

REPUBLIC OF KENYA



MINISTRY OF HEALTH

# KENYA NATIONAL STRATEGY FOR THE PREVENTION AND CONTROL OF NON-COMMUNICABLE DISEASES

2015 - 2020



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FOR THE PREVENTION AND CONTROL OF  
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# ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
DM	Diabetes Mellitus
CSO	Civil Society Organization
CVD	Cardiovascular Diseases
DNCD	Division of Non-communicable Diseases
GDP	Gross Domestic Product
HCP	Health care Provider
HIV	Human Immunodeficiency Syndrome
HIS	Health Information System
ICC	Inter-agency Coordinating Committee
IDF	International Diabetes Federation
IEC	Information Education and Communication
MDG	Millennium Development Goals
MOH	Ministry of Health
MOE	Ministry of Education
MOF	Ministry of Finance
NCD	Non-communicable Diseases
NGO	Non Governmental Organization
NNSP	National Non-communicable Diseases/Conditions Strategic Plan
NNDSC	National Non-communicable Diseases Steering Committee
RTI	Road Traffic Injury
TCB	Tobacco Control Board
WHO	World Health Organization



# PREFACE

The Kenya Health Policy 2012-2030 aims at attaining the highest possible standard of health in a manner responsive to the health needs of the population. This policy will be achieved through six strategic objectives which include halting and reversing the rising burden of NCD's, reducing the burden of violence and injuries, providing essential health care, minimizing exposure to health risk factors, eliminating communicable diseases and strengthening collaboration with health related sectors which have a bearing on NCD prevention and control.

Within this strategy, several interventions to reduce and manage the burden of NCDs have been included based on the nature of risks. They include “downstream” interventions which are largely biological and target the individual, “midstream” which target groups of people such as institutions or communities and “upstream” interventions which focus on society as a whole.

The development of this Kenya National Strategy for the prevention and control of Non-communicable Disease, 2015–2020, gives directions to ensure that there will be significant reduction of preventable burden of NCDs in Kenya. The purpose of this strategic document is to provide a road map towards reducing the preventable morbidity and mortality due to NCDs and to improve the quality of life of all Kenyans in line with vision 2030.

This strategic document focuses on ten strategic objectives that are key to the reduction of the burden of NCDs. It is also aligned to the functional assignments between the two levels of governance (national and county) with respect to accountability, implementation, reporting and management lines.

This strategy proposes a comprehensive and innovative approach to harness and synergize NCDs prevention and control at all levels of health care service delivery. Its intention is to embrace a multisectoral approach by engaging all government sectors and nongovernmental organizations and signals a radical departure from past approaches in addressing the health agenda. It is also crucial that partnerships be put in place in order to ensure that all is done to decrease the burden caused by NCD.



To this end, the government is committed to working with development partners and civil society organizations to prioritise NCD prevention and control in line with global commitments for NCD.

This NCD strategic document also highlights the need for availability of skilled human resource, sustained adequate funding and partnership building at all levels of governance. It will also emphasize the need for mobilizing communities in fighting poverty in order to accelerate social and economic growth. The time is right for the country to take on NCDs prevention and control using the ‘people centred’ approach.

It is my belief that collectively we can make a difference: Let us all join hands in embracing healthy lifestyles towards achieving a NCD free society.



Mr. James Macharia  
Cabinet Secretary  
Ministry of Health

## ACKNOWLEDGEMENTS

The Ministry of Health wishes to thank all those who contributed to the successful completion of this document. This was a multi-stakeholder effort with numerous meetings and repeated editions over a lengthy period.

We hope that all partners, stakeholders and health care workers will adopt and continue to support us in implementing the National NCD strategy to halt and reverse the burden of NCDs as outlined in this strategy.

Special appreciation goes to the small team at the Division of Non-communicable Diseases that worked tirelessly to draft, consult on and edit this document. With the launch of this strategy, their passion to see a Kenya void of the preventable burden of NCDs has just but began bearing fruit.



We appreciate the special support from the office of the Cabinet Secretary, Principal Secretary, Director of Medical Services and the head of the department of preventive and promotive health Dr. Jack kioko. The division of non communicable diseases wishes to also thank the office of the Country representative of the WHO Dr. Custodia Mandlhate and her team for their invaluable technical support.

We are grateful for the support of the health departments in the various Counties and the NCD alliance, APHRC, DMI, AIHD, Local universities, Private hospitals, private practitioners, local NGOs, Civil Society and patient support groups.

We are indebted to the Kenya Red Cross, The International Association of National Public Health Institutes and the MOH/CDC CoAg for funding the process of development, printing, launch and dissemination of this document.

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The launch of this document is not an end in itself but the beginning of a rigorous process to prioritize NCD prevention and control to halt and reverse the burden of NCDs for the present generation and secure a healthier working and prosperous nation tomorrow.

The implementation of this strategy will take cooperation from all levels of both the National and County governments and across all the sectors in line with the multi-sectoral nature of NCDs.



# EXECUTIVE SUMMARY

Non-communicable diseases (NCDs) are the leading causes of morbidity and mortality globally, causing more deaths than all other causes combined, and they strike hardest at the world's low and middle-income populations. Currently NCDs causes over 63% of deaths globally, with 80% of these deaths occurring in developing countries. The World Health Organization (WHO) estimates that NCDs will cause 73% of global deaths and 60% of the burden of disease by 2020.

Besides the burden of deaths and disability, non-communicable diseases pose a greater social and economic burden to the economy. Several factors are implicated in this increasing burden; longer average lifespan, tobacco use, decreasing physical activity, harmful use of alcohol and increasing consumption of unhealthy foods. Fortunately, non-communicable diseases are largely preventable. Up to 80% of premature deaths from heart disease, stroke and diabetes can be averted with evidence based behavioral and pharmaceutical interventions.

Despite the aforementioned, the prevention and control of non-communicable diseases gets inadequate attention particularly in Sub Saharan Africa where the double burden of both NCD and Communicable diseases is being experienced.

In Kenya NCD accounts for more than 50% of total hospital admissions and over 55% of hospital deaths. It is in this regard that the Ministry of Health and partners have developed this strategic document to serve as a comprehensive guide to addressing this emerging epidemic.

The goal of this national NCD prevention and control Strategy is to reduce the preventable burden of morbidity, mortality and disability due to Non-communicable diseases through multi-sectoral collaboration at the county and national levels, to ensure the highest attainable standards of health and productivity throughout the life cycle for sustainable socioeconomic development.

This strategy has laid emphasis on the four major NCD: cardiovascular conditions, cancers, diabetes, and chronic obstructive pulmonary diseases and their shared risk factors. However, much emphasis has also been given to, haemoglobinopathies, mental disorders, violence and injuries, oral and eye diseases in line the Brazzaville Declaration on Non-



Communicable Diseases prevention and control in the WHO African region.

Within this strategy, the Ministry of Health aims to;

1. Establish mechanisms to raise the priority accorded to NCDs at national and county levels and to integrate their prevention and control into policies across all government sectors
2. Formulate and strengthen legislations, policies and plans for the prevention and control of non-communicable diseases at both county and national government levels.
3. Promote healthy lifestyles and implement interventions to reduce the modifiable risk factors for NCDs: unhealthy diets, physical inactivity, harmful use of alcohol, tobacco use and exposure to tobacco smoke.
4. Promote and conduct research and surveillance for the prevention and control of non-communicable diseases
5. Promote sustainable local and international partnerships for the prevention and control of non-communicable diseases
6. Establish and strengthen effective Monitoring & Evaluation (M&E) systems for NCDs and their determinants.
7. Promote and implement evidence based strategies and interventions for prevention and control of violence and injuries.
8. Put in place interventions to reduce exposure to environmental, occupational and biological risk factors
9. Strengthen health systems for NCD prevention and control across all levels of the health sector
10. Promote and strengthen advocacy, communication and social mobilization for NCD prevention and control

This Kenya national NCD Strategic plan 2015-2020 will act as the strategic blue print for the national and county response to non-communicable diseases prevention and control for the next five years in Kenya.

Dr. Nicholas Muraguri  
Director of Medical Services  
Ministry of Health



Courtesy of the Global action plan for the prevention and control of noncommunicable diseases 2013-2020.

## SCOPE

This strategic document will mainly focus on the four major non-communicable diseases cardiovascular diseases, cancer, chronic respiratory diseases and diabetes, which make the largest contribution to global morbidity and mortality due to non-communicable diseases. It will also focus on their four shared behavioral risk factors—tobacco use and exposure, unhealthy diet, physical inactivity and harmful use of alcohol.

However the scope of this NCD strategy is expanded in line with the Brazzaville Declaration to include haemoglobinopathies, mental disorders, violence and injuries, oral and eye diseases plus chronic diseases with an infective origin like rheumatic heart diseases which is a significant challenge in the region.

This strategy will emphasize on an integrated approach addressing non-communicable diseases and their risk factors using evidence based cost effective interventions. It also realizes the need of integrating non-communicable disease control into communicable disease prevention and control using existing primary health care platforms such as community health services, maternal and child health, school health, disease surveillance, HIV, TB and Malaria as entry points.

Priority for action will be placed on areas of policy development; risk factor reduction; strengthening and re-orientation of the health care systems to address NCDs; advocacy and community mobilization; health promotion; research; surveillance and the creation of networks and partnerships for disease control across various sectors.

This NCD strategy has embraced multisectoral action by identifying and promoting actions across all sectors that have a stake in the prevention and control of non-communicable diseases. It builds on the successes made in tobacco control and aims at integrating NCD prevention and control in multisectoral platforms in Kenya.

The strategy provides a road map of strategic directions for the national and county governments and all NCD stakeholders, to take coordinated and coherent action to attain the now domesticated nine voluntary global targets, including that of a 25% relative reduction in premature mortality from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases by 2025.

### RELATIONSHIP TO EXISTING GLOBAL INITIATIVES, NATIONAL LEGISLATIONS, POLICIES AND STRATEGIES

The National Non-communicable diseases strategic plan has been adapted from the global NCD action plan 2013-2020 and it also builds on the implementation of other global resolutions thereby mutually reinforcing them. These include:

- I. WHO Framework Convention on Tobacco Control (WHO FCTC) (resolution WHA56.1)
- II. Global strategy on diet, physical activity and health (resolution WHA57.17)
- III. Global strategy to reduce the harmful use of alcohol (resolution WHA63.13)
- IV. Sustainable health financing structures and universal coverage (resolution WHA64.9)
- V. Global strategy and plan of action on public health, innovation and intellectual property (resolution WHA61.21)
- VI. The Brazzaville declaration on non-communicable Diseases prevention and control in the WHO African region 2011.
- VII. Moscow declaration at the first ministerial conference on healthy lifestyles and NCD control 2011.
- VIII. Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases :A/RES/66/2(2011)
- IX. UN Decade of Action for Road Safety 2011-2020 A/RES/64/255 (2010)
- X. Comprehensive Global mental health action plan 2013-2020
- XI. Universal eye health: a global action plan 2014-2019

The strategy also provides a framework to support and strengthen implementation of existing national developmental blue prints and legislations including;

- I. Constitution of Kenya 2010
- II. Vision 2030
- III. Public Health Act Amendment 2012
- IV. Tobacco Control Act 2007
- V. Cancer prevention and control act 2012
- VI. Alcoholic drinks control Act 2010
- VII. Breast Milk Substitute Act 2007 Children's act 2001
- VIII. Occupational health and safety act 2007
- IX. The National Transport and Safety Authority Act 2012
- X. Public information and Communications act 2008
- XI. Traffic Act Cap 403 Amendment 2012

Lastly, the strategy has close linkages to the following policies, strategies and action plans and implementation of this will lead to significant gains in those interventions and activities highlighted by these documents:

- I. Kenya Heath Policy 2012-2030
- II. National Health Sector Strategic and Investment Plan 2013-2018
- III. Health Sector function assignment and transfer policy paper
- IV. School health Policy
- V. National Reproductive Health Policy
- VI. National Nutrition Action plan 2012-2017
- VII. National Diabetes Control Strategy
- VIII. National Cancer Control Strategy
- IX. Tobacco Control Action Plan 2010-2015
- X. National Road Safety Action Plan

**2025 GOAL  
PREMATURE  
MORTALITY  
25%  
REDUCTION**



## 9 GLOBAL NCD TARGETS

This Kenya National Non-communicable diseases strategic plan has been adapted from the WHO global NCD action plan 2013-2020 that aims to reduce global premature mortality from NCDs by 25% by 2025.



**GLOBAL 2025 TARGET  
TOBACCO USE  
30%  
REDUCTION**



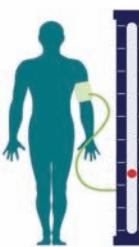
**GLOBAL 2025 TARGET  
PHYSICAL INACTIVITY  
10%  
REDUCTION**



**GLOBAL 2025 TARGET  
HARMFUL USE OF  
ALCOHOL  
10%  
REDUCTION**



**GLOBAL 2025 TARGET  
SALT/SODIUM INTAKE  
30%  
REDUCTION**



**GLOBAL 2025 TARGET  
RAISED BLOOD  
PRESSURE  
25%  
REDUCTION**



**GLOBAL 2025 TARGET  
DIABETES/  
OBESITY  
0%  
INCREASE**



**GLOBAL 2025 TARGET  
80%  
AVAILABILITY  
OF ESSENTIAL  
MEDICINES  
AND BASIC  
TECHNOLOGIES  
TO TREAT CVD  
AND OTHER NCDs**



**GLOBAL 2025 TARGET  
50%  
OF ELIGIBLE  
PEOPLE RECEIVING  
DRUG THERAPY  
AND COUNSELLING  
TO PREVENT  
HEART ATTACK  
AND STROKE**

# SECTION 1:

## Introduction

# SECTION 1: INTRODUCTION

The Kenya National NCD Strategic plan 2015-2020 is the strategic blue print for the national response to non-communicable diseases for the next five years in Kenya. This is the first plan that addresses NCD in the country and is adapted from the Global NCD Action Plan. It aims to inform national, county, sub county and community-level stakeholders on strategic directions to be taken into consideration when developing implementation plans on prevention and control of NCD. Development partners and stakeholders will also use this document to align their priorities and to support the country in its efforts to lower the burden of NCD.

This document establishes the framework for reducing morbidity and mortality from non-communicable diseases (NCD) in the context of broad health reform in Kenya as well as a “whole of government” and “whole of society” approach to promoting health.

## VISION

A nation free of avoidable burden of non-communicable diseases

## GOAL

To reduce the preventable burden, avoidable morbidity, mortality, risk factors and costs due to Non-communicable diseases and promote the well-being of the Kenyan population by providing evidence based NCD prevention and control interventions in order to ensure optimal health throughout the life course for sustainable socioeconomic development.

