Government of Anguilla, Ministry of Health & Social Development

The Anguilla National Plan of Action for the Prevention and Control of Chronic Non-Communicable Diseases 2015-2025

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Contents

ACRONYMS

CARICOM	Caribbean Community
CARPHA	Caribbean public Health Agency
CCM	Chronic Care Model
CDU	Chronic Disease Unit
CNCDs	Chronic Non-Communicable Diseases
COPD	Chronic Obstructive Pulmonary Disease
CRD	Chronic Respiratory Diseases
CVD	Cardiovascular disease
CWD	Caribbean Wellness Day
DALYs	Disability-adjusted life years
DM	Diabetes Mellitus
ED	Education Department
EPI	Expanded Programme on Immunization
EXCo	Executive Council
FBO	Faith Based Organisation
FCTC	Framework Convention on Tobacco Control
GoA	Government of Anguilla
GSHS	Global School Health Survey
HAA	Health Authority of Anguilla
Hep B	Hepatitis B
HIV	Human Immunodeficiency Virus
HPV	Human Papilloma Virus
HTN	Hypertension
MDG	Millennium Development Goals
MOE	Ministry of Education
MOF	Ministry of Finance
MOU	Memorandum of Understanding
MSD	Ministry of Health and Social Development
NCDU	National Chronic Disease Unit
NCD	Non-Communicable Diseases
NGO	Non –Governmental Organization
NHI	National Health Insurance
PAHO	Pan American Health Organization
PASB	Pan American Sanitary Bureau
PE	Physical Education
PHC	Primary Health Care
QOC	Quality of Care
SS	Social Security
TOR	Terms of Reference
UKOTs	United Kingdom Overseas Territories
UN	United Nations
UNICEF	United Nations Children's Fund
WHO	World Health Organisation

EXECUTIVE SUMMARY

The Ministry of Health and Social Development (MSD) and the National Chronic Disease Unit (CDU) envisions creating a comprehensive integrated approach to build capacity so that chronic diseases and their risk factors will be effectively managed and the psychosocial economic health burden of these diseases no longer exist.

The Anguilla **National Plan of Action for the Prevention and Control of Chronic Non-Communicable Diseases (CNCDs) 2015-2025** strives to achieve this through four priority lines of action:

- Policy, Advocacy and Multisectoral Partnerships
- Risk Factor Reduction of the four common risk factors (tobacco, alcohol, unhealthy diet, physical inactivity), Health Promotion and Communications
- Health Systems Response, Integrated Disease Management & Patient Self-Management
- Chronic Non-communicable Disease (CNCD) Surveillance and Research.

The Plan focuses on the four leading chronic diseases namely cancers, cardiovascular diseases, chronic respiratory diseases and diabetes and intends to mimic global and regional targets of reducing premature mortality due to CNCDs by 25% by 2025. It incorporates a situational analysis, stakeholder feedback and a review of the country's capacity which further provides direction for the prevention, management and control of CNCDs that is culturally specific to Anguilla.

This Action Plan was developed collaboratively with the Ministry of Health and Social Development (MSD), the National Chronic Disease Unit (CDU) and relevant stakeholders involved in CNCD prevention, control and management. It emphasizes a multisectoral approach and is reflected in departmental operational and strategic plans. It is aligned with the **World Health Organization (WHO) NCD Global Monitoring Framework and Global Action Plan 2013-2020**, the **PAHO Regional Plan of Action for the Prevention and Control of NCDs 2013-2019** and the **Millennium Development Goals (MDG) Post 2015 Development Agenda.**

As the burden of CNCDs steadily increases, the plan attempts to lessen the impact by focusing on being proactive instead of reactive. The Anguilla National Plan of Action for the Prevention and Control of Chronic Non-communicable Diseases aims to coordinate efforts across new and previously existing programs to achieve improvement in wellness of the population through integration and coordination in both public and private sectors in Anguilla.

1. BACKGROUND/OVERVIEW

Chronic Non Communicable Diseases (CNCDs) are lifelong, usually progressive conditions that cannot be cured but can be effectively managed.

1.1 Global Burden

Due to a global epidemiological transition[1] that has been occurring over the past few decades, these diseases have collectively become the leading cause of death and disability worldwide.

CNCDs now account for 60% of all deaths worldwide and are responsible for 38 million deaths per year. Specifically, the evidence indicates that cardiovascular diseases (including hypertension, ischemic heart disease and stroke), cancers, chronic respiratory diseases (chronic obstructed pulmonary disease) and diabetes are the four leading chronic diseases. Cardiovascular diseases account for most CNCD deaths, or 17.5 million people annually, followed by cancers (8.2 million), respiratory diseases (4 million), and diabetes (1.5 million). These 4 groups of diseases account for 82% of all CNCD deaths.

Alarmingly, over 14 million of these deaths occur between the ages of 30 and 70, of which 85% are in developing countries. Moreover, the total amount of persons dying prematurely from chronic diseases has doubled that of all infectious diseases (including HIV/AIDS, tuberculosis and malaria), maternal and prenatal conditions and nutritional deficiencies combined (Figure 1.).

