCDGEC	GOT
Sensitization meeting to political leaders at National level						National	National Focal Person	GOT
Sensitization meeting to political leaders at regional level						Regional	RMOs/RHMTs	RMO/NGOs, PARTNERS
Sensitization meeting to political leaders at district level						District	DMOs/CHMTs	DMO/NGOs
Share Viral Hepatitis information and updates in the political platforms in the country: Uhuru torch committee, HIV Campaigns and cancer screening campaign members						National	National Focal Person	Multiple
Preparatory sessions for World Hepatitis Day						National	National Focal person	Multiple
Sensitization and dissemination of Hepatitis knowledge and preventive strategies on world commemoration day of viral hepatitis on meeting squares						National	National focal person	Multiple
Convene meeting with Stakeholders such as HIV Partners NGOs, FBOs, Private sector to promote partnership on hepatitis services						National	National Focal person	Multiple
Advocacy meetings among decision makers on the need to introduce Hepatitis B birth dose						National	IVD	Multiple
Development, printing and dissemination of IEC materials on VH at National level						National	National Focal person	GOT
Conduct meetings with Mass Media and social media stakeholders to create demand for VH services						National	HPS-MOH	TV/Redio/Magazines/Mobile phones company/ Bloggers
Identify and conduct meetings with existing Community campaigns team to disseminate information on hepatitis						National	National Focal person	Multiple
Identify and conduct meetings with advocacy groups on strategies to increase testing on hepatitis						National	National Focal person	Multiple

Identify and conduct meetings with HIV Partners, NGOs, FBOs, Labour Organisations, Educational, Correctional Institutions and Private sector on integration of Hepatitis B & C awareness and testing						National	National Focal Person	Multiple
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## STRATEGIC OBJECTIVE 2: Strengthen preventive measures to halt transmission of viral hepatitis within the population

Sub-activity	Date/Time Frame					Level of implementation	Responsible Entity	Source of funding
	2018/19	2019/20	2020/21	2021/22	2022/23			
Training of CHMT/RHMT on Hepatitis B Birth dose and Hep B immunization						National/Regional/District/HF	IVD Programme/ PO RALG	GoT
Procurement, distribution and utilisation of Hepatitis B Birth dose vaccines and related supplies						National	IVD Programme/ PO RALG	GoT
To conduct Hepatitis B Birth dose guideline development workshop						National level	IVD Programme	GoT
Training of CHMT/RHMT on Hepatitis B immunisation						National/Regional/District/HF	IVD Programme/ PO RALG	GoT
Procurement, distribution and utilisation of Hepatitis B vaccines and related supplies						National	DPS/ PO RALG	GoT
To print and disseminate Hepatitis B vaccination SOPs for adults						National, regional, district	DPS/DPP	GoT
To review IPC-IS guidelines						National	DHQA	Multiple
To print IPC-IS guidelines						National	DHQA	Multiple
To disseminate IPC-IS guidelines to health facilities, port health centers and other relevant stakeholders.						National	DHQA	Multiple
To conduct refresher training on IPC among QIT						National, regional, district	National Focal Person	Multiple
To conduct training on IPC-IS among port health officers providing vaccination						Designated Vaccination Centres	DPS	Multiple
To develop SOPs for PEP services for prevention of Hepatitis B infection among healthcare workers						National, regional, district	DHQA	Multiple
To conduct sensitization meetings with HMT, CHMT and RHMT on supply of adequate PPE, appropriate syringes and waste segregation equipment for infection control in all work places						National, regional, district	DHQA	Multiple
To conduct supportive supervision for monitoring adherence to Standard Operating Procedures (SOP) for improved viral hepatitis prevention in health facilities						national wide	DHQA	Multiple

To conduct supportive supervision for monitoring adherence to Standard Operating Procedures (SOP) for improved viral hepatitis prevention in port health centres						Designated Vaccination Centres	DPS	Multiple
Develop and disseminate SOPs for guiding community members dealing with sharp objects						National	DPS	Multiple
To incorporate needle stick injuries and other exposures at workplaces within existing health information systems in order to monitor burden of exposure to hepatitis and other blood borne pathogens						National	DPS	Multiple
To conduct awareness session to PWIDs for the need of screening for HepB infection						National	DPS	Multiple
To conduct screening for viral hepatitis for PWID at community level						National	DPS	Multiple
To orient healthcare workers on how to link identified positive HepB patients to care						National	DPS	Multiple
To conduct advocacy meeting with employers in both public and private on the need to provide Hep B vaccination to healthcare workers prior to employment						National	DPS	Multiple
To conduct working session to incorporate requirement of HepB vaccination for healthcare workers within the Public Health Act related regulations and other related documents such Basic Standards for Health Facilities						National	DPS	
To conduct awareness session to travellers and truck drivers for the need of screening for HepB infection						National	DPS	
To conduct screening for truck drivers and frequent travellers at designated port health centres						National	DPS	
To conduct training sessions to port health officers on how to screen and link identified positive HepB to care						National	DPS	
To conduct screening of hepatitis B virus among pregnant women during Antenatal visits						National	DPS	
To orient healthcare workers on how to link identified positive HepB to care						National	DPS	