## GUIDING PRINCIPLES

The strategic plan relies on the following guiding principles and approaches

1. Multi-sectoral approach: The nature of NCDs and their risk factors calls for the involvement of both health and non health sectors in prevention and control measures. Mechanisms needs to be put in place to ensure that there is a coordinated multi-stakeholder engagement and multisectoral action for health both within government and by non government actors. Health should be incorporated in all policies and a whole of government approach where appropriate should be considered.
2. Life-course approach: Opportunities to prevent and control non communicable diseases occur at multiple stages of life; interventions in early life often offer the best chance for primary prevention. Policies, plans and services for the prevention and control of noncommunicable diseases need to take into account the health and social needs at all stages of life.
3. Human rights approach: The constitution of Kenya 2010 states that every citizen has the right to life, the right to the highest attainable standard of health and the right to access information. The National NCD Strategic Plan is firmly rooted in these rights.
4. Equity-based approach: The disparity in occurrence of NCDs is due to unequal distribution of social determinants of health. Action on the determinants of health, both for vulnerable groups and the entire population, is essential to



- create inclusive, equitable, economically productive and healthy communities.
- 5. Empowerment of Individuals and communities: Individuals and communities participation should be anchored in information geared toward helping them make informed decisions. In addition they should also participate in the prevention and control of non communicable diseases through advocacy, policy development, planning, legislation, service provision, research, monitoring and evaluation.
  - 6. Evidence-based: Interventions should be based upon evidence and implementation should focus on the achievement of well-formulated objectives and targets.
  - 7. Management of real, perceived or potential conflicts of interest: Public health policies, strategies and multi-sectoral action for the prevention and control of non communicable diseases must be protected from undue influence by any form of vested interest. Real, perceived or potential conflicts of interest must be acknowledged and managed.
  - 8. Integration: Intervention and approaches towards the prevention and control of NCDs should be integrated from policy development to service delivery with a focus on primary health care



# BACKGROUND

## Overview

Non-communicable diseases (NCDs), also known as chronic diseases, are not passed from person to person. They are of long duration and generally slow progression. The four main types of non-communicable diseases are cardiovascular diseases (like heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructed pulmonary disease and asthma) and diabetes. They share four major behavioral risk factors namely: tobacco use and exposure, unhealthy diet, physical inactivity and harmful use of alcohol.

Other NCDs of public health importance in Africa include haemoglobinopathies, mental disorders, violence and injuries, oral and eye diseases plus chronic diseases of an infective origin like rheumatic heart diseases. (WHO Brazzaville Report 2011)

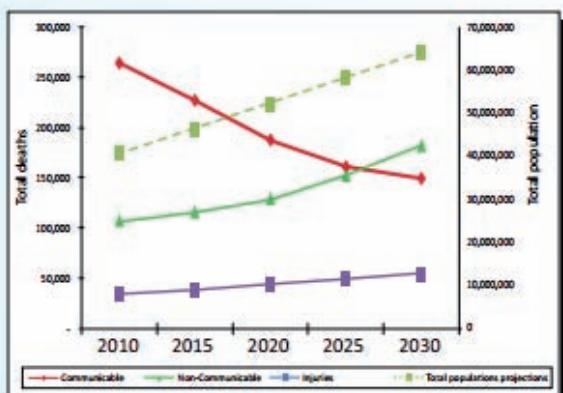
NCDs disproportionately affect low- and middle-income countries where nearly 80% of NCD deaths globally – 29 million – occur. They are the leading causes of death in all regions except Africa. However, current projections indicate that by 2020 the largest increases in NCD deaths will occur in Africa. By 2030 in African nations, deaths from NCDs are projected to exceed the combined deaths of communicable and nutritional diseases and maternal and perinatal deaths. (WHO NCD fact sheet 2013).

Kenya like most developing countries is facing a double burden of communicable and non-communicable diseases. Despite limited Data availability and quality , leading causes of death both in absolute numbers and in DALYs appears still to be due to infectious diseases (mainly HIV) and peri-natal conditions while cerebro-vascular diseases causes 6.1% of causes of deaths, and RTA and violence causes 2.5% of death and contributing 3.6% of DALYs. In turn, depression contributes 1.5% of DALYs (KHSSP 2013). In 2012 NCDs accounted for more than 50% of total hospital admissions and over 55% hospital deaths in Kenya (HMIS 2012).

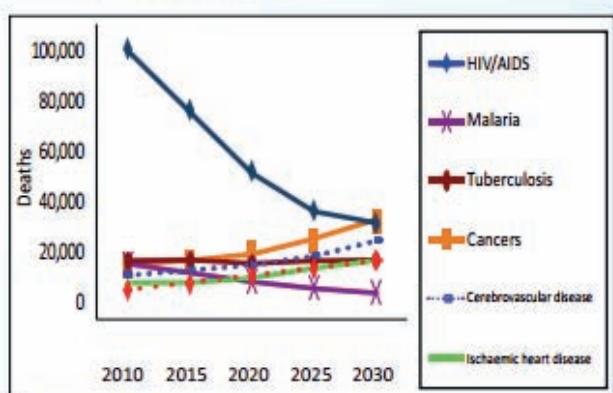
Future projections suggest that if policy directions and interventions that give more emphasis on communicable diseases are sustained, overall mortality will reduce by 360,000 persons (14%) annually by 2030. Even though the contribution by disease domain would be different, with communicable conditions contributing 140,000, NCDs contributing 170,000, and injuries contributing 60,000 in absolute numbers to the total reduction, it represents a 48% reduction in deaths due to communicable conditions, but a 55% increase in deaths due to NCDs, and a 25% increase in deaths due to injuries / violence as shown in the figure below.

## Health projections: 2011 – 2030

### By disease domain



### by disease condition

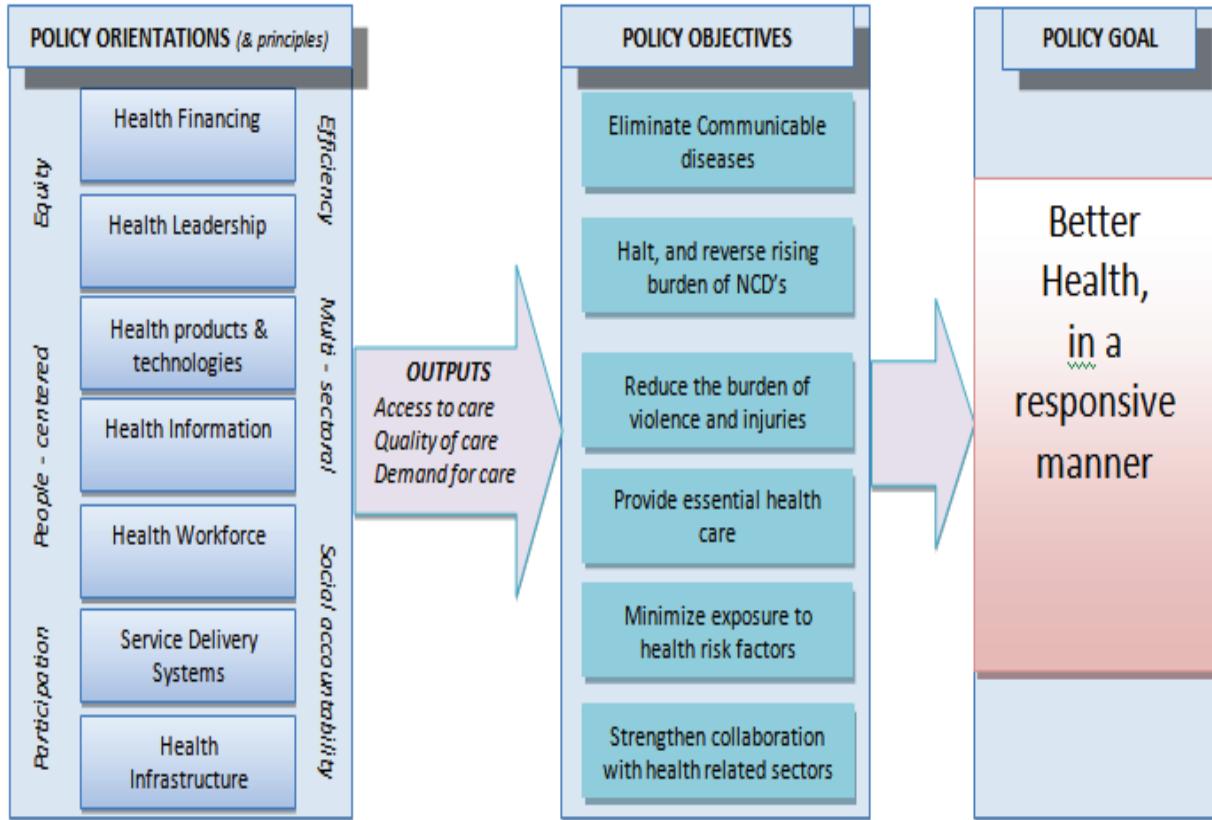


Source: Kenya Health Policy situation trends and distribution, 1994 – 2010, and projections to 2030

A verbal autopsy study among slum dwellers in Nairobi revealed that causes of death in this population was mainly due to infectious and peri-natal conditions, but also that the fraction of deaths caused by CVD and cancers was 13% and 8% among women respectively (INDEPT study 2014). The main contributors of morbidity and mortality, among the rural impoverished population and other disadvantaged groups are not well mapped out. While this population is also exposed to some of the shared risk factors and developing NCDs, they also face under nutrition and endemic NCDs such as haemoglobinopathies, eye and oral diseases, congenital conditions, rheumatic heart disease etc. These public health concerns have an uneven distribution in the population, and require a strong systematic approach and response.

To achieve the objectives of the Kenya Health policy 2012 -2030 of reversing the rising trends and burden of NCD, this strategic document establishes a framework for reducing morbidity and mortality from non-communicable diseases (NCDs) in the context of broad health reform in Kenya as well a “whole of government” and “whole of society” approach to promoting health. Reducing non-communicable diseases and their main behavioral risk factors will increase population “wellness” or wellbeing which will in turn promote economic and social development as well as reducing health expenditure at the individual and national level.





### Kenya Health Policy 2012-2030 –policy objectives

#### NCDs Risk factors in Kenya

NCDs share risk factors some of which are modifiable and others non modifiable. Some of the modifiable risk factors include;



#### Tobacco use

Tobacco is the leading preventable cause of premature death globally. It is estimated that it causes 5 million deaths annually and this may rise to 10 million by the year 2030 with 70% of these deaths occurring in developing countries if no proper public health initiatives are put in place. Tobacco use is a major risk factor for diseases and causes debilitating and often fatal conditions. Tobacco use causes cardiovascular diseases and cancers; it affects the respiratory, reproductive, gastrointestinal, genital, urinary, musculoskeletal and immunity systems. It is also responsible for congenital anomalies, low birth weight and respiratory conditions in children.

Half of long term users will eventually be killed by tobacco with 50% of these dying during their productive middle age years thus losing 20 to 25 years of productive life.

According to the Kenya Global Adult Tobacco Survey (GATS) (2014) despite the high prevalence (92.8%) of those who believed that smoking causes serious illness, overall, 11.6% or 2.5 million adults in Kenya, comprising 19.1% of men and 4.5% of women used tobacco (smoking and/or smokeless tobacco). About 7.8% or 1.7 million adults (15.1% of men and 0.8% of women) smoked tobacco while 4.5% or 1.0 million adults, comprising 5.3% of men

and 3.8% of women were currently using smokeless tobacco. Similarly, a high proportion of 71.9% of daily tobacco users use tobacco (smoking and/or smokeless tobacco) within 30 minutes of waking up in spite of the fact that 80.1% of adults favor increasing taxes on tobacco products to deter smokers from purchasing. Among the youth aged between 10-14 years, 7% are current tobacco users (9.6% boys and 4% girls) (GYTS 2013. 17.6 and 14.3% adults are exposed to tobacco smoke at the workplace and home respectively. (GATS 2014)

Kenya has made tremendous efforts to halt and reverse the tobacco epidemic. Kenya Signed and ratified the Framework Convention on Tobacco Control (FCTC) on 25th June 2004 and has domesticated in the comprehensive national legislation. The Tobacco Control Act (TCA) 2007. The TCA provides a legal framework for the control of the production, manufacture, sale, labeling, advertising, promotion, sponsorship and use of tobacco products including exposure to tobacco smoke.

The Act aims at protecting the health of the individual from debilitating illness, disease, disability and premature death. It also aims to protect the purchasers or consumers of tobacco products from misleading and deceptive inducements to use tobacco products and become addicted and inform them of the risks of using tobacco products and exposing others to tobacco smoke.

Furthermore, the Act provides for the protection of the health of children; protecting and promoting the rights of non-smokers to live in a smoke-free environment and the interest of tobacco growers by providing viable alternative crops.

While there has been considerable success in tobacco control in Kenya, this NCD strategy aims among other thing to advocate for the scale up and full implementation of the Tobacco Control Act 2007 to consolidate gains and further strengthen its enforcement at both National and county levels.



### Inadequate Physical Activity

Physical inactivity is recognized as an important risk factor for multiple causes of death and chronic morbidity and disability. Physical inactivity has been identified as the fourth leading risk factor for global mortality contributing to 6% of deaths. Moreover, physical inactivity is estimated to be the main cause for approximately 21–25% of breast and colon cancers, 27% of diabetes and approximately 30% of ischaemic heart disease burden.

Rates of Inadequate physical activity is estimated to be 10% in males and 14% in females (WHO 2014 ) with uneven distribution among rural and urban populations where levels of physical activity among rural populations is higher (Am J Hum Biol. Nov 2012). Children show signs of transition to a more sedentary lifestyle with only 12.6% of school children in a recent Nairobi study meeting the levels of adequate daily physical exercise (Muthuri et al, BMC Public Health. 2014).

Its role as a NCDs risk factor is well established and therefore a strong tool for prevention. Physical activity has tremendous health promoting and disease preventing benefits and define to a large extent people's health, growth and development.

Some of the barriers to physical activity in Kenya include urbanization with poor built environment planning, security, inadequate information, motorized transport and social cultural factors.



### Unhealthy Diets and Overweight/Obesity

Kenya is increasingly faced with diet-related non-communicable diseases, especially in urban areas. These result from the consumption of foods that are high in calories, sugars, trans- and saturated fats and salt but low in fruits and vegetables. Consumption of unhealthy diets and changing lifestyles has resulted in increased levels of cardiovascular diseases, cancers and diabetes (which are closely related to obesity and represent a significant development challenge). Being overweight and obese increases the risks of premature death and disabilities from NCDs that reduce the quality of life.

Evidence from the KDHS (2008-09) indicates increasing prevalence of overweight and obesity. The proportion of women aged 15-49 who are overweight and obese has increased from 23% in 2003 to 25% in 2008-09 with uneven prevalence distribution between rural (20%) and urban areas (39%), and the higher education and wealth quintiles being the most affected.

There is a marked variability of weight for height amongst school going children with 14.4 % of urban children being overweight while 6.4% are obese (Muthuri et al. BMC Public Health 2014).

Based on WHO cut-points, up to 4% of rural and 21% of Kenyan urban children are overweight/obese, and up to 9% of rural and 4% of urban children were underweight. This is in line with the overall physical activity levels as evidence consistently shows that children from rural Kenya are more physically active than their urban peers. The prevalence of low birth weight among Kenyan children stands at 11%, stunting at 35% and wasting at 6.7% (MIYCN 2013) which also increases risk of developing NCDs later in life.

Some of the barriers to consumption of healthy diets in Kenya include lack of awareness of healthy food choices, poverty, social cultural factors, urbanization and globalization.



### Harmful use of Alcohol

In more recent years the role of alcohol in non-communicable diseases, e.g., heart disease, liver cirrhosis and cancer, is increasing across the world and Kenya is no exception. About 30% of adult Kenyans (15 years old and above) have ever consumed alcohol, with lifetime abstention much higher among females (77.1%) than males (51.8%). Currently 13.7% of the population are alcohol drinkers which is a slight reduction since 2007. As has been commonly observed in African countries, drinkers consume large amounts of alcohol.

The adult annual per capita consumption is 4.3 litres of pure alcohol with the estimated consumption being 18.9 litres per drinker, much higher than the African average. Heavy episodic drinking has been reported among 5.2% of drinkers, and alcohol use disorders stands at 3.2%

in the general population (global alcohol report WHO 2014; NACADA RSA 2012). An estimated 5.8% of adult Kenyan males (15-64 years old) have some level of alcohol dependency with 2.4% of males falling under the category of abuse (SAPTA). In total 3.2% of adult Kenyans, may require some form of intervention (global alcohol report WHO 2014).