[1] Global epidemiological transition in this context refers to the change in the disease profile and the resultant dramatic changes and transitions in the world's health needs. At present, lifestyle and behaviour are linked to 20-25% of the global burden of disease due to the major NCDs.

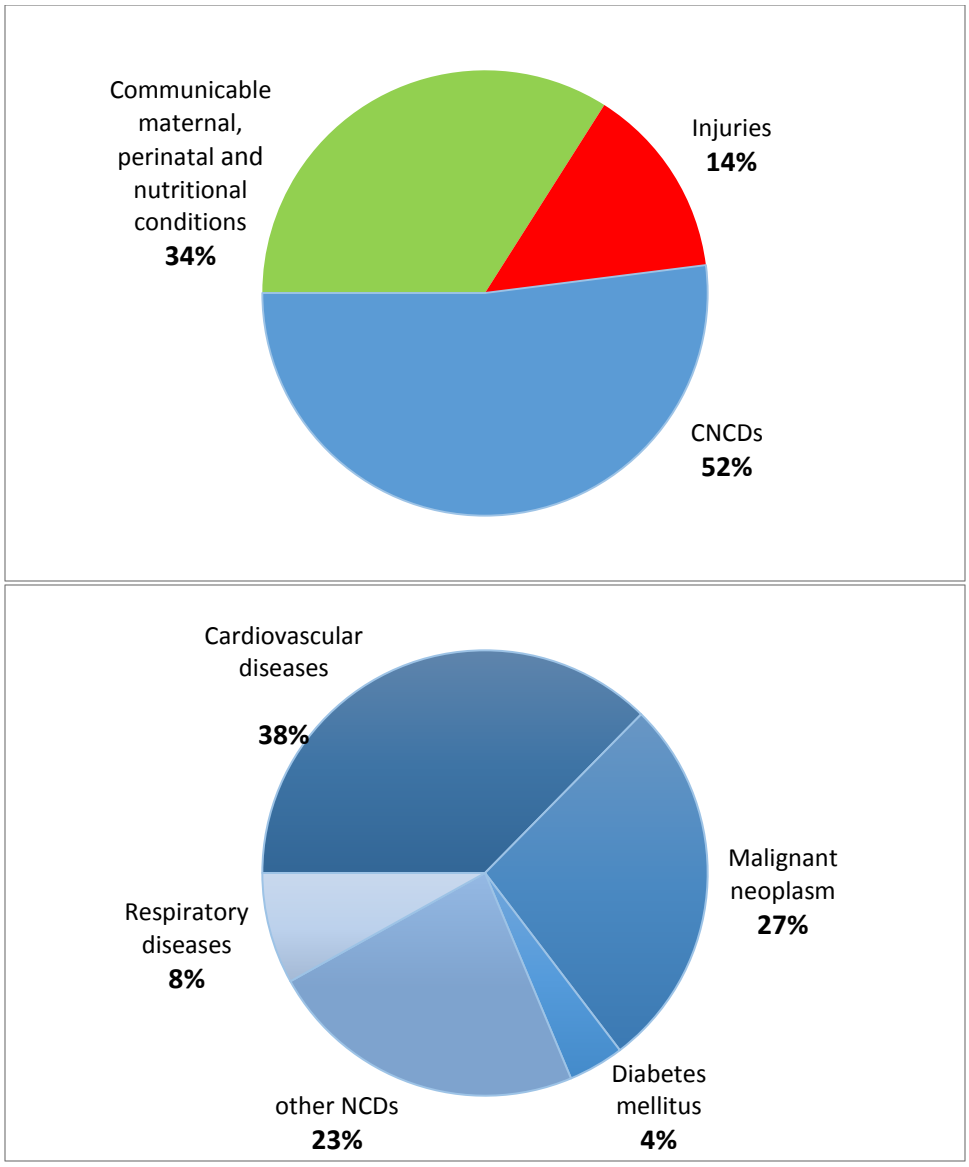

Figure 1. Proportion of global deaths under the age of 70[2], 2012 Estimates

These premature deaths are not only considered to be largely preventable by governments through implementing simple measures which reduce risk factors for CNCDs, but they also exacerbate existing poverty and are therefore a threat to poverty elimination and development.

[2] Source: Reproduced from WHO NCD Global Status Report 2014

In terms of economic impact, a survey of business leaders from around the world carried out by the World Economic Forum in 2009 identified chronic disease as one of the leading threats to global economic growth. Additionally, projected cumulative economic losses due to CNCDs under a "business as usual" scenario in low- and middle-income countries for the period 2011to 2025, were estimated to be around US$ 7 trillion. They linked this sizeable negative economic impact to the effect of mortality and prolonged disability associated with CNCDs on households, industries and societies, both via the consumption of health services and via losses in income, productivity and capital formation.