**STRATEGIC OBJECTIVE 3: Establish access to diagnostic, care and treatment services to viral hepatitis in the context of continuum of care and in accordance with universal health coverage**

Sub-activity	Date/Time Frame					Location/Level of implementation	Responsible Entity	Source of funding
	2018/19	2019/20	2020/21	2021/22	2022/23			
							Epidemiology Section-MoHCDGEC	
To update existing standard laboratory practice manuals for screening and diagnosis of viral hepatitis						National	NHL-QATC	GoT, Partners
Provide training of Laboratory Health Care Workers to support implementation of viral hepatitis screening and/or diagnostic testing						Dodoma	NHL-QATC	GoT

Supportive supervision of Laboratory Health Care Workers						National	NHL- QATC	GoT
To strengthen laboratory capacity to offer viral hepatitis testing at different levels through diagnostic services.						National	NHL-QATC	GoT
To procure rapid diagnostic test kits for hepatitis B and C						National	NHL-QATC	GoT
To upgrade existing gene-Xpert machines to accommodate VH testing						National	NHL-QATC	GoT
To improve on national forecasting quantification, procurement and timely delivery of VH commodities						National	NHL-QATC	GoT
Incorporate VH laboratory information management system into the existing reporting systems						National	NHL-QATC	GoT
To enrol laboratories for external quality assurance activities						National	NHL-QATC	GoT
Periodic review of lab data for quality improvement.						National	NHL-QATC	GoT
To sensitize Hospitals on integration of viral hepatitis care and treatment						National	MoHCDGEC	GoT
To develop standard clinical guideline for diagnosis and treatment of viral hepatitis						National	MoHCDGEC	GoT
To print and disseminate developed guidelines to all the facilities which will offer care and treatment services						National	MoHCDGEC	GoT
To develop on job training manual for care and treatment of viral hepatitis						National	MoHCDGEC	GoT
To conduct trainings to identified health care providers on management of viral hepatitis.						National	MoHCDGEC	GoT
To conduct supportive supervision to identified Health facilities						National	MoHCDGEC	GoT
To involve and notify the National Essential Medicine list and Standard treatment guideline for integration of recommended Anti Viral hepatitis drugs						National	MoHCDGEC	GoT
To incorporate the procurement of Hepatitis B and C Anti viral drugs into the existing national Integrated Logistics System under MOHCDGEC						National	MoHCDGEC	GoT
To educate patients on treatment and the importance of adhering to medications						National	MoHCDGEC	GoT
To develop set of standards for patients follow up and care						National, Facilities	MoHCDGEC	GoT
Map and establish network between key stake holders involved in viral hepatitis						National	MoHCDGEC	GoT
Prepare protocol to guide stakeholders in linking suspected/confirmed cases from other clinics (PWID, TB and HIV clinics, Prisons, correctional centres) to Hepatitis Clinics						National	MoHCDGEC	GoT
To establish standard referral network and sensitize HCWs							MoHCDGEC	GoT

## STRATEGIC OBJECTIVE 4: Strengthening strategic information systems and surveillance for monitoring, evaluation and evidence based decision making