Kenya is particularly experiencing the negative impact of traditional beverages like chang'aa due to adulteration of these beverages with poisonous substances and methanol poisoning. Cases of death after consumption of these drinks are common and are widely reported. Road traffic accidents, violence and crimes, problems at the workplace and home, injuries, risky sexual behavior and public disorder have long become the dire consequences of high intake of alcohol in rural and urban Kenya.

Factors contributing to the harmful use of alcohol include poverty, ease of access, peer pressure, irresponsible marketing, cultural practices and globalization. Some of the measures put in place include legislation for alcohol and establishment of the National Authority for the Campaign against Alcohol and Drug Abuse (NACADA).

#### Other modifiable risk factors

In addition to the four main shared risk factors, air pollution, environmental degradation, climate change and psychological stress including chronic stress related to work or unemployment may contribute to morbidity and mortality from cancer, cardiovascular disease and chronic respiratory diseases.

In Kenya, exposure to environmental and occupational carcinogens such as asbestos, petroleum exhaust gases, and ionizing and ultraviolet radiation in the living and working environment increases the risk of cancer. Similarly, indiscriminate use of agrochemicals in agriculture and discharge of toxic products from unregulated chemical industries may cause cancer and other non-communicable diseases such as kidney disease. These exposures have their greatest potential adverse effects early in life, and thus special attention must be paid to prevent exposure during pregnancy and childhood.

### Major Non-communicable Diseases

#### Cancer

Cancer is one of the leading causes of death worldwide accounting for 13% of all global mortality. In Kenya, it is estimated to be the second leading cause of NCD related deaths after cardiovascular diseases and accounting for 7% of overall national mortality (NCD country profile 2014, WHO).

Existing evidence shows that the annual incidence of cancer is close to 37,000 new cases with an annual mortality of over 28,000 making cancer the third leading cause of death after infectious diseases and cardiovascular conditions. These estimates are conservative and could be higher given that many cases go unreported and unaccounted for.

The leading cancers in Kenyan women are breast, cervical and esophagus. Breast cancer affects 34 per 100,000 population while cervical cancer affects 25 per 100,000 population a clear indication of the threat cancer poses to women. In men, esophageal, prostate cancer and Kaposi sarcoma are the most common cancers with incidence rates of 17.5, 15.2 and 9.2 per



100,000 men respectively. (Nairobi Cancer Registry)

Existing evidence shows that up to 40% of global cancers are preventable through interventions such as tobacco control, reduction of alcohol consumption, protection against exposure to environmental and occupational carcinogens, promotion of healthy diets and physical activity (NCD: a vital investment, WHO 2010). Key interventions to be prioritized include primary prevention, early detection, effective diagnosis and treatment, pain relief and palliative care, cancer surveillance and research, monitoring and evaluation and proper coordination of cancer control and prevention activities.

Risk factors for cancer in Kenya includes genetic predisposition, behavioural risk factors (mainly smoking, alcohol use, inadequate physical inactivity and poor diet), environmental carcinogens (e.g. aflatoxin and asbestos), and infections (e.g. HPV in cervical cancers, Hepatitis B and C in liver cancers, H. Pylori in stomach cancers, HIV in Kaposi's Sarcoma).

While early detection ensures a favorable outcome and prognosis of most cancers, about 80% of reported cases are detected at an advanced stage when very little can be achieved in terms of treatment. Some of the challenges include low awareness of cancer signs and symptoms, inadequate early detection services, weak referral systems, poor treatment and palliative services. Achieving universal coverage for the key cancer control interventions will therefore be vital in halting and reducing the rising burden of cancer in Kenya.

### Diabetes

In 2013 the global burden of diabetes was estimated to be 382 million people. The International Diabetes Federation (IDF) estimates that this figure is likely to rise to 592 million by the year 2035 (IDF Atlas, 2013). This rise in diabetes is associated with demographic and social changes such as globalization, urbanization, aging population and adoption of unhealthy lifestyles such as consumption of unhealthy diets and physical inactivity.

In Kenya, the prevalence of diabetes in adults is estimated to be 4.56% according to IDF, amounting to almost 750,000 persons and 20,000 annual deaths. There is a disparity in distribution with an estimate of approximately 10.7% among urban and 2.7% among rural dwellers (Diabetes Atlas 2014) this figure is based on regional projections and is likely to be an underestimation as over 60% of people diagnosed to have diabetes in Kenya usually present to the health care facility with seemingly unrelated complaints. It is also estimated that about 14% of the population in Kenya have impaired glucose.

As the prevalence of Diabetes mellitus is escalating, patients face an even greater threat from long term complications like foot, cardiovascular, eye, nerve and renal complications that are the hall mark of diabetes and its impact. Owing to poor glycemic control, a majority of patients referred for specialized end organ damage treatment at the national referral hospitals and outside the country are diabetes patients.

### Cardiovascular diseases

Cardiovascular diseases, which includes ischemic heart disease, cerebrovascular disease, cardiomyopathy, valvular heart disease and pericarditis currently constitute the leading cause of death in the world, with 80% of all CVD-related deaths occurring in low- and middle-income countries (Alwan et al, 2010). More than 200 risk factors for CVD has to date been identified (Hobbs 2004) with the major modifiable risk factors being high blood pressure, abnormal lipids levels, tobacco and alcohol use, physical inactivity, obesity, unhealthy diets



and raised blood glucose. Non-modifiable CVD risk factors include advancing age, heredity/family history, gender and race/ethnicity (WHO, 2004). Hypertension is an important risk factor for CVD and remains the single biggest risk factor for stroke (WHF 2014).

Estimates of mortality due to CVD in Kenya ranges from 6.1% (NHSSP) to 8% (WHO NCD fact sheet 2014), while autopsy studies suggest that more than 13% of cause-specific deaths among adults could be due to CVDs (INDEPT verbal autopsy study 2014; Ogeng'o J et al Cardiol J 2011).

The prevalence of hypertension has increased over the last 20 years. Recent studies have shown the overall prevalence to vary in various Kenyan communities. A study in Korogocho slums in Nairobi indicated the overall prevalence of hypertension in adults of 18% (Vijver et al 2013) while in Garrissa County, the level is lower at 12.6 % (Hassan). Other studies have showed levels of HTN among adults at 21.4% in rural Kenya (Hendriks et al, 2012) and 50% in population over 50 years in Nakuru (Mathenge et al).

RHD continues to be a major contributor to cardiovascular disease prevalence and affects both in children and adults. Valvular damage was found in 2/1000 by clinical method in school children (Anabwani et al 1998 EAMJ) and 27/1000 children by echocardiography (Yonga et al 2007 CVJA), and around half of patients admitted to hospital with Heart Failure is due to RHD (Yonga, AKUH). There is need to streamline the existing preventive and Promotive programs to integrate rheumatic heart disease through early detection and treatment of Streptococcal throat infection.

### Chronic Obstructive Pulmonary Disease (COPD)

Chronic Obstructive Pulmonary Disease (COPD) describes chronic lung diseases that cause limitations in lung airflow. COPD is an often under-diagnosed, life threatening lung disease that may progressively lead to death.

WHO estimates that 64 million people have moderate to severe chronic obstructive pulmonary disease (COPD). In 2005 more than 3 million people died of COPD, which corresponded to 5% of all deaths that year. Despite high prevalence in developed nations, almost 90% of COPD deaths occur in low- and middle-income countries (WHO Fact sheet N315).

The main drivers of COPD include tobacco smoking, indoor air pollution (from use of biomass fuel for cooking and heating), outdoor air pollution and occupational dusts and chemicals.

Within sub-Saharan Africa, limited data on COPD exists but the BOLD study reported COPD in 22.2% of men and 16.7% of women aged above 40 years. In Kenya COPD is estimated to cause approximately the same amount of DALYs as ischemic heart disease, stroke and epilepsy (GBD 2010 Heat Map).

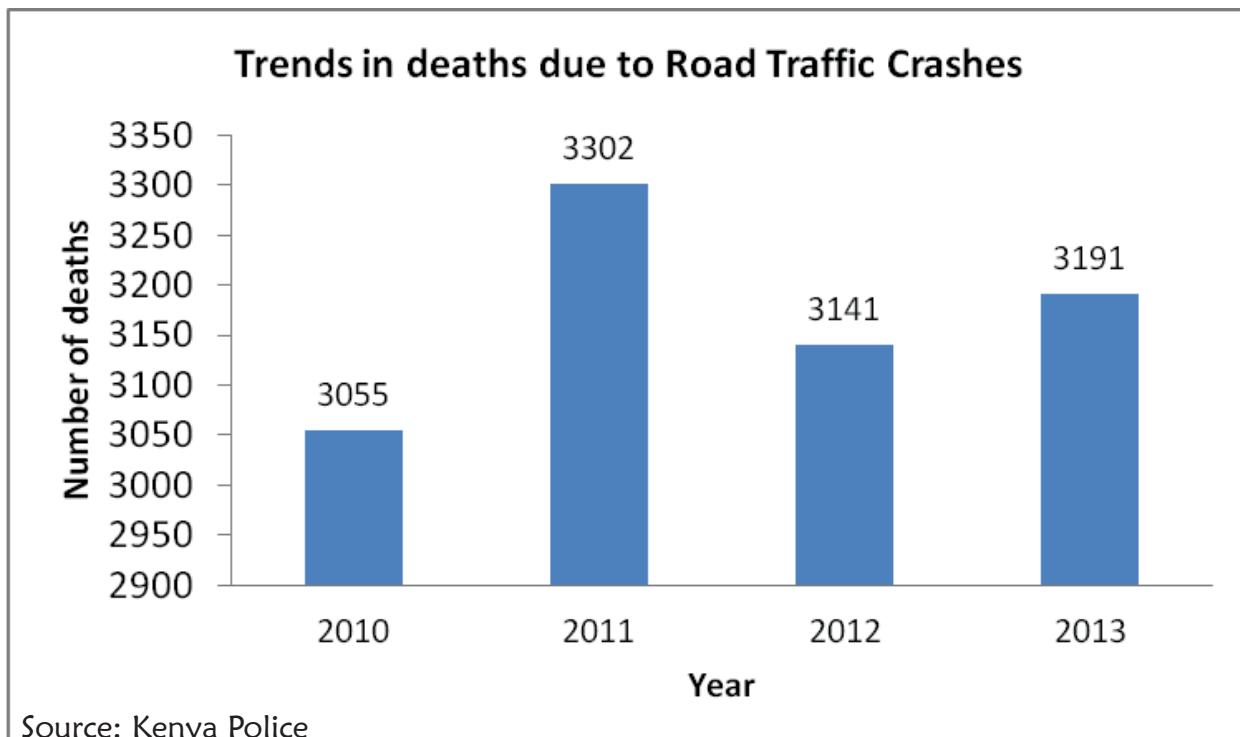
### Injuries and Violence

Injuries are categorized as either intentional or unintentional to denote whether or not an injury was meant to harm the victim. Injuries and violence are a serious public health issues because of the burden they pose on the health care system, through disability and premature death. Approximately 5.8 million people die from injuries each year, accounting for 10% of all deaths worldwide. Violence causes more than 1.6 million deaths worldwide every year. More than 90% of these occur in low- and middle-income countries (preventing injuries and violence, WHO 2007).



In Kenya, injuries are becoming an increasing important cause of hospital admissions and mortality [3]. The leading causes of injury in Kenya include assault (42%), road traffic crashes (RTC) (28%), unspecified soft tissue injury (STI) (11%), cut-wounds and dog-bites, falls, burns and poisoning (each <10%) [4].

Road traffic crashes are the ninth cause of mortality in Kenya. In 2013 data from the Kenya police indicates that road traffic crashes were responsible for 3191 deaths. Pedestrians are the most commonly affected in road traffic incidences where they comprised 60% of road traffic injury admissions to a national referral hospital.



Violence is ranked as the ninth highest cause of mortality in Kenya (NHSSP III). According to violence against children national survey conducted in 2010, 48.7% of female and 47.6% of male aged between 13-17 years had experienced some form of physical violence in the preceding 12 months before the survey. The Kenya Health and Demographic Survey 2008/9 revealed that 39% and 20.6% of women have ever experienced physical and sexual violence respectively.

#### Mental disorders

Mental disorders are an important cause of morbidity and contribute to the global burden of non-communicable diseases. Their control requires therefore equitable access to effective programmes and health care services.

Mental disorders also affect, and are affected by other non-communicable diseases: they can be a precursor or consequence of a non-communicable disease, or the result of interactive effects. For example, there is evidence to suggest that depression predisposes people to heart attacks and, conversely, heart attacks increase the likelihood of depression. The same appears for diabetes, where the association of depression to diabetes appears stronger than the inverse (Lyketsos, Am J Psychiatry 167:5, 2010).

Depression is associated with severe obesity, physical inactivity, and poor self-care, all risk factors for diabetes, and studies suggest long-term use of antidepressants increases the risk of diabetes by almost twofold (Andersohn et al 2009). Despite these strong connections, mental disorders in patients with non-communicable diseases as well as non-communicable diseases in patients with mental disorders have not received the attention they deserve.

Mental disorders share common risk factors with other non-communicable diseases such as sedentary behavior and harmful use of alcohol and are more common among the economically underprivileged population segments such as those with lower educational level, lower socioeconomic status, stress and unemployment.

This strategy draws from the larger and more comprehensive mental health action plan considering that NCDs and mental health issues are intricately linked. In its implementation, this strategy aims to build on the mental health public health interventions in the prevention and control of NCDs at the national and county levels.

#### **Linkages between major non communicable diseases and Communicable diseases**

The role of infectious agents in the development and progression of non-communicable diseases, either on their own or in combination with genetic and environmental influences, has been increasingly recognized in recent years. Many non-communicable diseases including cardiovascular disease and chronic respiratory disease are linked to communicable diseases in either causation or susceptibility to severe outcomes.

Increasingly, cancers such as cancer of the cervix, liver, oral cavity and stomach have been shown to have an infectious origin. Several cancers have been linked to infections and infestations in developing countries. These include human papillomavirus in cervical cancer/oral cancers, HIV in Kaposi sarcoma, hepatitis B and C in liver cancer, schistoma in bladder cancer and H. Pylori in stomach cancer. This functional linkage has also been established between diabetes and tuberculosis making a case for bidirectional integration and surveillance.

#### **Synergies between major non NCDs and other chronic conditions**

While preparing this comprehensive strategy for prevention and control of non-communicable diseases it was necessary take cognizance of a number of other non-communicable conditions of public health importance. These conditions will draw from this strategy to develop diseases specific and focused treatment guidelines in line with the broader health policy. The presence of these conditions may influence the development, progression and response to treatment of major non-communicable diseases and should be addressed through integrated approaches. Further, conditions such as kidney disease may result from lack of early detection and effective management of hypertension, diabetes and other NCDs and is thus closely linked to these NCDs prevention and control.

These conditions include; cognitive impairment, renal disorders, hepatic disorders, endocrine disorders, neurological conditions including epilepsy, autism, Alzheimer's and Parkinson's diseases; haematological conditions including haemoglobinopathies (e.g. thalassemia and sickle cell anaemia), gastroenterological, musculoskeletal, skin disorders, oral diseases, disabilities including visual and hearing impairment and genetic disorders which may affect individuals either alone or as co-morbidities.