1.2 Regional Burden

In the Region of the Americas, 77% of deaths are due to CNCDs; this is higher than the global estimate of 60% and estimated to be as high as 80% in some countries. In a pattern similar to that of the global picture, CVDs are responsible for the largest proportion of deaths accounting for 40%, followed by malignant neoplasms (25%), chronic respiratory diseases (8%), and diabetes (6%). With regard to premature deaths, 65% of all premature deaths are due to chronic disease. CVD and malignant neoplasms as responsible for the largest proportion of deaths (32%), followed by digestive diseases (9%), diabetes mellitus (7%) and respiratory diseases (6%), while 13% of deaths were the result of other Chronic Non Communicable Diseases.

However, within the Region of the Americas, the Non-Latin Caribbean sub-region[3] has the highest mortality rates from CNCDs, with CVD, cancer and diabetes as the main causes of CNCD deaths (Fig.2). This also includes relatively high mortality rates for breast and cervical cancers. Additionally, in this sub-region, the probabilities of premature death due to these diseases are among the highest in the world.

[3] This consists of the following 21 countries, most which are the English-speaking Caribbean territories: Anguilla, Antigua & Barbuda, Aruba, Bahamas, Barbados, Cayman Islands, Curacao, Dominica, Grenada, Guyana, Jamaica, Montserrat, Saint Kitts & Nevis, Saint Lucia, Saint Vincent & the Grenadines, Sint Maarten, Suriname, Trinidad & Tobago, Turks & Caicos, British Virgin Islands, US Virgin Islands.

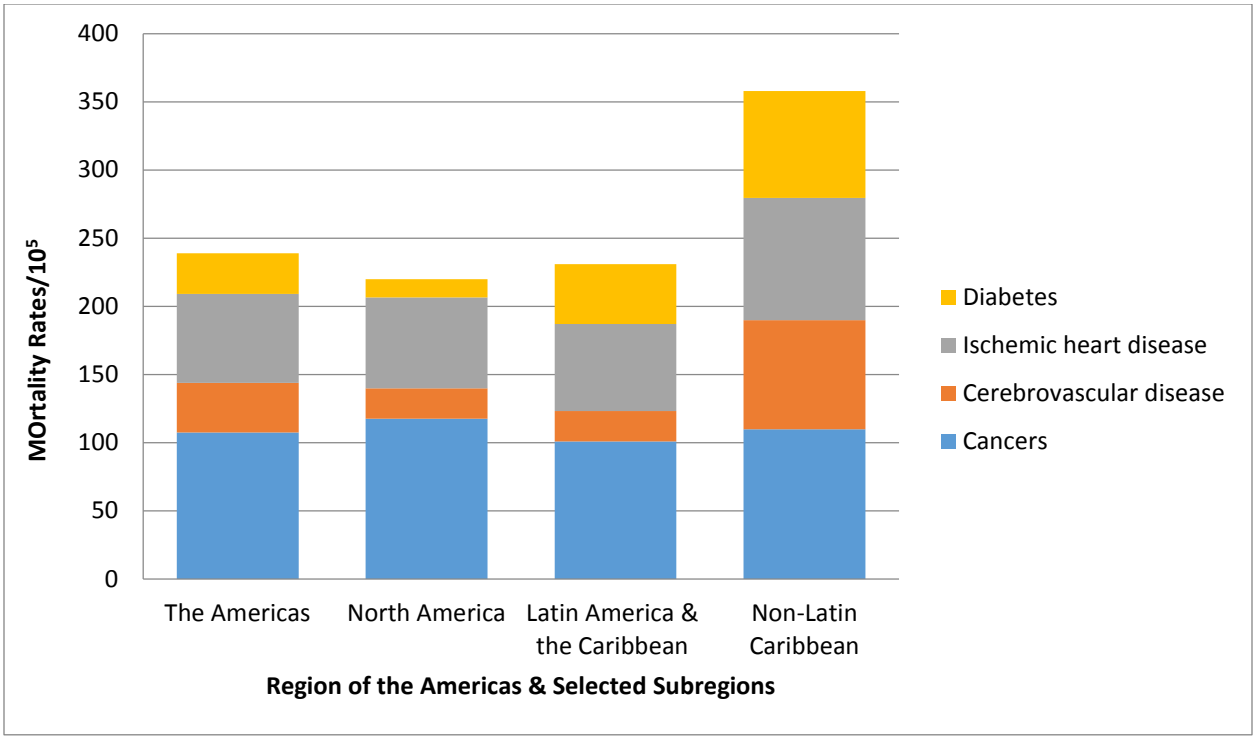

Figure 2. Mortality Rates for Selected NCDs within the Region of the Americas in 2013[4]

CNCDs have been estimated to contribute to almost 50% of disability-adjusted life years (DALYs)[5] lost in this sub-region. Previous assessments have estimated the diabetes prevalence rate in this sub-region to be as high as 10% and projected to increase. Additionally, diabetes-related amputations are among the highest recorded in the world. Cervical cancer incidence estimated in 2000 and 2002 was also relatively high compared to the region and the rest of the world at 35.8 and 32.6 per 100,000 respectively. In terms of economic impact, for some Caribbean countries the economic cost has been estimated at 5 to 8% of the Gross Domestic Product. For example, treatment of hypertension and diabetes in selected countries has been estimated to consume between 1.4 to 8.0 % of Gross Domestic Product.