Sub-activity	Date/Time Frame					Location/Level of implementation	Responsible Entity	Source of funding
	2018/19	2019/20	2020/21	2021/22	2022/23			
Use THIS results to estimate prevalence of chronic infections with HBV and HCV in the general population and in subpopulations						National	Epidemiology Section-MoHCGDEC	GoT, partners
Estimate the population which need treatment						National	Epidemiology Section-MoHCGDEC	GoT, partners
Map and review the status of key prevention interventions						National, regional, district level	Epidemiology Section-MoHCGDEC	GoT, partners
Incorporate viral hepatitis indicators in IDSR guideline						National, regional, district level	Epidemiology Section-MoHCGDEC	GoT, partners
Monitoring of immunization coverage for third dose of Hepatitis B vaccine among infants and Hepatitis B birth dose						National, regional, district level	Epidemiology Section-MoHCGDEC	GoT, partners
Incorporate testing and treatment indicators in the viral hepatitis database						National, regional, district level	Epidemiology Section-MoHCGDEC	GoT, partners
Conduct training session to ToTs from district level to analyse an use own data						National, regional, district level	Epidemiology Section-MoHCGDEC	GoT, partners
Develop, print and distribute protocol for sentinel surveillance, reporting tools for data collection and standard case definition for acute viral hepatitis						National, regional, district level	Epidemiology Section-MoHCGDEC	GoT, partners
To collect data from sentinel surveillance sites for Acute Hepatitis to enhance case reporting						National, regional, district level	Epidemiology Section-MoHCGDEC	GoT, partners
To collaborate with institutions to incorporate the VH training modules into the pre- service curriculum						National	Academic Institutions	GoT, partners
To orient health workers from health facilities on case reporting of laboratory-confirmed, type-specific viral hepatitis, using revised IDSR guidelines						National, Regional, District and facility level	MoHCDGEC/PORALG	GoT, partners
To conduct national surveillance among pregnant women attending ANC to determine the burden of hepatitis						Health facilities	PORALG	GoT, partners
To disseminate information on Viral Hepatitis at national level, regional level and district level						National	MoHCDGEC	GoT, partners
To build capacity to health care providers in identifying individuals at risk and with serological evidence						Regional	MoHCDGEC/PORALG	GoT, partners
To develop protocol for Sentinel Surveillance of Viral Hepatitis						District	MoHCDGEC/PORALG	GoT, partners
To identify requirements and resources needed for surveillance activities in the sites						National	MoHCDGEC	GoT, partners



To determine incidence, prevalence and mortality through health facilities caring for patients with cirrhosis and hepatocellular carcinoma						National	Epidemiology Section MoHCDGEC	GoT, partners
Collect mortality data through cancer registries, health facilities, national vital statistics						National	MoHCDGEC	GoT, partners
Conduct epidemiological and operational research on viral hepatitis						National	Epidemiology Section MoHCDGEC	GoT, partners
To develop and share research agenda on viral hepatitis with relevant stakeholders during annual meetings						National	MoHCDGEC	GoT, partners
Disseminate research results through publications, bulletins and conferences to inform policy makers and implementers						National	MoHCDGEC	GoT, partners
Periodically assess utilization of testing and treatment services for viral hepatitis						National	MoHCDGEC	GoT, partners
Evaluate progress in the implementation of the VH strategic plan						National	MoHCDGEC	GoT, partners
To conduct a biomarker survey to estimate the prevalence of chronic viral hepatitis infection in the general population						National, Regional, District, Health facilities	MoHCDGEC, PORALG	GoT, partners
Integrate monitoring and evaluation for viral hepatitis control in the existing systems						National	MoHCDGEC, PORALG	GoT

**TARGETS FOR MONITORING OF HEPATITIS B AND C PROGRESS 2018-2023  
UNITED REPUBLIC OF TANZANIA**

Service coverage targets	Baseline		2020	2023	2030 Global Target
	Year	Value			
<b>Hepatitis B Virus Vaccination:</b> Childhood vaccine coverage (Third Dose)	2018	98%	98%	98%	90%
<b>Numerator:</b> Number of children aged one year, receiving three doses of pentavalent vaccine					
<b>Denominator:</b> Number of surviving infants in a particular year					
<b>Prevention of Hepatitis B mother-to-child transmission:</b> Hepatitis B virus birth dose vaccination coverage	NA	NA	NA	NA	90%
<b>Numerator:</b> Number of infants receiving HBV birth dose vaccine within 24 hrs after birth					
<b>Denominator:</b> Expected live births in a particular year					
<b>Blood safety:</b> Provide quality assured blood and blood products i.e. ensure that all donated blood is screened in a quality assured manner	2018	89%	95%	97%	100%
<b>Blood safety:</b> Decrease proportion of blood donors with Hepatitis B among people who donated blood	2017	6%	4%	2%	2%
<b>Safe injections:</b> Percentage of injections administered with safety in and out of health facilities	2018	50%	60%	70%	90%
<b>Harm Reduction:</b> Number of sterile needles and syringes provided per person who inject drugs per year	2017	15	50	200	300