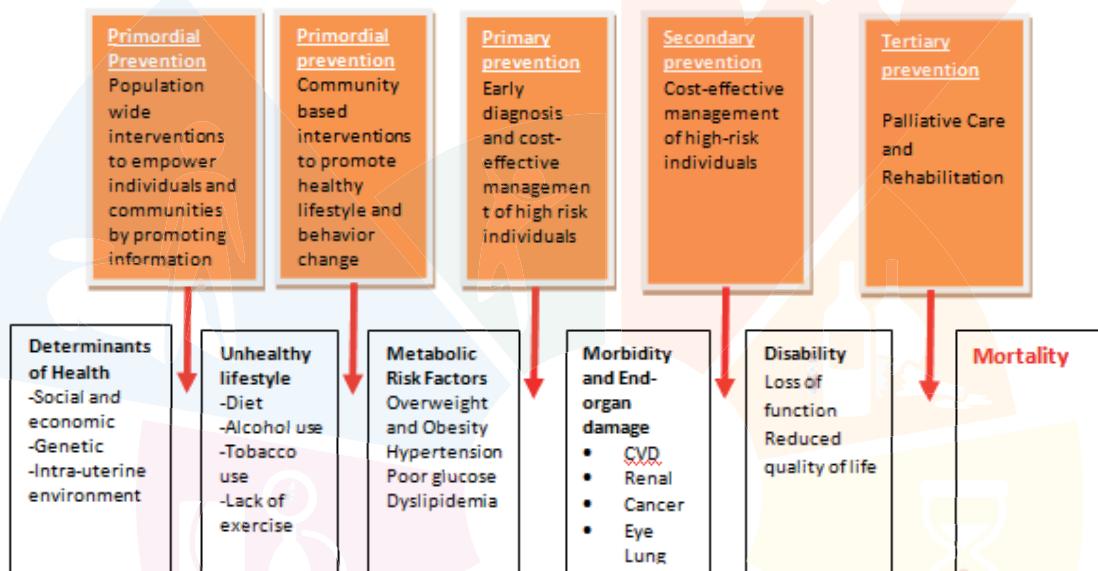
## Framework of prevention and control

The underlying risk factors of NCDs are largely preventable. Interventions are needed at population level (primordial prevention), at community level (primordial and primary prevention), through early diagnosis (primary prevention) and through comprehensive and cost-effective management (secondary prevention) palliative care and rehabilitation (tertiary prevention).

Action on NCDs will happen in 3 domains of

1. Disease Prevention and Health Promotion
2. Early Diagnosis and control of NCDs through Health Systems Strengthening
3. Monitoring, Surveillance and Research.

In each of these domains cost-effective and evidence based interventions are prioritized for implementation.



## Health System for NCDs and governance

In developing this NCD strategy, focus was laid in generating interventions to deal with systematic challenges that face NCD prevention and control at both the national and county government level. Investment in the Health System over the years has had focus on infectious diseases resulting in great capacity to address infectious diseases as compared to the poor NCD infrastructure. (50% of primary health facilities did not have a functioning glucometer, and only 27% of essential NCD medical supplies are on average available). (ABCE study, IHME 2014).



Several bottlenecks of NCD prevention and control have been identified and addressed in this strategy

1. Poor prioritization of NCD preventon and control in government agenda setting planning and budgeting at both national and county level.
2. Lack of an NCD prevention and control infrastructure with regional focal persons to coordinate NCD prevention and control planning, programming, monitoring and evaluation.
3. Lack of resources for public health initiatives for awareness and promotion of healthy lifestyles in the prevention and control of priority NCDs
4. Poor capture and reporting of NCD related indicators in the DHIS with resultant paucity of planning data.
5. Low levels of awareness of strategies of prevention and control of NCDs among health policy makers, planners and health care providers at both the national and county levels of government.
6. Poor availability and affordability of quality, safe and efficacious basic technologies and medicines for screening, diagnosis, treatment and monitoring of NCDs
7. Inadequate capacity of the health workforce in terms of numbers, equipment and skills mix for the prevention and control of the non-communicable diseases.
8. Lack of an enabling environment with appropriate regulatory and fiscal measures, laws and policy options to protect and empower individuals, families and communities to make informed healthy choices.
9. Lack of progressive local, regional and international partnerships among health and development agencies for prevention and control of NCDs
10. “Silon” nature of the health system with minimal opportunities of integrating NCDs in well established public health care platforms like HIV, TB, family planning, maternal and child health.





Adopted from Kenya's 2011 Report Card on the Physical Activity and Body Weight of Children and Youth Courtesy of Dr. Vincent Onywere

## SECTION 2:

# Strategic Objectives

## STRATEGIC OBJECTIVE 1:

To establish mechanisms to raise the priority accorded to NCDs at national and county levels and to integrate their prevention and control into policies across all government sectors

As the epidemiological transition continues to change and the prevalence of Non-communicable Conditions increases, there is need for greater political commitment and good-will in the public sector to support the prevention and control of non-communicable diseases at both national and county levels. Advocacy to raise political commitment and leadership will encourage policy and institutional changes necessary for the creation and strengthening of policies and plans for the prevention and control of non-communicable diseases.

To effectively address the risk factors of NCD action is required to be undertaken by sectors beyond health, such as Agriculture, Education, Finance, Planning, Transport, Environment, Infrastructure, Trade and Industry among others. It is therefore crucial for a whole of government and whole of society approach to the prevention and control of NCDs to be utilized.

There is need to strengthen the country's NCD coordination mechanism with the capacity and legitimacy to mobilize resources and coordinate multi-sectoral action on NCDs to truly match the unique scale of the NCD epidemic. This will entail greater budgetary, technical and legislative support to facilitate engagement of all stakeholders and sectors to collectively confront the challenges posed by non-communicable diseases.

**To achieve strategic objective 1, the following activities shall be undertaken:**

1. Establishing NCD Inter-Agency Coordinating Committee (ICC) consisting of representatives from all sectors, county governments and development partners in health.
2. Carry out a targeted county sensitization exercise while disseminating the strategy to inform and empower county leadership on the need to prioritize and integrate NCD prevention and control.
3. Allocating NCD prevention and control initiatives in national and county fiscal budgets and prioritize their financing.
4. Integrating NCD prevention and control into policies across all government sectors.
5. Holding of advocacy and sensitization forums to raise the priority accorded to NCD at national and county levels
6. Strengthening of existing multi-sectoral partnerships, infrastructure and service delivery systems at National and County levels to address NCD prevention and control.

## **Roles of the National government**

The national government has a policy formulation, review monitoring and evaluation role while creating an enabling environment for resource mobilization, integration of the prevention and control of NCD into the National health planning processes and broader development agenda. The national government is also crucial in assisting in forging appropriate multi-sectoral partnerships locally, regionally and globally.

It should also generate actionable evidence and disseminate information about the effectiveness of interventions or policies to intervene positively on linkages between non-communicable diseases and sustainable development. The following related issues such as poverty alleviation, economic development, attainment of the Millennium Development Goals, vision 2030, sustainable cities, non-toxic environment, food security, climate change, disaster preparedness, peace and security and gender equality all of which have a great bearing on Non-communicable diseases prevention and control have to be addressed.

## **Roles of the County Government**

The county governments will play a very pivotal in the implementation of this strategic objective. The role at this level will be to accord NCDs the necessary priority and attention in their health agenda and pave way for greater resource mobilization and allocation. County health teams will be instrumental in the integration of the prevention and control of NCD into the County health planning processes and broader development agenda and in forging appropriate multi-sectoral partnerships at the county level.

## **Roles of partners**

This strategic objective presents both health and non health partners a great opportunity to engage in advocacy at both the national and county government level towards prioritization of the prevention and control of NCDs through the exchange of information and best practices and the creation of an evidence-based planning culture. This objective also presents an opportunity for engaging in a broader development agenda and for forging appropriate multi-sectoral partnerships at the county, national and global level.



## STRATEGIC OBJECTIVE 2:

To Formulate and strengthen legislations, policies and plans for the prevention and control of non-communicable diseases at both county and national governments.

As the ultimate guardian of a population's health, the national and county governments have the lead responsibility for ensuring that appropriate institutional, legal, financial and necessary arrangements are provided for the prevention and control of non-communicable diseases. Due to the increase in the burden of NCDs, there is a need to strengthen the existing national health policies that support NCDs prevention and control and to formulate new policies and guidelines on NCDs and their determinants so as to reduce impact and halt further progression. These need to be an integral part of the county and national health development plans within the framework of the broader development plans.

**To achieve this strategic objective, the following activities will be undertaken:**

1. Creation of an inventory of existing NCDs related policies and plans
2. Reviewing health related legislations and policies and providing recommendations on effective measures to support prevention and control of NCDs.
3. Development of national policies, legislations, plans, standards and guidelines documents at the county and national government for the prevention and control of NCDs and reduction of their risk factors.
4. Dissemination of national policies, legislations, plans, standards and guidelines documents at the county and national government for the prevention and control of NCDs and reduction of their risk factors.
5. Conduct periodic review and updates of the NCDs policy documents.
6. Integrating NCD prevention and control into policies across all government sectors.
7. Strengthen the enforcement of legislation on NCD prevention and control at both national and county levels.

### Role of the National Government

There is a need to regularly formulate and review existing legislations, policies and plans and identify gaps for prevention and control of non-communicable diseases. This will ensure a favorable environment for a whole-of-government, whole-of-society and health-in-all policies approach across in key sectors. These key sectors include health, agriculture, communication, customs/revenue, education, employment/labor, energy, environment, finance, food, foreign affairs, housing, industry, justice/security, legislature, social welfare, social and economic development, sports, trade, transport, urban planning and youth affairs.

There is a need to formulate and or review legislation to regulate the food and beverages industry, the alcohol and tobacco sectors and other activities associated with non-communicable diseases.



### **Role of the County Governments**

County governments should formulate legislations, policies and plans and ensure that adequate, predictable and sustained resources are available to strengthen NCD prevention and control programmes. There is a need to ensure suitable expertise and capacity for the prevention and control of - NCDs and their determinants across the health system.

### **Role of the development partners**

Development partners are called upon to support the implementation and adherence of policies and guidelines on prevention and control of NCDs as well as participate in the formulation and strengthening of legislations, policies and plans.



## STRATEGIC OBJECTIVE 3:

To promote healthy lifestyles and implement interventions to reduce the modifiable risk factors for non-communicable diseases: unhealthy diets, physical inactivity, tobacco use and harmful use of alcohol.

While deaths from non communicable diseases mainly occur in adulthood, exposure to risk factors begins in childhood (even in intrauterine period) and builds up throughout life. It is therefore necessary for appropriate legislative and regulatory measures to be placed in key sectors to empower individuals and communities. Such measures will be necessary to reduce tobacco use and exposure, physical inactivity, unhealthy diet, obesity and harmful use of alcohol and also protect children from adverse impacts of marketing of unhealthy food and beverages.

Available evidence-based cost effective approaches to reducing the risks for non-communicable diseases should guide the process. These can ensure effective utilization of scarce resources and enhance public health outcomes. The interventions should focus on tobacco control, promotion of healthy diets and physical activity and reduction of harmful use of alcohol.

To achieve this strategic objective, the following activities shall be carried out.

### Promoting healthy diet

- I. Implementing national policy, plans, standards and guidelines that promote the production and consumption of healthy diets.
- II. Implementing health related legislations and regulations on salt, saturated and trans fatty acids and refined sugar content of processed foods and the packaging, labeling and marketing of food products and beverages.
- III. Implementing public awareness programmes on healthy diets during the life course, in the framework of national and county strategic plans, and regulations.
- IV. Implementing the nutrition component in the school health policy/strategy.
- V. Initiating and implementing programmes that promote healthy diets in the community, private and public educational institutions, workplace, health facilities etc, in the framework of national and county strategic plans, and regulations.
- VI. Supporting and promoting existing initiatives for breastfeeding and complementary feeding.
- VII. Put in place mechanisms for economic incentives including taxes and subsidies that encourage healthy choices for food and beverages.

### Promotion of physical activity

- I. Implementing national legislations, policies and guidelines that promote physical activity
- II. Creating public awareness on the health benefits of physical activity in prevention and control of NCDs



- III. Strengthening implementation of the physical activity component of the school health policy, in the framework of national and county strategic plans, and regulations.
- IV. Implementing programmes that promote physical activity in the community, private and public institutions, workplaces, health facilities etc, in the frame work of national and county strategic plans, and regulations.

### Tobacco Control

- I. Scaling up of the implementation and enforcement of the Tobacco Control Act 2007 at National and County levels.
- II. Implement effective use of tax and price measures for control of demand for tobacco products.
- III. Strengthen the implementation of the protocol to eliminate illicit trade in tobacco products.
- IV. Monitoring the implementation of the ban on Tobacco advertisement, promotion and sponsorship (TAPS) from tobacco industry
- V. Strengthening the implement of the regulation of tobacco product content, emissions, disclosure labeling, and packaging
- VI. Raising public awareness on the dangers of tobacco use and exposure to second hand tobacco smoke.
- VII. Supporting the strengthening of the implementation of 100% smoke free environments in public places at National and County levels.
- VIII. Integrating tobacco cessation interventions at all levels.
- IX. Promoting diversification to healthy and profitable alternatives of livelihoods for communities that are dependent on tobacco production at the national and county level.
- X. Strengthening the implementation of tobacco control initiatives in the school curriculum and programmes.
- XI. Monitoring and mitigating tobacco industry interference in the implementation of public health policies

### Reducing harmful use of alcohol

- I. Domesticating the global and regional strategies for the reduction of harmful use of alcohol.
- II. Supporting the full implementation of Alcoholic Drinks Control Act 2010 and other relevant legislations.
- III. Implementing effective fiscal and monetary measures to reduce the harmful use of alcohol at the National and County levels.
- IV. Developing legislation on prohibition of advertising, promotion and sponsorship of alcoholic beverages at the National and County levels.
- V. Creating public awareness on the dangers of alcohol consumption and its related risks.
- VI. Strengthening the implementation of the component on prevention and control of alcohol use in the school health policy and programmes.
- VII. Integrating alcohol abuse management and rehabilitation services at all levels including community, health care system, and workplace



## Role of the National and County governments

The national and county governments should be the key stakeholders in promoting health and reducing risk factors for NCDs. Considering the diverse interests within NCDs, effective multi-sectoral action will require allocation of defined roles to the different stakeholders, protection of the public interest and avoidance of influence from the industry.

Further, there is a need to create an enabling environment with appropriate regulatory and fiscal measures, laws and other policy options, and health education to empower individuals, families and communities to make informed healthy choices.

Policy formulation and legislation to reduce modifiable risk factors for non-communicable diseases will need to be supported by proper enforcement, monitoring and evaluation.

## Role of Partners

Partners are called upon to support the development and implementation of policies, guidelines and standards on modifiable risk factors for NCDs. They also have the important role in the mobilization of resources, initiating prevention and control programs and providing support in monitoring and evaluation



## STRATEGIC OBJECTIVE 4:

Promote and implement evidence based strategies and interventions for prevention and control of violence and injuries.

Injury and violence presents a significant burden to the health care sector, communities, families and individual. Injuries and violence are to a large extent preventable. There is need for a comprehensive approach to reverse this trend. There is need to focus on identification of factors that lead to morbidity and mortality resulting from injuries and violence. This objective aims at creating an enabling environment for prevention of violence and injuries, appropriate management of injuries and effective rehabilitation to prevent death.

To achieve this strategic objective, the following activities shall be undertaken:

- I. Promote and implement health related legislations and regulations that prevent and control violence and injuries
- II. Developing and strengthen national, policies, plans, regulations, standards and guidelines for violence and injury prevention and control
- III. Implementing national policies, plans, regulations and standards and guidelines for injury prevention and control
- IV. Enhancing public awareness on the risk factors for violence and injuries and their prevention and control.
- V. Initiating and implement community violence and injury prevention and control programs including private and public institutions and workplace
- VI. Strengthen pre-hospital care and ensure that they are well integrated with other public health and health care infrastructure
- VII. Improve the organization and planning of trauma care and rehabilitative services in the health care system
- VIII. Advocating for the implementation of the occupational health and safety policy and guidelines

### Role of National government

The national government is responsible for developing and strengthening legislations, policies and strategies for prevention and control of Violence and Injuries and implementation of scientific proven violence and injury intervention programs.