[4] Source of data: PAHO Basic Indicators 2014

[5] The disability-adjusted life year (DALY) is a measure of overall disease burden, expressed as the number of years lost due to ill-health, disability or early death. One DALY can be thought of as one lost year of "healthy" life.

1.3 CNCD Risk Factors

It has been accepted for some time now that these diseases largely share four modifiable risk factors: unhealthy diet, physical inactivity, tobacco use and the harmful use of alcohol. These factors in turn lead to four key metabolic/physiological changes that increase the risk of CNCDs: raised blood pressure, overweight/obesity, hyperglycemia (high blood glucose levels) and hyperlipidemia (high levels of fat in the blood). According to WHO reports, the following are attributable to CNCD risk factors on an annual basis:

- 6 million deaths due to tobacco including second-hand smoking.
- About 3.2 million deaths and 69.3 million DALYs due to insufficient physical activity.
- More than half of the 3.3 million deaths from harmful drinking and estimated 5.1% of DALYs due to CNCDs have been attributed to alcohol consumption.

Additionally, in 2010, 1.7 million deaths from cardiovascular causes were attributed to excess salt/sodium intake. Furthermore, elevated blood pressure is considered to be the leading metabolic risk factor globally to which 18% of global deaths and 7% of DALYs due to CNCDs are attributed. This is followed by 'overweight and obesity' and 'raised blood glucose'. Obesity and overweight among females exceeds 50-60% in most Caribbean countries and excessive alcohol use causes much morbidity and mortality.

In Bolivia, Brazil, Dominican Republic, Jamaica, Mexico, Paraguay, and Peru, over-nutrition and obesity have become more of a concern than under- nutrition among children under five. PAHO has stated that between 30-60 % of the region's population does not achieve the daily-recommended level of exercise, and expects obesity rates to increase as high as 39%. According to PAHO reports, diabetes rates have also spiked across the region with 35 million

people region-wide living with the disease and close to 64 million projected to be diagnosed by 2025.

In the non-Latin Caribbean, hypertension is considered to be one of the most important risk factors for heart disease. By some accounts, hypertension affects as much as 22.6%, 25.8% and 27.0% of the population in Jamaica, St. Lucia and Barbados respectively.

1.4 International & Regional CNCD Legislative & Policy Frameworks for Response

The following is a summary of the leading frameworks for action against the major CNCDs that informed this plan of action:

The WHO Global Action Plan for the Prevention and Control of NCDs 2013-2020 [6]- The current global action plan that focuses on four types of non-communicable diseases: CVD, cancer, CRD and diabetes; as well as four shared behavioural risk factors: tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol. It has an accompanying framework (Annex 1) that devises 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.

[6] This plan is available at http://www.who.int/nmh/publications/ncd-action-plan/en/

The WHO Best Buys 2011 [7]– Very cost-effective interventions that are also high-impact and feasible for implementation even in resource-constrained settings **(Annex 2).**

The Framework Convention on Tobacco Control (WHO FCTC)[8] 2005– Entered into force on February 27th 2005, the WHO FCTC is considered the first global public health treaty that was developed in response to the globalization of the tobacco epidemic. It focuses on root causes of the epidemic including complex factors with cross-border effects, such as trade liberalization and direct foreign investment, tobacco advertising, promotion and sponsorship beyond national borders, and illicit trade in tobacco products. There are currently 180 Parties to the Convention.

The Pan American Health Organization Plan of Action for the Prevention and Control of Non-Communicable Diseases in the Americas 2013-2019[9]- Developed to correspond with the (PAHO) Strategy for the Prevention and Control (2012-2025) which was endorsed in 2012 by the Pan American Sanitary Bureau (PASB). It espouses actions on CNCDs by the PASB and by Member States based on regional and subregional initiatives, contexts, and achievements while maintaining alignment with the World Health Organization (WHO) NCD Global Monitoring Framework and Global Action Plan 2013 2020. The plan utilizes fours based on the four strategic lines of action in the Strategy for the Prevention and Control of NCDs and it is congruent with the 25 indicators and 9 targets of the WHO Comprehensive Global Monitoring Framework

[7] These are detailed in the WHO publication *From Burden to "Best Buys": Reducing the Economic Impact of Non-Communicable Diseases in Low- and Middle-Income Countries* 2011 available at http://www.who.int/nmh/publications/best_buys_summary.pdf

[8] A full description of the convention is available at http://www.who.int/fctc/about/WHO_FCTC_summary_January2015.pdf

[9] The PAHO Plan of Action for the Prevention and Control of Noncommunicable Diseases in the Americas 2013-2019 is available at http://www.paho.org/hq/index.php?option=com_docman&task=doc_view&Itemid=270&gid=27517&lang=en