<b>Viral Hepatitis B diagnosis coverage</b>	2017	4%	10%	40%	90%
<b>Numerator:</b> Cumulative estimated number of people provided with HBV testing services each year with positive results					
<b>Denominator:</b> Estimated people living with HBV infection in Tanzania aged 15 years and above (Prevalence 4.1%)					
<b>Viral Hepatitis C diagnosis coverage:</b> Assuming that, in 2018 alone, 525 people were diagnosed and HCV positive tests kits will be available, Key and vulnerable populations well defined and contribute a sizeable number of HCV cases so may be easier to reach	2017	5%	10%	50%	90%
<b>Numerator:</b> Cumulative estimated number of people provided with HCV testing services each year with positive results					
<b>Denominator:</b> Estimated people living with HCV infection in Tanzania aged 15 years and above (Assuming that 55% of the population are aged 15yrs and above, HCV prevalence 1%)					
<b>Viral Hepatitis B treatment coverage</b>	2017	2%	5%	40%	80%
<b>Numerator:</b> Number of people testing positive for HBV, who are under treatment with Tenofovir					
<b>Denominator:</b> Number of people with positive HBV testing results					
<b>Viral Hepatitis C treatment coverage</b>	2017	2%	5%	50%	80%
<b>Numerator:</b> Number of people testing positive for HCV, who have completed treatment					
<b>Denominator:</b> Number of people with positive HCV testing results					

## CONSOLIDATED BUDGET

#	Strategic Intervention	Output/Activities	Estimated Budget				
			2018/19	2019/20	2020/21	2021/22	2022/23
<b>STRATEGIC OBJECTIVE 1: Promote advocacy and increase awareness on viral hepatitis to enhance utilization of services</b>			<b>532,713,500</b>	<b>379,997,070</b>	<b>523,923,807</b>	<b>446,044,976</b>	<b>545,611,037</b>
<b>Priority Area 1: Advocacy</b>			<b>384,028,000</b>	<b>339,081,350</b>	<b>400,543,259</b>	<b>402,637,489</b>	<b>414,716,614</b>
<b>Specific Objective 1: Engage political leaders in advocating for viral hepatitis services and activities</b>							
1	1.1 Forge for political support in addressing Viral Hepatitis	1 Prepare policy briefs on viral hepatitis for policy makers	<b>32,418,000</b>	-	-	-	-
		2 Conduct sensitization meetings on viral Hepatitis for all regional, district, ward and village leaders including influential people	<b>31,200,000</b>	<b>64,272,000</b>	<b>116,303,068</b>	<b>119,792,160</b>	<b>123,385,925</b>
		3 Share viral hepatitis information and updates in the political platforms in the country eg UHURU torch and existing integrated campaigns	<b>51,800,000</b>	<b>53,444,000</b>	<b>55,269,800</b>	<b>56,927,894</b>	<b>58,635,731</b>
		4 Commemorate World Hepatitis Day at National and sub-national levels	<b>214,845,000</b>	<b>221,365,350</b>	<b>228,970,391</b>	<b>225,917,435</b>	<b>232,694,958</b>
		5 Enhance collaboration with the private sector stakeholders to promote partnerships for viral hepatitis activities	<b>19,640,000</b>	-	-	-	-
		6 Conduct advocacy among decision makers on the need to introduce HepB vaccine birth dose	<b>34,125,000</b>	-	-	-	-
<b>Priority Area 2: Raising Awareness</b>			<b>148,685,500</b>	<b>40,915,720</b>	<b>123,380,548</b>	<b>43,407,487</b>	<b>130,894,424</b>
<b>Specific Objective 1: Increase public awareness on Viral Hepatitis</b>							

1	1.2 Increase community awareness on viral hepatitis and reduce stigma and discrimination	1	Develop, print and disseminate Information Education and Communication (IEC) materials on viral hepatitis B and C prevention, care and treatment	72,111,500	40,915,720	42,143,192	43,407,487	44,709,712
		2	Disseminate information on viral Hepatitis B & C to religious and community leaders to mobilize communities for viral hepatitis B and C testing and prevention strategies	76,574,000	-	81,237,357	-	86,184,712
<b>STRATEGIC OBJECTIVE 2: Strengthen preventive measures to halt transmission of viral hepatitis within the population.</b>				<b>756,276,000</b>	<b>481,938,440</b>	<b>543,040,902</b>	<b>467,865,387</b>	<b>482,421,817</b>
<b>Priority Area 1: Vaccination</b>				<b>209,130,000</b>	<b>169,744,000</b>	<b>174,836,320</b>	<b>180,081,410</b>	<b>185,483,852</b>
<b>Specific Objective 1: Preventing Hepatitis B transmission through vaccination</b>								
1	Vaccinate against Hepatitis B for Children and high risk groups	1	To introduce HepB Birth Dose into routine childhood immunization	44,330,000				
		2	Procure hepatitis B vaccine and related commodities for high risk group	164,800,000	169,744,000	174,836,320	180,081,410	185,483,852
		3	Print and Disseminate Hepatitis B vaccination SOPs for adults	-				
		4	To introduce cost-sharing mechanisms for Hepatitis B vaccination for adults	-				
<b>Priority Area 2: Blood Safety</b>				<b>103,630,000</b>	<b>23,604,000</b>	<b>24,784,200</b>	<b>26,023,410</b>	<b>27,324,581</b>
<b>Specific Objective 1: To Prevent Transmission of HBV and HCV through Blood Transfusion</b>								
1	Strengthen clinical evaluation and HBV and HCV risk factors assessment before blood donation including referral for those found to be infected	1	To conduct refresher training to service providers on adherence to Standard Operating Procedures on screening Blood Donors as outlined by NBTS	30,510,000	-	-	-	-
		2	Orient service providers on referral system mechanism, networking and management of blood donors found with HBV and HCV infection	-	-	-	-	-