### Role of County Government

The county government is responsible for developing and strengthening legislations, policies and strategies for prevention and control of Violence and Injuries. It should also support the community and the health care system in providing appropriate trauma and rehabilitation services and implement scientific proven violence and injury intervention programs.

### Role of development partners

Engage in advocacy as well as implementation support for the policies and act as a liaison for information and feedback



## STRATEGIC OBJECTIVE 5:

To strengthen health systems for NCD prevention and control across all levels of the health sector.

This strategy aims at strengthening the health system, at all levels to provide health services built on evidence-based decision support tools that ensure appropriate and timely screening, diagnosis and treatment of NCDs. This will ensure that all health facilities are equipped with the minimum clinical equipment and tools for assessment and management of NCDs and their risk factors. This strategy recognizes the importance of strengthening capacity of health systems at primary and secondary levels of screening, early diagnosis and effective management and palliation for people with non-communicable disease

To achieve this strategy, the following activities will be undertaken by the National Government, County Government and Partners:

### Human resource for health

- i. Building the capacity of the health workforce in terms of numbers and skills mix, at all levels, for the prevention and control of the non-communicable diseases.
- ii. Strengthening the HR career track policies to include competency-based certification and remuneration in NCD prevention and control.
- iii. Reviewing the pre-service and in-service curriculum in training of health care workers to incorporate NCDs prevention and control.

### Service delivery

- i. Developing and disseminating integrated clinical guidelines and treatment protocols for NCD prevention, care and treatment for all levels.
- ii. Establishing an innovative chronic care model for NCD service delivery at the primary health care level
- iii. Developing wellness policies for clinics and programs at all levels of health care system and other sectors
- iv. Streamlining of the referral system for NCD prevention care and management
- v. Integrating palliative care and end- of - life care to the primary health care platforms.

### Health products and technology

- i. Ensuring availability and affordability of quality, safe and efficacious basic technologies for screening, diagnosis, treatment and monitoring of NCDs at the national and county levels
- ii. Ensuring availability of essential NCDs prevention and care medicines and supplies and link this to financing mechanisms to foster access, affordability and sustainability at the national and county levels.
- iii. Engage relevant stakeholders to develop policies and legislation on complementary and alternative medicine in the management of NCDs



## Financing

- i. Strengthening policies on universal health coverage through innovative, sustainable and equitable mechanisms for financing NCD prevention and control
- ii. Developing policy guidance for financing of health care delivery through primary health care approaches to include NCD prevention and control at national and county levels
- iii. Creating mechanisms to utilize the sin tax in the prevention and control of NCDs
- iv. Strengthen public private partnerships to ensure sustainable access to essential medicines and technologies for NCD prevention and control.

## Health infrastructure

- i. Review health system structures (standards and norms) to better support NCD prevention and control taking into consideration access and equity.
- ii. Facilitate integration of NCD prevention into other primary care platforms.
- iii. Support regional coordination towards establishment of centres of excellence and specialized care that are sensitive to regional needs and balance

## Leadership and governance

- i. Strengthen policies for ensuring transparency, accountability, fairness and equity for NCD prevention and control which will involve community participation
- ii. Establish mechanisms for information sharing on leadership and governance in NCD prevention and control at county, national levels
- iii. Identify champions and ambassadors to provide leadership in NCD prevention and control.

## Health information

- i. Restructure the health information systems to guarantee reliable, timely, complete and quality data for evidence-based implementation and decision making in NCD prevention and control
- ii. Provide a central repository for NCD data to facilitate its utility for policy formulation and review.



## STRATEGIC OBJECTIVE 6:

To promote interventions to reduce exposure to environmental, occupational, genetic and biological risk factors.

This strategic objective aims to promote interventions to reduce exposure to environmental, occupational and biological contaminants arising from the environment, home and workplaces and strengthen surveillance of these contaminants in order to mitigate the effects of their exposure in causing NCDs.

**To achieve this strategic objective, the following activities shall be undertaken:**

- I. Strengthening the implementation of the legal frameworks, policies, standards and guidelines to reduce exposure to environmental, biological and occupational risk factors to protect populations from environmental contaminants and occupational hazards that predisposes to NCDs
- II. Initiate and promote programs aimed at protecting and reducing exposure to risk factors for NCDs at the workplace, public and home environment.
- III. Create public awareness on prevention and control of exposure to environmental , biological and occupational risk factors on NCDs
- IV. Availing vaccination, screening, early detection and treatment for infections that predisposes to NCDs.

### The role of the National government:

- Develop appropriate legislation and policy to promote interventions aimed at reducing exposure to environmental, occupational and biological risk factors for NCDs

### The role of County governments:

- Enact, adopt and implement legislations, policies and guideline aimed at reducing exposure from environmental, biological and occupational risk factors.
- Surveillance and monitoring of threats posed by exposure to environmental, occupational and biological risk factors for NCDs

### The role of Partners:

- Support and oversee the implementation of interventions aimed at reducing exposure to environmental, occupational and biological risk factors for NCDs

## STRATEGIC OBJECTIVE 7:

To establish and strengthen effective monitoring and evaluation systems of non-communicable disease and their determinants.

Establishing effective M&E systems to monitor inputs, processes and outputs; and to evaluate outcomes, trends and impact are critical in the assessment of collective efforts by NCDs stakeholders. Continuous measurement of the progress and impact of the implementation of NCDs policies are essential to achieving planned interventions. In addition M&E systems are vital for effective and sustainable program implementation.

To achieve this strategic objective, the following activities shall be carried out:

- i. Adapt the global NCD M&E framework for prevention and control of NCDs with locally relevant targets and indicators.
- ii. Undertake a comprehensive situational analysis on the burden of NCDs and their risk factors
- iii. Integrating of global NCD and NCD risk factor surveys into the national surveillance system.
- iv. Develop standardized NCD M&E tools and integrate them into the HIS at all levels of health care.
- v. Dissemination NCD M&E tools to all levels of health care
- vi. Establishment of a mechanism for the collection, reporting, analysis and utilization of NCD data not routinely captured by HIS.
- vii. Periodic review of the implementation of the NCD strategic plan
- viii. Strengthen the capacity of HIS staff and other health workers to use the NCD M&E tools in collection, collation , reporting and utilization of NCD data
- ix. Establish intra-county, County and National NCD data review meetings and information sharing platforms.

### The role of the National Government:

- Establish effective M&E systems for prevention and control of non-communicable diseases
- Develop and share tools for use at all levels of health care in both facilities under the national and County governments

### The role of the County Government:

- Adopt and strengthen the established M&E systems for prevention and control of NCDs
- Strengthen capacity of the health workers for effective monitoring and hold joint review meetings
- Streamline data sources and ensure local utilization of evaluation data for policy formulation

### The role of the Partners:

- Support the development and implementation process for effective M& E systems for control and prevention of NCDs.



## STRATEGIC OBJECTIVE 8:

To promote and conduct research and surveillance for the prevention and control of non-communicable diseases

There is need to support research and surveillance on non-communicable diseases and timely disseminate the findings to the decision makers and the general population. Research that includes epidemiology, behavioral, health system, biomedical and clinical are critical in producing base line data, measuring progress and supporting informed policy and strategy development.

There is a need to disaggregate NCD data by age, sex, social economic and geographical status to facilitate effective response and equitable distribution of resources.

To achieve this strategic objective, the following activities shall be carried out;

- i. Carry out a national situational analysis for NCDs burden and risk factors.
- ii. Identify priority research areas on Non-communicable Diseases and their risk factors
- iii. Strengthen capacity for NCD surveillance and research (human resource, infra structure, equipment and supplies)
- iv. Conducting baseline and periodic surveys on NCDs and their risk factors
- v. Allocating resources for routine and periodic surveillance of NCDs at county and national government.
- vi. Facilitating knowledge translation on conducted research to guide decision making by national and county governments
- vii. Integrating research into national and county health programmes for evidence-based policy and practice for the prevention and control of NCDs
- viii. Integrating NCD and their risk factors into the existing national house hold surveys.
- ix. Establishing national and sub national networks and reference centers for NCD surveillance and research and link with regional and global structures on NCD surveillance research networks
- x. Establishing dissemination mechanisms of surveillance and research findings on NCDs

### The role of the National government:

- Develop and disseminate the national NCD research agenda
- Promote and conduct surveillance and research in NCDs priority areas
- Collaborate with national and international institutions to strengthen NCDs surveillance and research
- Invest in innovation and research for evidence-based interventions



### The role of the County government:

- Integrate NCD research and surveillance into the existing systems at the health department
- Promote and conduct surveillance and research on priority areas in NCDs
- Make decisions based on research and ensure periodic dissemination of research findings

### The role of the development Partners:

- Support and conduct joint research activities at both the county and national government.
- Facilitate operational research in areas of their operations and support the policy makers to adopt and implement the findings for improving NCD prevention and care.



## STRATEGIC OBJECTIVE 9:

To promote local and international partnerships for the prevention and control of non-communicable diseases.

This strategic objective is aimed at promotion of efficient mobilization and utilization of resources including financial and technical expertise through improved coordination and collaboration with both local and international partners.

**To achieve this strategic objective the following activities shall be carried out by the National Government, County Governments and Partners.**

- i. Establishing a national NCD prevention and control Steering Committee (NNCDSC) comprising of technical experts within the ministry of health.
- ii. Establishing NCD Inter-Agency Coordinating Committee (ICC) consisting of development partners in health.
- iii. Establishing technical working group on selected NCD themes that meet on a regular basis and report via the NCD Inter-Agency Coordinating Committee (ICC).
- iv. Advocating for Identification and support of focal units for NCD prevention and control at all levels
- v. Encouraging local mechanisms to establish regional centers of excellence in various NCD prevention and control initiatives by grouping counties by regions and interests.
- vi. Mainstreaming NCD prevention and control into other health programs (HIV/AIDS, ophthalmic, TB, Malaria, reproductive health, Nutrition, community health, maternal and child health etc) in order to address NCD concerns.
- vii. Leveraging on PPP to support NCD prevention and control

## STRATEGIC OBJECTIVE 10:

To promote and strengthen advocacy, communication and social mobilization for NCD prevention and control

The purpose of this objective is to ensure mobilization of active support and public participation for NCD prevention and control through strategies and methods that influence opinions and decisions of people and organizations. This objective aims at empowering individuals and communities in adopting healthy lifestyles to promote health, prevent and control NCDs. Utilization of evidence based behaviour change communication effectively lead to motivation individuals and communities to adopt healthy attitudes and practices with the goal of reducing the incidence, prevalence and complications of NCDs.

Social mobilization brings together community members and other stakeholders to strengthen community participation for sustainability and self-reliance.

This objective aims at developing an advocacy, communication and social mobilization framework addressing the key domains of society including political, media, health professionals, community, for social change resulting in prevention and control of NCDs

To achieve this strategic, the following activities are key:

- i. Building the capacity for health promotion for prevention and control of NCDs amongst health care workers and the general population.
- ii. Strengthening health promotion with focus on health inequity, empowerment and social determinants of health using participatory approaches for the prevention and control of NCDs
- iii. Utilizing social marketing for health approaches to achieve and sustain adoption of behaviours that are key in prevention and control of NCDs
- iv. Strengthening health education programs for people with known NCDs to reinforce the importance of informed decision and self care.
- v. Strengthening the implementation of the NCD component of the community strategy.
- vi. Advocating for the Provision of essential medicines, screening and diagnostic equipment, medical supplies and infrastructure for priority NCDs at all levels of the health care system.

### Role of National Government

The national government is responsible for carrying out advocacy to the citizens, county governments and the parliamentary arm of the national governments. Appropriate advocacy messages should be guided by scientific evidence.



## Role of County Government

The county government is responsible for conducting advocacy to the county population. Advocacy should target county specific agendas. Where necessary, advocacy will require collaboration with the national governments.

## Role of Development Partners

Partners play a critical role in carrying out advocacy. Partner will develop advocacy messages in conjunction with the government and provide funding for advocacy. Partners can additionally carry out the advocacy after consultation with either national or county governments.





## **SECTION 3:**

### **Implementation framework**

## Section 3; Implementation framework

**STRATEGIC OBJECTIVE 1:** To establish mechanisms to raise the priority accorded to NCDs at national and county levels and to integrate their prevention and control into policies across all government sectors

Activity	Expected Output	Indicators	Lead Agency	Partners	Time-line
Establishing NCD Inter-Agency Coordinating Committee (ICC) consisting of representatives from all sectors, county governments and development partners in health.	- NCD - ICC established	-ICC launch report	-MOH-DNCD -County health department	-Development partners -Relevant Government ministries and agencies -Research institutes, -Academia -NCD networks	2015
Carry out a targeted county sensitization exercise while disseminating the strategy to inform and empower county leadership on the need to prioritize and integrate NCD prevention and control	-Counties sensitized on need to prioritize and integrate NCD prevention and control	-Number of counties sensitized	-MOH-DNCD	-County health department -Development partners -Implementing partners	2015-2017
Allocating NCD prevention and control initiatives in national and county fiscal budgets and prioritize their financing	-NCD prevention and control initiatives allocated fiscal budget at both National and County levels -Financing for NCD prevention and control prioritized	-Proportion of National health budget allocated to NCD -Proportion of Counties with NCD budget	- MOH-DNCD -County health department	-Development partners -Implementing partners	2015-2020
Integrating NCD prevention and control into policies across all government sectors	- NCD prevention and control into policies integrated across all government sectors	-Proportion of government sectors that have integrated NCD prevention and control in their policies	-MOH-DNCD -County health department	- Relevant Government Ministries and Agencies	2015-2018
Holding of advocacy and sensitization forums to raise the priority accorded to NCD at national and county levels	-Advocacy and sensitization forums held	-Number of sensitization meetings held. -Number of sectors sensitized	- MOH-DNCD -County health department	-Relevant Government Ministries and Agencies -Development partners -Implementing partners -Media	2015-2020
Strengthening of existing multi-sectoral partnerships, infrastructure and service delivery systems at National and County levels to address NCD prevention and control	-Multi-sectoral partnerships at national and county level strengthened -Multi-sectoral infrastructure at national and county level strengthened -Multi-sectoral service delivery systems at national and county level strengthened	-Number of counties with multi-sectoral partnerships -Minutes of the multi-sectoral meetings. -Number of multi sectoral forums held	-MOH-DNCD -County health department	Development partners -Implementing partners	2015-2020



**STRATEGIC OBJECTIVE 2:** To formulate and strengthen legislations, national policies and plans for the prevention and control of non-communicable diseases/conditions at both the county and national government