2007 Port of Spain Declaration & Strategic Plan of Action for the Prevention and Control of NCDs for Countries of the Caribbean Community (CARICOM) 2011-2015- Almost a decade ago regional heads realised the tremendous impact of CNCDs. Inaction could undermine the development of our small fragile countries and the devastating impact on countries' health and socio economic status. One of the premier milestones for the region was convening of a CARICOM Summit "Uniting to Stop The Epidemic of Chronic Non-Communicable Diseases" which resulted in the signing of 2007 CARICOM Port-of-Spain Declaration on NCDs. It consisted of 27 commitments to definitive action and subsequent to the signing of the declaration; the CARICOM Strategic Plan of Action was developed and endorsed. The plan consists of five lines of action and is monitored against a grid that countries report on annually (Annex 4). One of the most visible activities engendered from the strategic plan is the annual observance of Caribbean Wellness Day (CWD)[10] (and subsequently Caribbean Wellness Week) which has successfully been implemented in 19 of 20 CARICOM countries.

1.4.1 Gaps and Challenges

Among the main challenges identified in mounting a comprehensive, sustained, multisectoral, whole-society response to the CNCD challenge is the lack of human and financial resources. The former is reflected by country population size and felt perhaps most acutely by the smaller territories. For example, an assessment done by the Healthy Caribbean Coalition in 2015, found correlation between successful national NCD commissions and country population size. It further elaborated that, with the exception of Haiti, 6/7 (85%) countries with populations >250,000 had

[10] CWD is an annual event which provides an opportunity to increase the awareness of the non-communicable diseases (NCDs) burden in the Caribbean; mobilise and strengthen public, private, and civil society partnerships for NCDs; promote multi-country, multi-sectoral activities in support of wellness; and showcase national and community level activities to promote healthy living and encourage residents to develop good health practices.

established NCD Commissions. This was compared to 6/12 (50%) among the smaller countries with <250,000 population.

Progress has languished in addressing food security, labelling and elimination of trans-fats which require regional or global systems interventions.

Inadequate funding, including resource allocation for NCDs, has frustrated several interventions like comprehensive public health education programmes in support of wellness and healthy lifestyle changes, and the execution and repeating of global behavioural risk factor surveys such as Global School Health, Global Youth Tobacco and STEPS NCD risk factor surveys. This is evidenced by less than a third of countries reportedly having a budget allocated for NCD and risk factor surveillance.

Additionally the PAHO regional plan of action points to the need for health information systems to better integrate the collection of the relevant data from multiple sources - less than half reportedly using their CNCD data for evidence-based policy-making and planning. This goes hand-in-hand with the need to strengthen competencies for analysis and use of the information particularly to justify resource allocation.

Implementation of the Framework Convention on Tobacco Control (FCTC)—the most recent WHO report—indicates some progress in this area although over half (69) of State Parties referred to gaps between the resources available and the needs assessed for implementation of the WHO FCTC. In addition to human and financial resource constraints, other challenges being reported are the lack of certified laboratories available in countries to test products, unavailability of drugs for treatment of tobacco dependence, and lack of resources for monitoring and evaluation of cessation services.

In terms of access to health care services, a sub-regional assessment found health care systems were fragmented and did not provide effective preventive services, early diagnosis, and timely treatment of CNCDs. The reasons were very often associated with socioeconomic factors and the need to emphasize improving accessibility, affordability, and quality in the broader health system.

Notwithstanding the above regional heads in 2015 renewed their commitment to the principles set out in CARICOM's 2007 Port of Spain Declaration as well as in the 2011 political declaration of the United Nations (UN) meeting on the Prevention and Control of CNCDs and the formal 2014 UN review of progress on CNCDs. Regional leaders maintain the consensus that CNCDs prevention and control will remain high on the political agenda as they focus to strengthen the health systems, prioritise investment in primary health care, and strengthen surveillance and data collection systems including bilateral and regional cooperation.

2 CNCD SITUATIONAL ANALYSIS- ANGUILLA

The 2011 population census put the population of Anguilla at 13,572 of which 7.5% of persons were 65 years and older. Additionally, the most current PAHO estimates are of an overall life expectancy of 81.1 years.

2.1 CNCD Burden – Anguilla

NCDs are a major health burden in Anguilla and constitute a serious and palpable threat to Anguilla's development through lost productivity and spiralling health care costs.

2.1.1 Mortality

CVD (hypertension, stroke and ischemic heart disease), cancers, diabetes and COPD are responsible for at least 50% of deaths annually in Anguilla. Between 2010 to 2014, for example, this ranged from 52 to 61% of annual deaths, and out of a total of 341 deaths reported overall for that period 175 (52%) were due to those CNCDs[11] (Fig. 1). CVD and cancers were the top killers jointly responsible for 143 deaths (82%), followed by diabetes with 16% and a much smaller proportion was attributable to COPD at 2% (Fig. 2). Forty-nine of these deaths (28%) were premature i.e. occurring in persons less than 70 years of age (Fig.2)

[11] An additional three deaths were reportedly due to alcohol-related liver disease.