2	Ensure 100% of all donated blood units are screened in a quality-assured manner as per WHO standards for HBV and HCV	1	To conduct supportive supervision to strengthen quality control measures for laboratory testing of HBV and HCV at NBTS at zonal level	22,480,000	23,604,000	24,784,200	26,023,410	27,324,581
		2	To strengthen the existing courier system for blood sample transportation from blood collection point to zonal blood bank for testing in order to ensure all units collected are universally tested in a quality-assured manner	10,800,000	-	-	-	-
		3	To train health facility staff on cold chain and blood sample management to preserve integrity of samples from collection to zonal blood banks	39,840,000	-	-	-	-
<b>Priority Area 3: Infection Prevention and Control-Injection Safety (IPC-IS)</b>				<b>106,288,000</b>	<b>41,856,000</b>	<b>89,283,909</b>	-	-
<b>Specific Objective 1: Promote Infection Prevention and Control-Injection Safety (IPC-IS) in and out of health care settings</b>							-	-
1	Strengthen Infection Prevention and Control-Injection Safety in health facilities, NBTS, Port health centers and the community	1	To conduct refresher training on IPC among Quality Improvement Teams (QIT) so that they cascade the training to the rest of HCWs.	34,320,000	34,320,000	17,160,000	-	-
		2	To provide Post Exposure Prophylaxis (PEP) services for prevention of HepB infection among healthcare workers	7,536,000	7,536,000	3,768,000	-	-
		3	To conduct sensitization meetings with HMT, CHMT and RHMT on supply of adequate PPE, appropriate syringes and waste segregation equipment for infection control in all work places.	64,432,000		68,355,909		

		4	To liaise with respective directorate for inclusion of needle stick injury, vaccination for health care workers, hepatitis PEP, birth dose, into the existing checklist utilized by RHMTs and CHMTs during supportive supervision for improved viral hepatitis prevention in health care settings	-	-	-	-	-
		5	To incorporate needle stick injuries at workplaces within existing health information systems in order to monitor the burden of exposure to HBV and other blood borne pathogens.	-	-	-	-	-
<b>Priority Area 4: Key and Vulnerable Groups (People Who Inject Drugs, Pregnant women and Travellers needing special considerations)</b>				<b>337,228,000</b>	<b>246,734,440</b>	<b>254,136,473</b>	<b>261,760,567</b>	<b>269,613,384</b>
<b>Specific Objective 1:Enhancing access on viral hepatitis preventive services among Key and Vulnerable Groups</b>								
1	Ensure that people who inject drugs, pregnant women and travellers needing special considerations have access to viral hepatitis prevention services.	1	To improve access to viral hepatitis screening, testing, linkages and treatment for PWID attending harm reduction services and/or in MAT clinics as part of a comprehensive package on harm reduction services	97,680,000	-	-	-	-
		2	To utilize Needle Syringe Exchange demonstration project in HIV/AIDS Program for prevention of viral hepatitis	4,048,000	4,169,440	4,294,523	4,423,359	4,556,060
		3	Improve access to viral hepatitis prevention services to travellers needing special considerations (people under military assignments or attending international events or travelling to endemic areas, pilgrims, etc	47,100,000	48,513,000	49,968,390	51,467,442	53,011,465