ACTIVITY	EXPECTED OUTPUT	INDICATORS	LEAD AGENCY	ACTORS	TIME LINE
Creation of an inventory of existing NCDs related policies and plans	-Inventory of NCDs related policies and plans established-Gaps in policies identified	-Number on NCD related policies - Number on NCD related plans -No. of NCDs policy gaps identified	-MOH-DNCD -County health department	-Relevant Government Ministries and Agencies - Development Partners, -Academia -Research Institutes	2015
Reviewing health related legislations and policies and providing recommendations on effective measures to support prevention and control of NCDs	-Health related legislations and policies reviewed and recommendations made to support prevention and control of NCD -Dissemination of the reports	- Number of review forums - Number of review reports -The number of reports disseminated.	-MOH DNCD -Parliamentary health committee	- County Assembly health committee -Development partners, -CSOs, -Community partners, -Relevant Government Ministries and Agencies	2015-2016
Development of national policies,legislations, plans, standards and guidelines documents at the county and national government for the prevention and control of NCDs and reduction of their risk factors	-Comprehensive National NCD policy developed. -Disease Specific strategies, plans and guidelines developed	- No. of national policy documents and plans in place. -No of disease specific strategies, plans and guidelines developed	MOH DNCD, Policy and Standards -Parliamentary health committee -County Assembly	-Development partners -CSO - Relevant Government Ministries and Agencies	2015-2020
Dissemination of national policies, legislations, plans, standards and guidelines documents at the county and national government for the prevention and control of NCDs and reduction of their risk factors.	-NCD policy document disseminated to all stakeholders -Disease specific strategies ,plans and guidelines disseminated to all stakeholders	-Number of policy documents disseminated - Number of disease specific strategies, plans and guidelines disseminated	-MOH DNCD -County health departments	-Development partners -Parliamentary health committee -Media	2015-2020
Conduct periodic reviews and updates of the NCD policy documents	-Mid-term and end term review report developed - Updated policy documents as appropriate	-Number of Review reports -The number of The policy documents updates	-MOH -DNCD -County health departments	Development partners -CSO - Relevant Government Ministries and Agencies	2015-
Strengthen the enforcement of legislation on NCD prevention and control at both national and county levels	-Advocacy tools developed -Regulations developed -Capacity of regulatory agencies built		-MOH -DNCD -County government	Development partners -CSO - Relevant Government Ministries and Agencies	2015-2020

**STRATEGIC OBJECTIVE 3:** To promote healthy lifestyles and implement interventions to reduce the modifiable risk factors for non-communicable diseases: unhealthy diets, physical inactivity, tobacco use and harmful use of alcohol

Promoting healthy diet					
Activity	Expected Output	Indicators	Lead Agency	Partners	Time-line
Implementing national policy, plans, standards and guidelines that promote the production and consumption of healthy diets	-National policy, plans, standards and guidelines for healthy diets implemented	-Number of periodic implementation reports	-MOH-DNCD, Policy and Standards	- Relevant Government Ministries and Agencies -Implementing partners	2015-2020
Implementing health related legislations and regulations on salt, saturated and trans fatty acids and refined sugar content of processed foods and the packaging, labeling and marketing of food products and beverages	-Advocacy tools developed -Advocacy dialogue held -Implementing agencies sensitized on legislations and regulations	-Number of advocacy tools developed -Number of sensitization meetings held -Number of regulatory agencies and other stakeholders sensitized on legislations and regulations -Number of periodic implementation reports	-MOH-DNCD -Ministry of East Africa Affairs, Commerce, and Tourism	-County Health Departments -CSO -Implementing partners	2015-2017
Implementing public awareness programmes on healthy diets during the life course, in the framework of national and county strategic plans, and regulations	-IEC materials on healthy diets for different life stages developed -Awareness programmes to promote healthy diets undertaken	-Number of IEC materials developed -Number of awareness activities carried out -Number of reports of awareness creation activities	-MOH-DNCD - County Health Departments	-Implementing Partners -CSO	2015-2020
Implementing the nutrition component in the school health policy/strategy	-School health policy on nutrition implemented	-Number of school management and other stakeholders sensitized -Number of schools with nutrition in their curriculum -Proportion of schools implementing the nutrition component of the school health policy	MOE	-MOH-DNCD, Nutrition Unit, Child and Adolescent Health Unit	2015-2020
Initiating and implementing programmes that promote healthy diets in the community, private and public educational institutions, workplace, health facilities etc, in the framework of national and county strategic plans, and regulations	-Community programmes on healthy diet programs initiated and implemented in national and county strategic plans and regulations	-Number of initiatives established -Number of periodic implementation reports -Number of Community units with nutrition component	-MOH-DNCD - County Health Departments -Ministry of Education	-Implementing Partners, - Private sector, -Relevant Government Ministries and Agencies	2015-2020
Supporting and promoting existing initiatives for breastfeeding and complementary feeding	-Sensitization forums held with stakeholders -Breastfeeding and complimentary feeding initiatives supported	-Number of sensitization forums -Number of Periodic implementation reports	-MOH-DON	-MOH-DNCD -MOH- Child Health -County Government -Implementing Partners -CSO	2015-2020
Put in place mechanisms for economic incentives including taxes and subsidies that encourage healthy choices for food and beverages	-Advocacy tools on economic incentives developed and presented -Policy dialogue meetings held -Public campaigns on available incentives held	-Number of advocacy tools developed -Number of policy dialogue meetings held -Number of public campaigns on available incentives held	-MOH, Ministry of East Africa Affairs, Commerce, and Tourism	--MOH-DNCD -MOH- Child Health -County Government -Implementing Partners -CSO	2015-2020



PHYSICAL ACTIVITY						
implementing national legislations, policies and guidelines that promote physical activity	-National legislations, policies and guidelines on physical activity implemented	-Number of trainings done -Number of stakeholders trained -Number of periodic implementation reports	-MOH-DNCD -Relevant Government Ministries and Agencies	-County Health Department -Implementing Partners -CSO	2015-2020	
Creating public awareness on the health benefits of physical activity in prevention and control of NCDs	- IEC materials on physical activity developed -Awareness campaign promoting physical activity implemented	-Number of awareness campaigns held -Number of IEC materials developed.	-MOH-DNCD	- Relevant Government Ministries and Agencies -County Government -Implementing Partners -CSO	2015-2020	
Strengthening implementation of the physical activity component of the school health policy, in the framework of national and county strategic plans, and regulations	-Physical activity component implemented in schools	-Number of school management and other stakeholders sensitized - Proportion of schools implementing the physical activity component of the school health policy management and other stakeholders.	-MOE -MOH-DNCD, Child Health	-County Government -Implementing Partners -CSO	2015-2020	
Implementing programmes that promote physical activity in the community, private and public institutions , workplaces, health facilities etc, in the framework of national and county strategic plans, and regulations	-Physical activity programs developed	-Number of community programs developed -Number of community units implementing physical activity programs	MOH-DNCD	-County Government -Implementing Partners -CSO - Relevant Government Ministries and Agencies	2015-2020	
Tobacco Control						
Scaling up of the implementation and enforcement of the Tobacco Control Act 2007 at National and County levels	Stakeholders at national and county levels sensitized on the Act, policies and guidelines	-Number of sensitizations done -Number of stakeholders sensitized	-MOH-DNCD -TCB -Relevant Ministries	County Government -Implementing Partners -NGOs -CSOs -Relevant Ministries	2015-2020	
Implement effective use of tax and price measures for control of demand for tobacco products	-Advocacy tools on effective use of tax and price measures developed and presented -Policy dialogues meetings held	-Number of advocacy tools developed -Number of policy dialogue meetings held - Policy brief on Tobacco taxation as an effective tobacco control intervention	-Ministry of Finance	-MOH - Relevant Government Ministries and Agencies - NGOs -CSO	2015-2020	



Strengthen the implementation of the protocol to eliminate illicit trade in tobacco products	-Ratification of the Protocol - Sensitization on the Protocol to eliminate illicit trade	-Minutes of meetings held on protocol -Number of stakeholders sensitized on protocol - Tools of ratification	- Ministry of East Africa Affairs, Commerce, and Tourism	MOH-DNCD -County Government -Relevant Government institutions	2015-2020
Strengthen the implementation of the ban on advertisement, promotion and sponsorship from tobacco industry	-Senistatization of stakeholders on the Ban on TAPS - Monitoring of implementation of ban on TAPS	-Number of sensitization meetings -Number of regulatory agencies and other stakeholders sensitized on legislations and regulations -Number of implementation periodic reports -Number of violation of TAPS reported	-MOH-Division of Environmental Health	-Regulatory agencies, -CSO - Relevant Government Ministries and Agencies	2015-2020
Strengthening the implement of the regulation of tobacco product content, emissions, disclosure labeling, and packaging	-Sensitization of stakeholders on provisions of the FCTC and TCA on Products regulation and disclosure - Regulation of Tobacco product content, emissions disclosure labeling, and packaging strengthened	-Number of sensitization meetings -Number of regulatory agencies and other stakeholders sensitized on legislations and regulations -Number of implementation periodic reports	-MOH -KNBS	-Regulatory agencies, -CSO - Relevant Government Ministries and Agencies	2015-2020
Raising public awareness on the dangers of tobacco use and exposure to second hand tobacco smoke	-IEC materials on tobacco control developed -Awareness campaign to discourage tobacco use conducted	-Number of awareness campaigns carried out -Number of IEC materials developed - Evaluation reports	MOH	-Relevant government agencies and ministries, -CSO -Media -County governents	2015-2020
Supporting the strengthening of the implementation of 100% smoke free environments in public places at National and County levels l	-Regulation agencies sensitized on legislations and regulations	-Number of sensitization meetings -Number of regulatory agencies and other stakeholders sensitized on legislations and regulations -Number of periodic implementation reports	-MOH-Division of Environmental Health -County Governments	-Regulatory agencies -CSO	2015-2020
Integrating tobacco cessation interventions at all levels	-Cessation services integrated -Tobacco cessation guidelines developed and disseminated	-Number of cessation centers established -Number of HCP trained on cessation	-MOH-Curative services -MOH-DNCD -MOH- Community	-NACADA, -Implementing Partners - CSO,	2015-2020
Promoting diversification to healthy and profitable alternatives of livelihoods for communities that are dependent on tobacco production at the national and county level	-Advocacy tools on healthy and profitable alternatives of livelihoods developed and presented -Policy dialogues meetings held	-No of advocacy tools developed No of policy dialogue meetings held	-MOA	MOH, -NGOs - CSO	2015-2020
Strengthening the implementation of tobacco control initiatives in the school curriculum and programmes	-Tobacco control incorporated in the school curriculum	-Proportion of schools with tobacco control in curriculum -Number of schools sensitized on tobacco control	-MOE -MOH	-CSO, -NGO	2015-2020
Monitoring and mitigating tobacco industry interference in the implementation of public health policies	-Development of tobacco industry interference monitoring tools -Tobacco industry interference monitored - Tobacco industry interference mitigated	-Number of period monitoring report -Number of mitigation reports	-MOH -CSO -Attorney Generals Office	-County governments -NGOs	2015-2020



### Reducing harmful use of alcohol

Domesticating the global and regional strategies for the reduction of harmful use of alcohol	-National strategy for harmful reduction of alcohol developed	-Number of sensitization forums on strategy	-MOH- DNCD and Department of Environmental Health - County Governments	-NACADA, -Relevant ministries, -CSO	2015-2017
Supporting the full implementation of Alcoholic Drinks Control Act 2010 and other relevant legislations	-Advocacy tools developed -Stakeholders forums held	-Number of stakeholders sensitized -Number of stakeholders forums held	-MOH- DNCD and Department of Environmental Health - County Governments	-NACADA, -Relevant ministries, CSO	2015-2019
Implementing effective fiscal and monetary measures to reduce the harmful use of alcohol at the National and County levels	-Advocacy tools on economic incentives developed and presented -Policy dialogue meetings held	-Number of advocacy tools developed -Number of policy dialogue meetings held.	-MOH -MOF	-NACADA, - Relevant Government Ministries and Agencies -CSO	2015-2020
Developing legislation on prohibition of advertising, promotion and sponsorship of alcoholic beverages at the National and County levels	-Legislation prohibiting advertising, promotion and sponsorship of alcoholic beverages at the National and County levels	-Number of policy briefs	-MOH -NACADA -County Governments		2015-2018
Creating public awareness on the dangers of alcohol consumption and its related risks	-IEC materials on harmful use of alcohol developed -Awareness campaigns to discourage harmful use of alcohol conducted	-Number of awareness campaigns carried out -Number of IEC materials developed	-MOH-DNCD -MOH-Health Promotion - County Health Departments	-NACADA - Relevant Government Ministries and Agencies -CSO	2015-2020
Strengthening the implementation of the component on prevention and control of alcohol use in the school health policy and programmes	-Curriculum on of harmful use of alcohol in schools strengthened	-Number of school with curriculum on harmful use of alcohol	-MOE -MOH-DNCD MOH-Child Health	-NACADA, -Relevant ministries, -CSO -County Health Departments	2015-2020
Integrating alcohol abuse management and rehabilitation services at all levels including community, health care system, and workplace	-Regional rehabilitation services established at health care facilities -Community rehabilitation services established -Workplace Rehabilitation services established	-Number of facilities offering rehabilitation services -Number of Community units offering alcohol rehabilitation services -Number of work place with rehabilitation services	-MOH-Curative services -MOH-DNCD -MOH- Community strategy Unit -County Governments	-NACADA, -Implementing Partners - CSO, - Private sector	2015-2020



**STRATEGIC OBJECTIVE 4:** Promote and implement evidence based strategies and interventions for prevention and control of violence and injuries

Activity	Expected output	Indicator	Lead agency	Partner	Timeline
Promote and implement health related legislations and regulations that prevent and control violence and injuries	Health related legislations and regulations that prevent and control violence and injuries promoted and implemented	<ul style="list-style-type: none"> <li>-Number of legislations developed with input from health sector</li> <li>-Number of policy briefs</li> <li>-Number of implementation reports</li> </ul>	Relevant Government Ministries and Agencies -MOH-DNCD -County Governments	-CSO -Implementing partners	2015-2020
Developing and strengthen national, policies, plans, regulations, standards and guidelines for violence and injury prevention and control	<ul style="list-style-type: none"> <li>-National policies, plans, regulations standards and guidelines developed</li> <li>-National policies, plans, regulations and standards and guidelines disseminated</li> </ul>	<ul style="list-style-type: none"> <li>-Number of national policies, plans, regulations and standards and guidelines developed</li> <li>-Number of national policies, plans, regulations and standards and guidelines disseminated</li> </ul>	-MOH -Relevant Ministries and Agencies -County Health Departments	-NGOs -Implementing partners -NGOs	2015-2020
Implementing national policies, plans, regulations and standards and guidelines for violence and injury prevention and control	<ul style="list-style-type: none"> <li>-Advocacy tools developed for prevention and control of injuries and violence</li> <li>-Implementing agencies and Stakeholders sensitized on the documents</li> </ul>	<ul style="list-style-type: none"> <li>-Number of implementing agencies and stakeholders sensitized</li> <li>Number of advocacy tools developed</li> <li>Number of advocacy forums held</li> </ul>	-MOH - Relevant Government Ministries and Agencies -County Governments	-NGOs -Implementing partners -NGOs	2015-2020
Enhancing public awareness on the risk factors for violence and injuries and their prevention and control	<ul style="list-style-type: none"> <li>-IEC materials on risk factors for injuries and prevention of violence and injuries developed</li> <li>-Awareness programmes on violence and injury prevention and control established</li> </ul>	<ul style="list-style-type: none"> <li>-Number of IEC materials developed</li> <li>-Number of awareness programmes carried out</li> <li>-Number of Periodic implementation reports</li> </ul>	MOH -Relevant Ministries and Agencies -County Governments	-NGOs -Implementing partners -CSOs	2015-2020
Initiating and implementing community violence and injury prevention and control programs including in private and public institutions, workplace, health facilities	-Community programs initiated and implemented	<ul style="list-style-type: none"> <li>-Number of community programs initiated</li> <li>-Number of institutions implementing the programmes</li> <li>-Number of periodic implementation reports</li> </ul>	-MOHD NCD - County Governments	-NGOs -Implementing partners -CSOs	2015-2020
Strengthen pre-hospital care and ensure that they are well integrated with other public health and health care infrastructure	-Pre-hospital care strengthened	<ul style="list-style-type: none"> <li>-Number of community trainings held on pre-hospital care</li> <li>-Number of community members trained on pre-hospital care</li> </ul>	-MOH-DNCD, curative services, emergency preparedness, community strategy unit -County Health Departments	-Red cross -NGOs -CSOs	2015-2020
Improve the organization and planning of trauma care and rehabilitative services in the health care system	-Trauma care and rehabilitative services improved	<ul style="list-style-type: none"> <li>-Number of health facilities sensitized</li> <li>-Number of healthcare workers trained</li> </ul>	-MOH- DNCD, curative services - County Health Departments	-NGOs -Implementing partners -CSOs	2015-2020