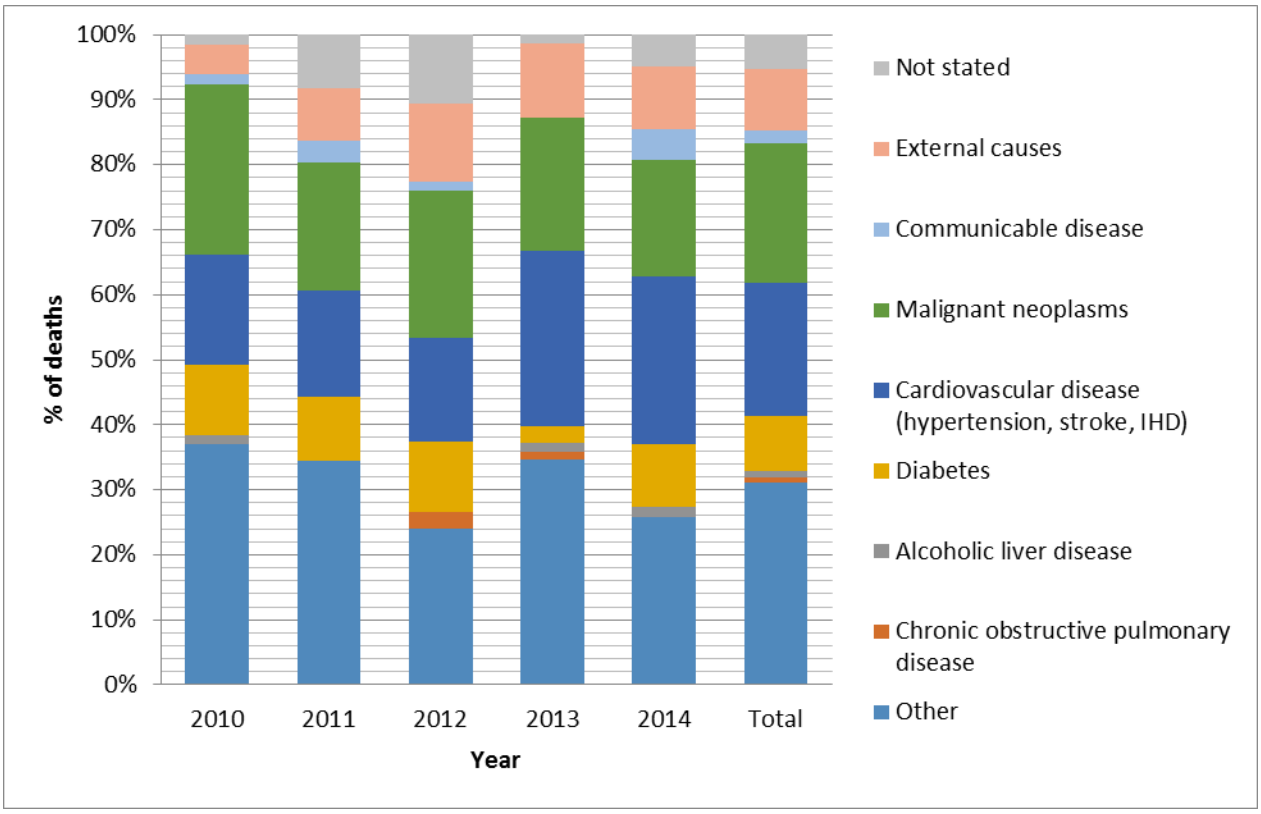

Figure 3. Proportion of Deaths due to Selected Conditions in Anguilla between 2010 and 2014 (N=341)