		4	To improve access to viral hepatitis screening and referral for pregnant women attending reproductive and Health (RCH) clinics	188,400,000	194,052,000	199,873,560	205,869,767	212,045,860
<b>Strategic Objective 3: Establish access to diagnostic, care and treatment services to Viral Hepatitis in the context of continuum of care and in accordance with universal health coverage</b>				<b>926,273,000</b>	<b>572,711,200</b>	<b>616,044,186</b>	<b>603,396,742</b>	<b>643,058,700</b>
<b>Priority Area 1: Diagnostics</b>				<b>361,028,000</b>	<b>244,723,500</b>	<b>252,765,555</b>	<b>261,194,139</b>	<b>288,152,060</b>
<b>Specific Objective 1: Improve screening and provide quality viral hepatitis testing for early identification of infected persons in the course of the disease</b>								
1	Strengthen countrywide laboratory system to provide quality diagnosis of acute and chronic hepatitis	1	To update existing standard laboratory practice manuals for screening and diagnosis of viral hepatitis	53,828,000	-	-	-	-
		2	To provide training, supervision and monitoring of Laboratory Health Care Workers to support the implementation of Viral Hepatitis Screening and/or diagnostic testing.	122,970,000	91,565,000	95,823,950	100,286,269	123,085,784
		3	To strengthen laboratory capacity to offer viral hepatitis testing at different levels through diagnostic services	4,850,000	5,092,500	5,347,125	5,614,481	5,895,205
		4	To procure rapid diagnostic tests for hepatitis B and C as well as upgrade existing Gene Xperts machines to accommodate VH testing	73,500,000	73,500,000	73,500,000	73,500,000	73,500,000
		5	To improve on National forecasting Quantification, procurement and timely delivery of VH commodities	24,300,000	-	-	-	-
		6	Incorporate VH lab information management system into the existing reporting systems	4,850,000	4,995,500	5,145,365	5,299,726	5,458,718



2	Improve quality assurance, and external quality control measures for laboratory testing of viral hepatitis	1	Incorporate a quality assurance mechanism into the existing system for HIV to promote quality implementation of viral hepatitis screening and testing recommendations	4,850,000	4,995,500	5,145,365	5,299,726	5,458,718
		2	Participate in external quality assurance activities	22,500,000	64,575,000	67,803,750	71,193,938	74,753,635
		3	Periodic review of lab data for quality improvement	4,850,000				
		4	To provide HBV and HCV screening and testing services to the general population	44,530,000				
<b>Priority Area 2: Care and Treatment</b>				<b>526,415,000</b>	<b>322,003,400</b>	<b>333,874,802</b>	<b>335,853,859</b>	<b>348,367,433</b>
<b>Specific Objective 1: Improve quality of care and treatment for persons infected with viral hepatitis</b>								
1	Establish viral hepatitis care and treatment centres across all relevant health care settings at regional levels	1	To develop implementation plan for expanding access to care and treatment services for viral hepatitis in both Public and Private health facilities	90,450,000	-	-	-	-
		2	To sensitize RHMT, CHMT and HMT on integration of VH care and treatment in their respective hospitals	33,100,000	-	-	-	-
		3	To develop standard clinical guidelines and job aid for diagnosis and treatment of VH	67,200,000	-	-	-	-
		4	To print and disseminate developed guidelines to all the facilities which will offer care and treatment services	13,480,000	13,964,400	14,467,332	4,630,500	4,862,025
		5	To provide treatment for patients with HBV and HCV infection					
2	Provide training and support for health care providers to manage and	1	To develop on job training manual for care and treatment of viral hepatitis	8,285,000	-	-	-	-

	treat people with VH	2	To conduct trainings, supervision and monitoring to identified health care providers on management of viral hepatitis.	169,900,000	159,719,000	166,637,870	173,870,671	181,432,140
3	Integrate current therapies for chronic viral hepatitis in National Essential Medicine List for sustainable supply	1	To involve and notify the National Essential Medicine list and Standard treatment guidelines for integration of recommended Anti Viral hepatitis drugs	-	-	-	-	-
		2	To incorporate the procurement of Hepatitis B and C Anti-viral drugs into the existing national Integrated Logistics System under MOHCDGEC	144,000,000	148,320,000	152,769,600	157,352,688	162,073,269
4	Enhance treatment adherence and support	1	To educate patients on treatment on the importance of adhering to medications	-	-	-	-	-
		2	To develop set of standards for patients follow up and care	-	-	-	-	-
<b>Priority Area 3: Linkage and Referrals</b>				<b>38,830,000</b>	<b>5,984,300</b>	<b>29,403,829</b>	<b>6,348,744</b>	<b>6,539,206</b>
<b>Specific Objective 1: Identify potential stakeholders dealing with viral hepatitis for linkage in the national programme on viral hepatitis.</b>								
1	Establish and develop guidance for linkage to involve key stakeholders in viral hepatitis care.	1	Map and establish collaborative network between key stakeholders in viral hepatitis	5,810,000	5,984,300	6,163,829	6,348,744	6,539,206
		2	Prepare protocol to guide stakeholders in linking suspected/confirmed cases from other clinics (PWID, TB and HIV clinics, Prisons, correctional centres) to Hepatitis Clinics	5,810,000	-	11,620,000	-	-
<b>Specific Objective 2: To establish referral system to ensure effective access to care</b>				<b>27,210,000</b>	<b>-</b>	<b>11,620,000</b>	<b>-</b>	<b>-</b>
1	Create systems and tools to enhance referral to care of all viral hepatitis infected persons.	1	To establish standard referral network	5,810,000	-	11,620,000	-	-
		2	Sensitize/orient health care workers on viral hepatitis referral network	-	-	-	-	-