**STRATEGIC OBJECTIVE 5:** To strengthen health systems for NCD prevention and control across all levels of the health sector

ACTIVITY	EXPECTED OUTPUT	INDICATORS	LEAD AGENCY	PARTNERS	Time line
Building the capacity of the health workforce in terms of numbers and skills mix, at all levels, for the prevention and control of the non-communicable diseases	-Training materials and job aids for both in-service and pre-service developed -Trainings and mentorship on NCD prevention and Control conducted	-Number of offices created and staff deployed -Number of health workers trained -Number of CHWs trained -Training institutions	-MOH DNCD -County Health Department -Council of Governors	-PPPs -WHO -Drivers of Public Participation(DOPPs)	2015-2020
Strengthening HR career track policies to include competency-based certification in NCD prevention and control	-Career track policies strengthened	-Presence of HR Policy -Number of HCW promoted using career track policy	-MOH DNCD, HRM Dept -PSC -County PSBs	-NGOs	2015-2020
Reviewing the pre-service and in-service curriculum in training of health care workers to incorporate NCDs prevention and control	-Pre service and In service training curriculum reviewed	-Number of documents reviewed -Number of review meetings held	-MOH-DNCD, standards -Academia	-NGOs -CSO -Development partners	2015-2020
Developing and disseminating integrated clinical guidelines and treatment protocols for NCD prevention, care and treatment for all levels	-Availability of the Clinical guidelines and Protocols for NCD control	-Number Counties sensitized on clinical guidelines and protocols - Number of guidelines and protocols disseminated and distributed Proportion of health facilities utilizing guidelines/protocols	-MOH-DNCD	-Relevant Government Ministries and Agencies -Development partners -Training institutions	2015-2020
Establishing an innovative chronic care model for NCD service delivery at the primary health care level	-Chronic care model for NCD service delivery established	-Report on the Chronic care model pilot  -Number of county health facilities implementing chronic care model  -Number of counties that incorporate palliative care protocols into their health system	-MOH-DNCD, Curative services -County health Departments -MTRH -KEPHCA	- Relevant Government Ministries and Agencies -development partners -Implementing partners	2015-2020
Developing wellness policies for clinics and programs at all levels of health care system and other sectors	-Wellness policy in place -Wellness models in place	-Report on the Wellness model pilot - Proportion of health facilities implementing wellness program	-MOH -DNCD and curative services County Health Office	-County governments, development -Implementing partners	2015-2017

Streamlining of the referral system for NCD prevention care and management	-Referral system in place for NCD prevention care and management	-Proportion of counties implementing the referral strategy	-MOH-DNCD, Referral Unit -County Health Office	-Implementing partners -NGOs	2015-2020
Integrating palliative care and end of life care to the primary health care platforms	-Palliative care and end of life integrated to primary health care	-Number of primary health care facilities implementing palliative care	-MOH-DNCD and Curative services -County Health facilities	-Implementing partners -NGOs	2015-2020
Ensuring availability and affordability of quality, safe and efficacious basic technologies for screening, diagnosis, treatment and monitoring of NCDs at the national and county levels	-Quality, safe and efficacious basic NCD technologies and essential medicines availed  -Revised distribution list to various levels of care containing basic NCD medicines and supplies	-Number of counties sensitized on formulated Policy  -Number of tracer NCD medicines and technologies available at KEMSA and county level	-MOH DNCD -County Health Office -KEMSA	Relevant government agencies, Development partners, relevant stakeholders KEMSA	2015-2020
Ensuring availability of essential NCDs prevention and care medicines and supplies and link this to financing mechanisms to foster access, affordability and sustainability at the national and county levels	-Essential NCDs prevention and care medicines and supplies availed  -Financial mechanism linked to availing of NCDs prevention and care medicines and supplies	-Proportion of health facilities with no stock out of NCDs prevention and care medicines and supplies during supervision  -Proportion of health budget allocated to NCD medicine and supplies	-MOH-DNCD, KEMSA, Pharmaceutical Unit -County Health Department	-Development partners -Implementing partners -NGOs	2016-2020
Engage relevant stakeholders to develop policies and legislation on complementary and alternative medicine in the	-Policies on complementary and alternative medicine developed  -Legislation on complementary and alternative medicines developed	-Number of policy briefs developed	-MOH-DNCD, Alternative medicine -KEMRI County health departments	-Academia -CSO	2016-2020



**STRATEGIC OBJECTIVE 6:** To promote interventions to reduce exposure to environmental, occupational, genetic and biological risk factors

Activity	Expected output	Indicators	Lead agency	Partners	Time line
Strengthening the implementation of the legal frameworks, policies, standards and guidelines to reduce exposure to environmental, biological and occupational risk factors to protect populations from environmental contaminants and occupational hazards that predisposes to NCDs	-Implementation of legal frameworks, policies, standards and guidelines strengthened	-Number of legislations strengthened -Number of policies strengthened -Number of guidelines documents strengthened	-MOH-DCND, DEH -County health Department	-NEMA -Ministry of Environment, -County governments	2015-2020
Initiate and promote programs aimed at protecting and reducing exposure to risk factors for NCDs at the workplace, public and home environment	-Programs aimed at protecting and reducing environmental exposure initiated	- Number of work place programs - Number of Public programs - Number of home programs	-MOH-DCND, DEH -County health Department	-Relevant Government Ministries and Agencies -Private sector -NGOs -CSOs	2015-2020
Create public awareness on prevention and control of exposure to environmental, biological and occupational risk factors on NCDs	-IEC materials on prevention and control of environmental, biological and occupational risk factors developed -Awareness campaigns on prevention and control of environmental ,biological and occupational risk factors held	-Number of awareness campaigns carried out -Number of IEC materials developed -Number of IEC materials disseminated -Number of sensitization meetings held	-MOH - DNCD Health promotion units at both MOH and county health departments, -Media	-Relevant Government Ministries, -Development Partners	2015-2020
Availing vaccination, screening, early detection and treatment for infections that predisposes to NCDs	-Vaccines made available -Early screening and detection program in place -Treatment of conditions resulting from biological risk factors available in all the levels of care	-Number of vaccines available -Number of persons vaccinated -Number of screening programs established -Number of health workers sensitized on early detection and treatment	-MOH - DNCD , DVI -County Health Department	-Relevant Government Ministries, -Development Partners -CSO	2015-2020



**STRATEGIC OBJECTIVE 7:** To establish and strengthen effective monitoring and evaluation systems of non-communicable disease and their determinants

ACTIVITY	EXPECTED OUTPUT	INDICATORS	LEAD AGENCY	PARTNERS	TIME LINE
Adapt the global NCD M&E framework for prevention and control of NCDs with locally relevant targets and indicators.	-National NCD M&E framework developed	-National NCD M&E framework in place -Number of copies of National NCD M&E framework disseminated -Proportion of indicators being reported	MOH - DNCD -WHO -County health department	-Development partners -Relevant Government ministries and agencies -NGOs	2015-2016
Undertake a comprehensive situational analysis on the burden of NCDs and their risk factors	-Situational analysis performed	-Situational analysis report	MOH-DNCD, Research -WHO -County Health Departments	-Development partners -Relevant Government ministries and agencies -NGOs	2015-2017
Integrating of global NCD and NCD risk factor surveys into the national surveillance system.	-Global NCD and Risk factor Surveys integrated into national surveillance	-Number of national surveys integrating NCD and risk factor surveys -Survey reports	MOH -KNBS	-Research institutions -NGOs -Academia	2015-2020
Develop standardized NCD M&E tools and integrate them into the HIS at all levels of health care	-NCD M&E tools developed and integrated	- No of M& E tools developed -Proportion of facilities generating NCD M&E reports	-MOH -DNCD M&E unit, HIS -County health departments	-Development partners, -Relevant government ministries	2015-2017
Dissemination NCD M&E tools to all levels of health care	-NCD M&E tools disseminated	-Proportion of counties with tools disseminated	-MOH -DNCD M&E unit, HIS -County health departments	- WHO, -CDC, -Development partners	2015-2020
Establishment of a mechanism for the collection, reporting, analysis and utilization of NCD data not routinely captured by HIS	-Mechanism for NCD data collection, reporting, analysis for NCDs in place	-Number of institutions reporting on non-routine reports, minutes of the Committee -Reporting rate from health facilities	-MOH -DNCD M&E unit, HIS -County health departments	-Development partners, -Relevant government ministries	2015-2017
Periodic review of the implementation of the NCD strategic plan	-NCDs implementation plan progress Periodically reviewed	-Number of integrated regular supportive supervisory visits to the counties - Number of integrated NCDs review meetings conducted -Number of Reports of NCDs review -Number of Reports of NCDs county support supervision	-MOH - County health departments	-Development partners -Implementing partners -Relevant government ministries	2017-2020



**STRATEGIC OBJECTIVE 8:** To promote and conduct research and surveillance for the prevention and control of non-communicable diseases

ACTIVITY	EXPECTED OUTPUT	INDICATORS	LEAD AGENCY	ACTORS	TIME LINE
Carry out a national situational analysis for NCDs burden and risk factors	National situational analysis for NCDs burden and risk factor conducted	-One Situational analysis report	-MOH-DNCD, Research Unit	-County Health Departments -NGOs -Development partners	2015
Identify priority research areas on Non-communicable Diseases and their risk factors	-Priority research areas on NCDs Identified	-Number of Priority research areas Identified -List of priority research areas	-MOH – DNCD, KEMRI -County Health Department	-Development partners, -CSOs, -Relevant government ministries and agencies,	2015-2016
Strengthen capacity for NCD surveillance and research (human resource, infrastructure, equipment and supplies)	-NCD surveillance and research capacity strengthened	-Number of healthcare workers trained on NCD surveillance and research -Proportion of NCD budget dedicated to NCD surveillance and research infrastructure	-MOH – DNCD, Research, Surveillance Unit -County Health Department	-Development partners	2015-2020
Conducting baseline and periodic surveys on NCDs and their risk factors	-NCD risk factors baseline survey conducted (STEPS) -Periodic surveys of NCD and their risk factors conducted	-Report of the baseline surveys -Reports of the periodic survey	-MOH, DNCD KEMRI, Research Unit County Health Department -KNBS	-Relevant ministries and agencies, -Development partners -Academia	2015-2020
Allocating resources for routine and periodic surveillance of NCDs at county and national government	-Funds allocated for routine and periodic surveillance	-Proportion of NCD budget allocated to surveillance	MOH,DNCD,DSRU -County Health Department	-Development partners, -Academia,	2015-2020
Facilitating knowledge translation on conducted research to guide decision making by national and county governments	-Evidence based decisions made	- Number of decisions guided by research	-MOH, DNCD KEMRI, Research Unit -County Health Department	-Relevant ministries and agencies, -Development partners -Academia	2015-2020

**STRATEGIC OBJECTIVE 9:** To promote local and international partnerships for the prevention and control of non-communicable Diseases

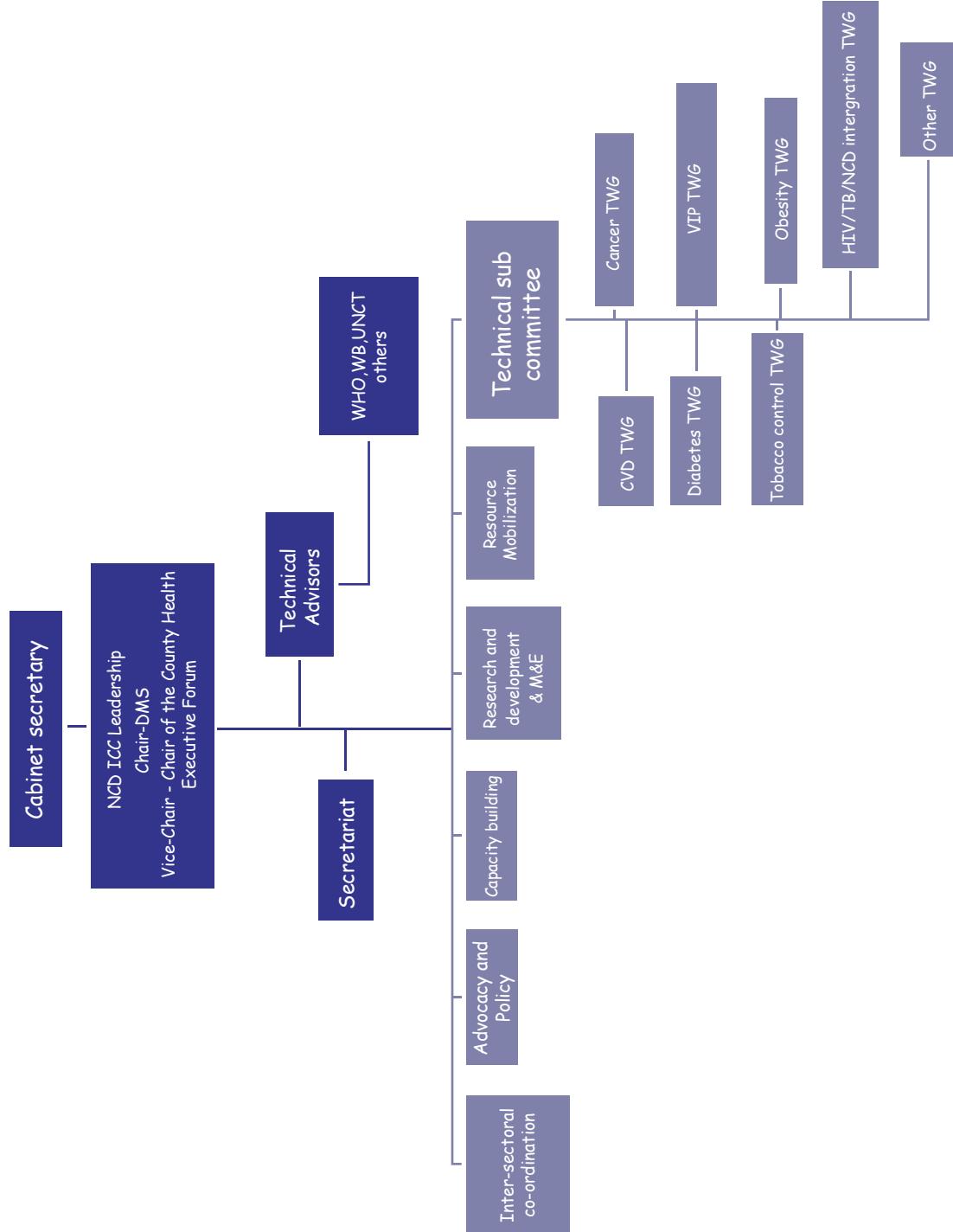
ACTIVITY	EXPECTED OUTPUT	INDICATORS	LEAD AGENCY	PARTNERS	TIME LINE
Establishing a national NCD prevention and control Steering Committee (NNCDSC) comprising of technical experts within the ministry of health	-National Steering Committee in place and TORs defined	-Number of meetings held by steering committee -Minutes of the meetings held by steering committee -Terms of reference for the steering committee, -Periodic reports of the committees	-MOH -DNCD	-Relevant Government ministries, -Development partners, -CSOs -Academia	2015
Establishing NCD Inter-Agency Coordinating Committee (ICC) consisting of development partners in health	-NCDs Inter-Agency Coordinating Committee in place and TORs defined	-Number of ICC stake holders forum conducted -Minutes of the ICC meetings -Periodic reports of the committees	-MOH - DNCD	-Relevant Government ministries, -Development partners, -CSOs -Academia	2015
Establishing technical working group on selected NCD themes that meets on a regular basis and report via the NCD Inter-Agency Coordinating Committee (ICC)	-Technical working groups established and their TOR defined	-Number of TWG groups in place -Number of meetings held by the TWG -Report of the activities performed by the TWGs	-MOH - DNCD	-Relevant Government ministries -Development partners -CSOs -Academia	2015-2020
Advocating for Identification and support of focal units for NCD prevention and control at all levels	-NCD Focal units identified -NCD Focal persons identified and TORs defined	-Number of NCD focal units identified and supported. -Number of NCD focal persons identified and supported	-MOH – DNCD -County Health Department	-Relevant Government ministries -Development partners	2015 – 2018
Mainstreaming NCD prevention and control into other health programs (HIV/AID, ophthalmic, TB, Malaria, reproductive health, Nutrition, community health, maternal and child health etc) in order to address NCD concerns	-NCD prevention and control incorporated into other health programs	-Number of health programs incorporating NCD prevention and control	-MOH - DNCD and other programmes	-County Health Departments - Development partners other stakeholders	2015-2020
Leveraging on PPP to support NCD prevention and control	-PPP forums on NCD prevention and control established	-Number of PPP forums held on NCD -Number of private partners incorporating NCD control into their plans	-MOH DNCD	-Relevant Government ministries -Development partners	2015-2020
Participate in regional and global for a for the prevention and control of NCDs	- Contribute and draw from regionally and globally agreed upon resolutions and frameworks	- Number of regional and global for a participated in	MOH-DNCD	- MOH national level - Relevant Ministries - County Government -CSOs -Development Partner	