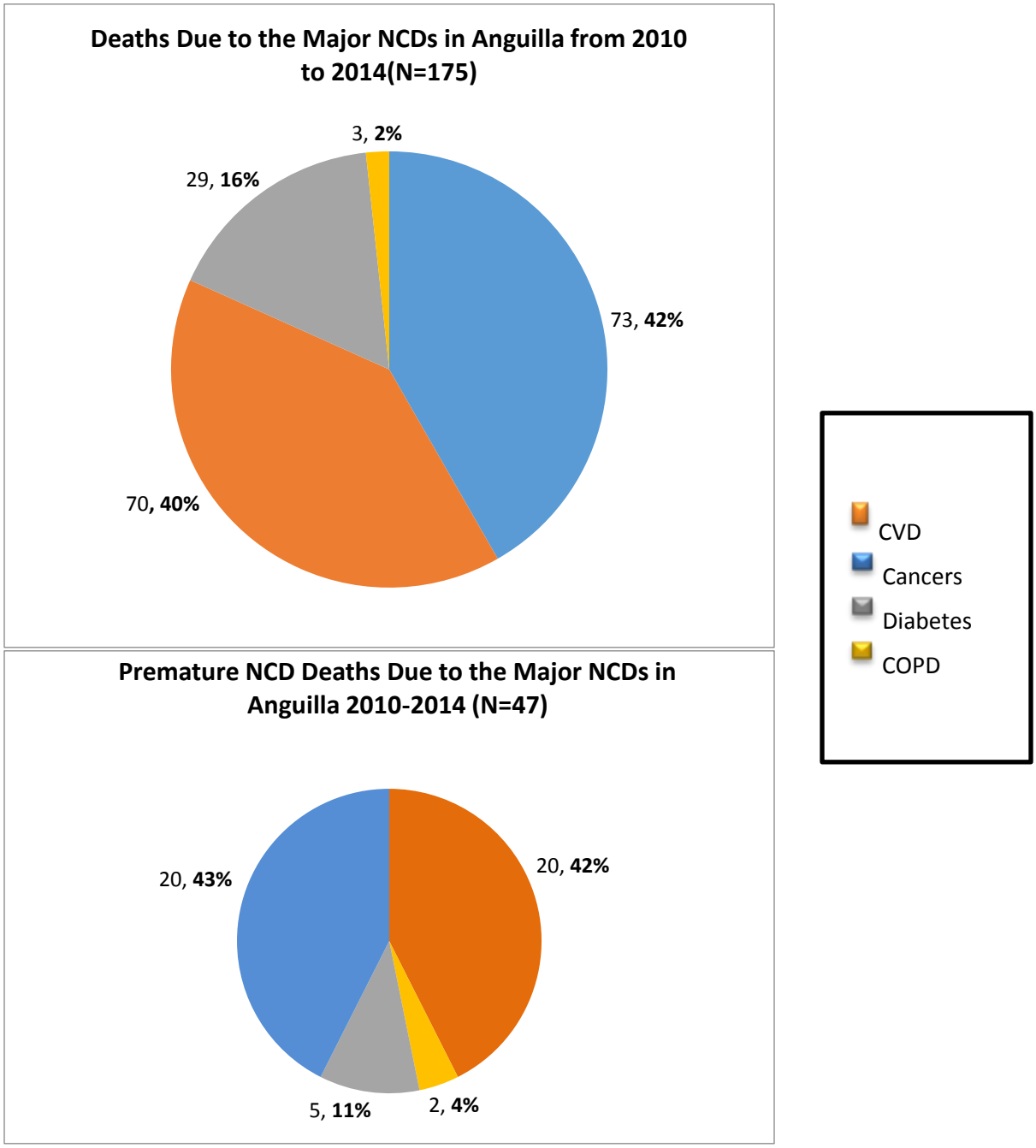

Figure 4. Total and Premature Deaths in Anguilla due to Major NCDs from 2010 to 2014

In terms of sex and gender, 90 deaths (51%) occurred in males while 85 (49%) occurred in females. Cancer was the leading cause of death in males and most of these deaths were attributable to prostate cancer. Moreover, prostate cancer was by far the leading cause of deaths in Anguilla for the period; there were more than 4 times the number of deaths due to prostate cancer than for the predominantly female breast and cervix combined (See Fig. 5).

With regard to premature deaths, as many as 36 out of 49 (73%) occurred in males. On the other hand, CVD was the leading cause in females, though most of these deaths were not premature. Additionally, three deaths were attributed to alcohol-related liver disease for the period, all occurred in males, two of which were premature.

Table 1. Total and Premature NCD Deaths by Sex in Anguilla from 2010 to 2014

Disease	Male Deaths			Female Deaths		
	<70	>70	Total	<70	>70	Total
Cardiovascular	14	13	27	6	37	43
Cancer	15	34	49	5	19	24
Diabetes	3	8	11	2	16	18
COPD	2	1	3	0	0	0
Total	34	56	90	13	72	85