		3	To develop tools for referral and feedback processes within the national viral hepatitis care programme	21,400,000	-	-	-	-
<b>STRATEGIC OBJECTIVE 4: Strengthening strategic information systems and surveillance for evidence based decision making</b>				<b>451,317,833</b>	<b>314,372,717</b>	<b>360,568,920</b>	<b>335,063,271</b>	<b>384,888,029</b>
<b>Priority Area 1: Understanding the context of viral hepatitis in the country and plan for viral hepatitis control</b>				<b>50,066,667</b>	<b>46,763,250</b>	<b>48,363,834</b>	<b>50,020,343</b>	<b>51,734,772</b>
<b>Specific Objective 1: Understanding epidemic pattern, population needs and available services for Viral Hepatitis Control</b>				<b>50,066,667</b>	<b>46,763,250</b>	<b>48,363,834</b>	<b>50,020,343</b>	<b>51,734,772</b>
1	Collect baseline information to guide in response planning	1	Use THIS results to estimate prevalence of Chronic Infections with HBV and HCV in the general population and in sub-populations	9,720,000	10,011,600	10,311,948	10,621,306	10,939,946
		2	Estimate the population which needs treatment	21,388,333	22,220,067	23,084,355	23,982,480	24,915,772
		3	Map and review the status of key prevention interventions	14,108,333	14,531,583	14,967,531	15,416,557	15,879,053
		4	Incorporate Viral hepatitis indicators in IDSR guideline	4,850,000	-	-	-	-
<b>Priority Area 2: Programme data</b>					-	-	-	-
<b>Specific Objective 1: Routinely monitor programme performance indicators</b>					-	-	-	-
1	Routinely monitor programme performance indicators	1	Monitor immunization coverage for third dose of Hepatitis B vaccine among infants	-	-	-	-	-
		2	Monitoring of Hepatitis B birth dose	-	-	-	-	-
		3	Incorporate testing and treatment indicators in the viral hepatitis data base	-	-	-	-	-
		4	Conduct training sessions to ToTs from district level to analyze and use their own data	60,400,000	-	-	-	-
<b>Priority area 3: Viral Hepatitis Surveillance</b>				<b>229,601,667</b>	<b>205,280,717</b>	<b>211,439,138</b>	<b>217,782,312</b>	<b>224,315,782</b>

Specific Objective 1: Improve viral hepatitis surveillance in the country								
1	Strengthen the National, Regional and Districts capacity to collect and report viral hepatitis surveillance data	1	Develop, print and distribute protocol for sentinel surveillance, reporting tools for data collection and standard case definition for acute viral hepatitis	26,300,000	-	-	-	-
		2	To collect data from sentinel surveillance sites for viral Hepatitis to enhance case reporting (surveillance for laboratory-confirmed, type-specific viral hepatitis) in order to describe trends and identify risk factors for infection	35,993,333	32,953,133	33,941,727	34,959,979	36,008,779
		3	Conduct national surveillance among pregnant women attending ANC to determine the burden of viral hepatitis	28,365,333	29,216,293	30,092,782	30,995,566	31,925,433
		4	To disseminate information on Viral Hepatitis at national and sub-national levels for action	83,800,000	86,314,000	88,903,420	91,570,523	94,317,638
2	Establish Viral Hepatitis sentinel surveillance in sites with diagnostic capacity, (BMC, MNH, KCMC, Benjamin Mkapa, MZRH, Private Health Facilities and Regional Referral Hospitals for selected regions)	1	To capacitate health care providers to identify individuals at risk and for serological evidence or complete diagnosis, and reporting to the existing structures	-	-	-	-	-
		2	To develop protocol for Sentinel Surveillance of Viral Hepatitis	-	-	-	-	-
		3	To identify requirements and resources needed for surveillance activities in the site	-	-	-	-	-
3	Establish National estimates of Viral Hepatitis Incidence, Prevalence and Mortality	1	To determine mortality through national vital statistics or cancer registries and through health facilities caring for patients with cirrhosis and hepatocellular carcinoma	55,143,000	56,797,290	58,501,209	60,256,245	62,063,932
<b>Priority Area 4: Operational Research</b>				<b>34,000,000</b>	<b>35,020,000</b>	<b>36,070,600</b>	<b>37,152,718</b>	<b>38,267,300</b>