**STRATEGIC OBJECTIVE 10:** To promote and strengthen advocacy, communication and social mobilization for NCD prevention and control

Activity	Expected output	Indicators	Lead agency	Partners	Time line
Building the capacity for health promotion for prevention and control of NCDs amongst health care workers and the general population.	-Strengthened capacity for health promotion for control and prevention of NCD	-Number of health care workers trained on NCD health promotion -Number of initiatives established for health promotion in the general population	-MOH - DNCD, Health Promotion	-County Health Departments -NGOs -CSOs -Media	2015-2020
Strengthening health promotion with focus on health inequity, empowerment and social determinants of health using participatory approaches for the prevention and control of NCDs	-Health promotion with focus on health inequity strengthened	-Number of forums addressing inequity via health promotion conducted	-MOH- DNCD, Health Promotion -County Health departments	-NGOs -CSOs -Media	2015-2020
Utilizing social marketing for health approaches to achieve and sustain adoption of behaviours that are key in prevention and control of NCDs	-Social marketing for health utilized in the prevention and control of NCDs	-Number of social marketing campaigns held	-MOH- DNCD, Health Promotion	-County Health Departments -Relevant Government Ministries and Agencies -NGOs -CSOs -Media	2015-2020

## NCD Inter-sectoral coordinating Committee (NCD ICC)



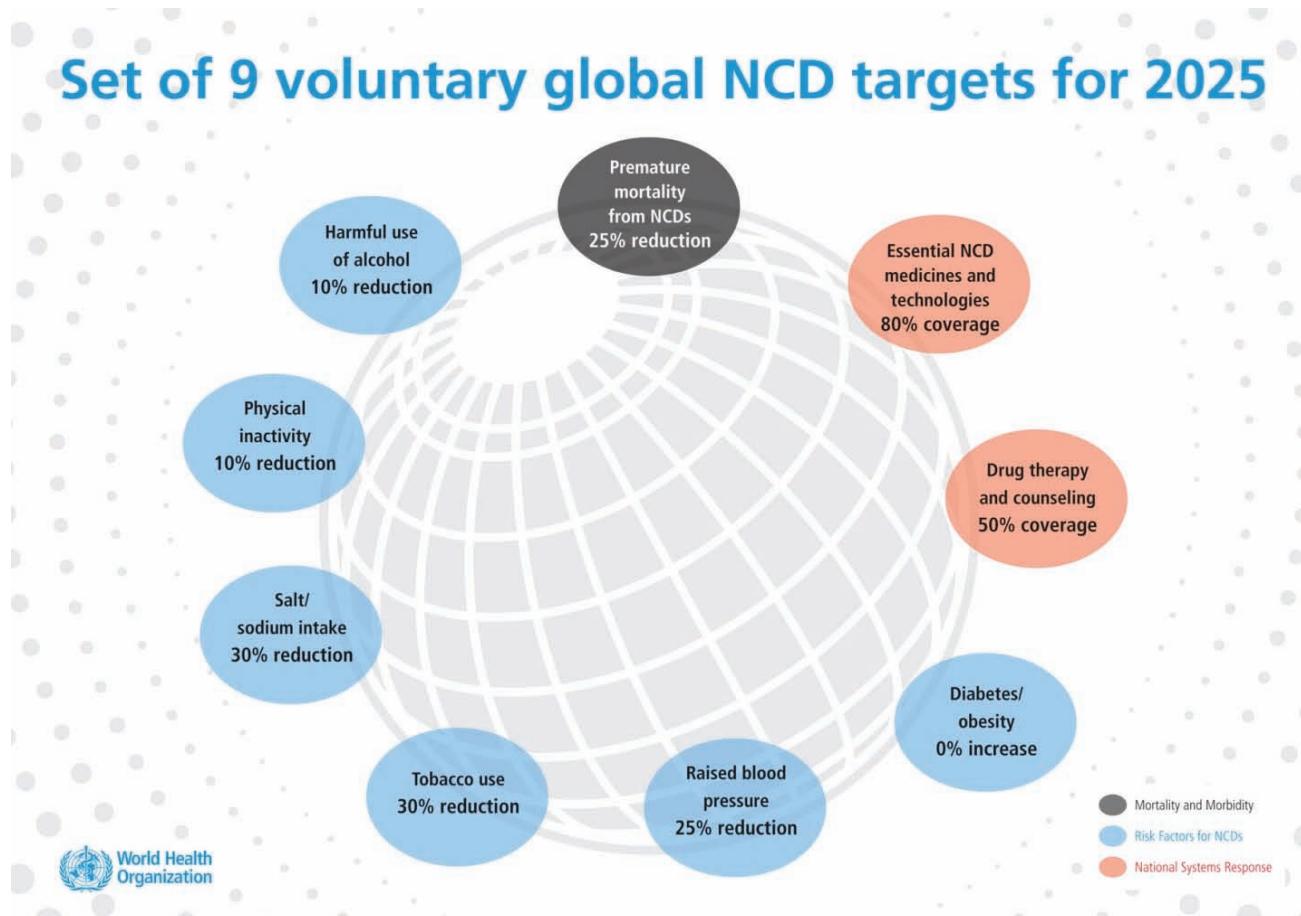
## The Non Communicable Diseases Inter-sectoral coordinating Committee (NCD ICC)

- The NCD ICC reports to the Cabinet Secretary, MOH and ultimately to the Cabinet
- The NCD ICC will be chaired by the Director of Medical Services (DMS) who may delegate to the head of the department or division concerned with NCDs.
- Deputy Chair:
  - The Chair of the County Health Executives Forum will deputize the DMS as chair of the NCD ICC
  - He/She will liaise and connect the ICC to the county health forum and ultimately represent the NCD ICC to the council of Governors.
- Secretariat:
  - The secretariat of the NCD ICC will be hosted at the NCD alliance Kenya whose location will be dependent on the Civil society hosting the NCD alliance at the time.
- Ad Hoc Members:
  - The ICC may upon need co-opt members from both the national and county level to represent an issue of NCD importance through the Sub Committees.
- Sub-Committees
  - \* Advocacy and Policy
  - \* Inter-sectoral Coordination-coordination of various state actors; Ministry of Devolution will be key.
  - \* Capacity building
  - \* Research and Development/M&E
  - \* Technical Sub-Committee- consists of the various Technical working groups
- The Chair to the Technical Sub-Committee shall be Head at the division of non communicable diseases or his representative
- Other sub-committees: Chair to be person/organization outside the MOH
- Membership to the various sub-committees to be agreed upon after the launch of the ICC.
- Upon first meeting, Chair to preside over adoption of the agreed draft structure and TORs.

# APPENDIX

## Appendix 1:Comprehensive global monitoring framework,

Nine voluntary global targets for the prevention and control of non-communicable diseases



# Global Monitoring Framework

## Appendix 2:

25 indicators for the comprehensive global monitoring framework for the prevention and control of non communicable diseases, (WHO Global NCD Action Plan 2013-2020)



# 25 Indicators



## Appendix 3: Kenya national monitoring framework for the prevention and control of NCDs and their determinants

Framework element	Year 2020 Target	Indicator	Comments
Mortality and morbidity			
Premature mortality from non-communicable diseases	(1) A 20% relative reduction in risk of premature mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases	(1) Unconditional probability of dying between ages of 30 and 70 from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases	1. Need for modeling and estimates due to limited mortality data from Vital Registration. 2.Calling up of the Verbal Autopsy may be a solution on the interim
Additional indicator		(2) Cancer incidence, by type of cancer, per 100 000 population	1. Cancer registry needs to be rolled out nationally.
Risk factors			
Harmful use of alcohol	(2) At least 10% relative reduction in the harmful use of alcohol	(3) Total (recorded and unrecorded) alcohol per capita (aged 15+ years old) consumption within a calendar year in litres of pure alcohol (4) Age-standardized prevalence of heavy episodic drinking among adolescents and adults, (5) Alcohol-related morbidity and mortality among adolescents and adults	Need to have a comprehensive ICD 10 coding and certification
Physical inactivity	(3) A 10% relative reduction in prevalence of insufficient physical activity	(6) Prevalence of insufficiently physically active adolescents, defined as less than 60 minutes of moderate to vigorous intensity activity daily (7) Age-standardized prevalence of insufficiently physically active persons aged 18+ years (defined as less than 150 minutes of moderate-intensity activity per week, or equivalent)	To implemented together with the national guidelines for healthy diets and physical activity 2013
Salt/sodium intake	(4) A 15 % relative reduction in mean population intake of salt/sodium	(8) Age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years	To be reviewed with national surveys results on salt consumption
Tobacco use	(5) A 30% relative reduction in prevalence of current tobacco use in adolescents (6) A 30% relative reduction in prevalence of current tobacco use in persons aged 15+ years	9. prevalence of current tobacco use among adolescents 10. Age standardized prevalence current tobacco use of among person age 15 years and above.	To be monitored with GATS and GTS surveys



Biological risk factors	<p><b>(8) Halt the rise in diabetes and obesity</b></p> <p>(12) Age-standardized prevalence of raised blood glucose/diabetes among persons aged 18+ years (defined as fasting plasma glucose concentration <math>\geq 7.0 \text{ mmol/l}</math> [126 mg/dl] or on medication for raised blood glucose)</p> <p>(13) Age-standardized prevalence of raised blood glucose/diabetes among persons aged 6-18 years (defined as fasting plasma glucose concentration <math>\geq 7.0 \text{ mmol/l}</math> [126 mg/dl] or on medication for raised blood glucose)</p> <p>(14) Prevalence of overweight and obesity in adolescents (defined according to the WHO growth reference for school-aged children and adolescents, overweight – one standard deviation body mass index for age and sex, and obese – two standard deviations body mass index for age and sex)</p> <p>(15) Age-standardized prevalence of overweight and obesity in persons aged 18+ years (defined as body mass index <math>\geq 25 \text{ kg/m}^2</math> for overweight and body mass index <math>\geq 30 \text{ kg/m}^2</math> for obesity)</p> <p>(16) Age-standardized mean proportion of total energy intake from saturated fatty acids in persons aged 18+ years]</p> <p>(17) Age-standardized prevalence of persons (aged 18+ years) consuming less than five total servings (400 grams) of fruit and vegetables per day</p> <p>(18) Age-standardized prevalence of raised total cholesterol among persons aged 18+ years (defined as total cholesterol <math>\geq 5.0 \text{ mmol/l}</math> or [190 mg/dl]; and mean total cholesterol concentration</p>	<p>Monitored via STEPS survey and KDHS</p> <p>Additional indicators</p>
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National systems response		
Drug therapy to prevent heart attacks and strokes	(9) At least 50% of eligible people receiving drug therapy and counselling (including glycemic control) to prevent heart attacks and strokes	(19) Proportion of eligible persons (defined as aged 40 years and older with a 10-year cardiovascular risk ≥30%, including those with existing cardiovascular disease) receiving drug therapy and counseling (including glycemic control) to prevent heart attacks and strokes
Essential noncommunicable disease medicines and basic technologies to treat major non-communicable diseases	(10) An 80% availability of the affordable basic technologies and essential medicines, including generics, required to treat major noncommunicable diseases in both public and private facilities	(20) Availability and affordability of quality, safe and efficacious essential noncommunicable disease medicines, including generics, and basic technologies in both public and private facilities
Additional indicators	<p>(21) Access to palliative care assessed by morphine-equivalent consumption of strong opioid analgesics (excluding methadone) per death from cancer</p> <p>(22) Adoption of national policies that limit saturated fatty acids and virtually eliminate partially hydrogenated vegetable oils in the food supply, as appropriate, within the national context and national programme</p> <p>(23) Availability, as appropriate, if cost-effective and affordable, of vaccines against human papillomavirus, according to national programmes and policies</p> <p>(24) Policies to reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, trans fatty acids, free sugars, or salt</p> <p>(25) Vaccination coverage against hepatitis B virus monitored by number of third doses of Hep-B vaccine (HepB3) administered to infants</p> <p>(26) Proportion of women between the ages of 30-49 screened for cervical cancer at least once, or more often, and for lower or higher age groups according to national programmes or policies</p>	<p>(19) Proportion of eligible persons (defined as aged 40 years and older with a 10-year cardiovascular risk ≥30%, including those with existing cardiovascular disease) receiving drug therapy and counseling (including glycemic control) to prevent heart attacks and strokes</p> <p>Compiled from national and county health monitoring records.</p> <p>Specific projects and survey tracking</p>



## Appendix 4: Multisectoral action to reduce NCDs and their determinants

Sector	Tobacco	Physical inactivity	Harmful use of alcohol	Unhealthy diet
Agriculture	✓		✓	✓
Communication	✓	✓	✓	✓
Education	✓	✓	✓	✓
Employment	✓	✓	✓	✓
Energy		✓	✓	✓
Environment	✓	✓	✓	✓
Finance	✓	✓	✓	✓
Food/catering	✓	✓	✓	✓
Foreign affairs	✓	✓	✓	✓
Health	✓	✓	✓	✓
Housing	✓	✓		✓
Justice/security	✓	✓	✓	✓
Legislature	✓	✓	✓	✓
Social welfare	✓	✓	✓	✓
Social and economic development	✓	✓	✓	✓
Sports	✓	✓	✓	✓
Tax and revenue	✓	✓	✓	✓
Trade & Industry (excluding tobacco Industry)	✓	✓	✓	✓
Transport	✓	✓	✓	✓
Urban Planning	✓	✓	✓	✓
Youth Affairs	✓	✓	✓	✓



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***"A gram in prevention is worth a ton in treatment ....."* Mantra at DNCD**

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