<b>Specific Objective 1: Set priorities in viral hepatitis epidemiological and operational research</b>								
1	Conduct viral hepatitis operational researches in the areas of prevention, detection and care and treatment	1	Conduct epidemiological and operational research on viral hepatitis.	34,000,000	35,020,000	36,070,600	37,152,718	38,267,300
		2	To develop and share research agenda on viral hepatitis with relevant stake holders during annual meetings.	-	-	-	-	-
		3	Dissemination of research results through publications, bulletin, conferences to inform policy makers and implementers.	-				
<b>Priority Area 5: Monitoring and Evaluation</b>			<b>77,249,500</b>	<b>27,308,750</b>	<b>64,695,348</b>	<b>30,107,897</b>	<b>70,570,176</b>	
<b>Specific Objective 1: Routine monitoring of the strategic plan implementation and evaluating the outcomes.</b>								
1	Intergrate Monitoring and Evaluation for Viral Hepatitis Control in the existing systems	1	Periodically assess utilization of testing and treatment services for viral Hepatitis	-	-	-	-	-
		2	Evaluate progress in the implementation through midterm and end term review of the strategic plan	51,241,167	-	36,021,160	-	38,956,885
		3	To conduct biomarker surveys to monitor diseases trends	-	-	-	-	-
		4	To monitor quality of surveillance including epidemiological data and address critical gaps	26,008,333	27,308,750	28,674,188	30,107,897	31,613,292
<b>TOTAL</b>			<b>2,666,580,333</b>	<b>1,749,019,427</b>	<b>2,043,577,815</b>	<b>1,852,370,376</b>	<b>2,055,979,583</b>	

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## LIST OF CONTRIBUTORS

NAME	INSTITUTION
DR. JANNETH MGHAMBA	EPIDEMIOLOGY AND DISEASE CONTROL SECTION, MoHCDGEC
DR. AZMA SIMBA	NATIONAL COORDINATOR, VIRAL HEPATITIS, MoHCDGEC
DR. HYACINTHA JAKA	CATHOLIC UNIVERSITY OF HEALTH AND ALLIED SCIENCES AND ZONAL HEALTH RESOURCES CENTRE, MWANZA
DR. JOHN C. RWEHASHA	HEAD, DEPARTMENT OF MEDICINE, MUHIMBILI NATIONAL HOSPITAL
MS. JACQUELINE MAKUPA	ENVIRONMENTAL HEALTH SECTION, MoHCDGEC
DR. JOYCE LYMO	DIRECTORATE OF POLICY AND PLANNING, MoHCDGEC
REDMIUS KAKULU	ENVIRONMENTAL HEALTH SECTION, MoHCDGEC
FADHILI KILAMILE	ENVIRONMENTAL HEALTH SECTION, MoHCDGEC
DR. EMMANUEL CHACHA	ENVIRONMENTAL HEALTH SECTION, MoHCDGEC
JOYCE ISRAEL MWASHA	PHARMACIST, MLOGANZILA HOSPITAL
EMMANUEL YOHANA	IMMUNIZATION AND VACCINE DEVELOPMENT PROGRAMME, MoHCDGEC
NGWENGWE BULULA	IMMUNIZATION AND VACCINE DEVELOPMENT PROGRAMME, MoHCDGEC
THEODORA NDUNGURU	OCEAN ROAD CANCER INSTITUTE
DR. JUMA ABDU	NATIONAL BLOOD TRANSFUSION SERVICES, MoHCDGEC
MR. JOSEPH BIRAGO	ENVIRONMENTAL HEALTH SECTION, MoHCDGEC

DR. ANGELINA SIJAONA	DIRECTORATE OF CURATIVE SERVICES, MOHCDGEC
DR. WERNER MAOKOLA	NATIONAL AIDS CONTROL PROGRAMME, MOHCDGEC
DR. TUMAINI NAGU	MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES
DR. BHAVIN JANI	WHO COUNTRY OFFICE, TANZANIA
DR. CHRISTINE MUSANHU	WHO COUNTRY OFFICE, TANZANIA
MR. AMBELE MWAFULANGO	NATIONAL HEALTH LABORATORY QUALITY ASSUARANCE TRAINING CENTRE
DR. SANIA SHAFI	FOCAL PERSON, VIRAL HEPATITIS, ZANZIBAR
DR. SANAA SAID	MNAZI MMOJA HOSPITAL, ZANZIBAR
DR. KASSIM KALINGA	MEDICAL VOLUNTEER, MOHCDGEC
DR. ERNEST NTAGAYE	RUANGWA DISTRICT COUNCIL, LINDI REGION