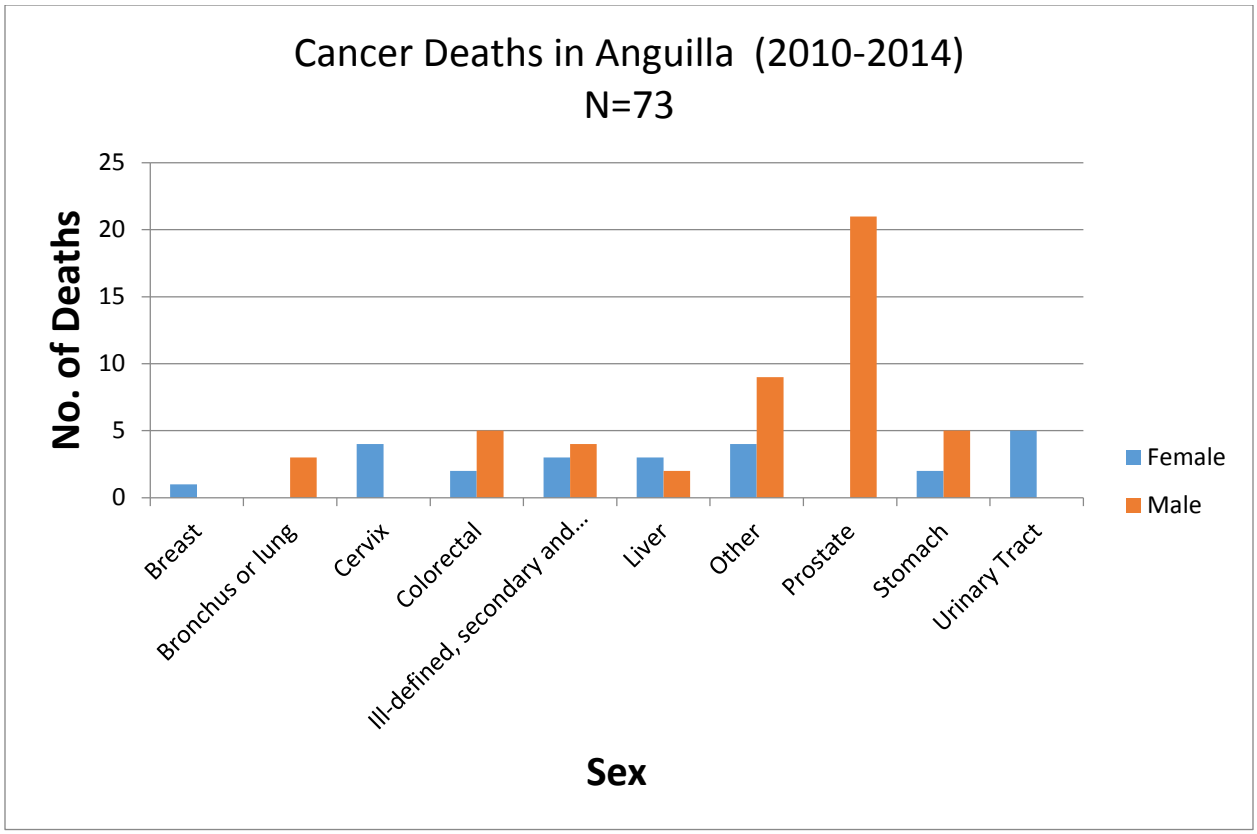

Figure 5. Cancer Deaths by Sex in Anguilla - 2010 to 2014 (N=73)

2.1.2 Economic impact

Between 2013 and 2014, the number of clients on dialysis increased from 17 to 20 representing a 15% increase. Furthermore, all clients were diabetic, hypertensive or both.

In any given year, the local treatment cost for the major CNCDs exceeds 50% of total local health care costs. The cost of treating dialysis patients is especially indicative. In 2012, a total of EC$1,291,000.00 for eleven (11) of the 14 clients was spent from the Department of Social Development , Ministry of Health's budget , which was 52% of the total expenditure for local medical treatment for that year. This represented a sixty-six percent increase (66%) compared to 2011. In 2013, the Government of Anguilla spent almost EC$2.4 million on dialysis for 17 clients. This is close to double what was spent in 2012.

2.2 Country Capacity and Response

Public Health Infrastructure, Partnerships and Multisectoral Collaboration for CNCDs Governance

The Ministry of Health is responsible for the policy, planning, evaluation, regulation and the overall governance of health and health care. With regard to services provision, the Ministry assumes the role of purchaser of health services provided by the Health Authority of Anguilla (HAA) through the enactment of the Health Authority of Anguilla Act No. 1 of 2004. The private sector is considered a complimentary partner in health and also provides health care services.

Chronic Disease Unit

In 2015, the Ministry of Health in Anguilla recognized the need to shift its focus from solely HIV/AIDS. To this end, the decision was made to transform the then National AIDS Programme into now what is referred to as the National Chronic Disease Unit (NCDU). This unit therefore targets HIV/AIDS and is also geared towards the control and prevention of Chronic Non-Communicable Diseases. Hence, it aims to reduce the burden of Chronic Diseases through the creation of a comprehensive integrated chronic disease strategy that encompasses education, programme development, policy formulation, behavioural modification, advocacy and disease prevention. The unit is currently staffed with a Director, two Programme Officers and an Outreach Officer, with one Programme Officer assigned solely to CNCDs and the other to HIV. The unit works in collaboration with the Health Planner, the Chief Medical Officer and the Permanent Secretary. The unit has an assigned budget, though these funds are shared between CNCD and HIV activities and functions.

Primary Health Care & Primary Prevention

The MSD espouses the goal of achieving a comprehensive health care system that is grounded in a primary health care (PHC) approach to delivery of services. The GoA purchases these services from the Health Authority of Anguilla[12] (HAA), while retaining its funding and governance roles.

HAA manages 5 health centres and 1 polyclinic on the island that serve the primary health care needs of populations in the local communities. This includes clinics for the main chronic diseases, with weekly visits from internists, for patients referred for further medical management.

The MSD is responsible for the delivery of School Health Services through the Department of Education. Health Assessments are conducted on all new students entering all primary schools (government and private) and secondary school. The process includes physical assessments, as well as weight and height measurements to calculate body mass index (BMI), based on the Centre for Disease Control (CDC) guide.

CNCD Commission

The formation of a national CNCD Commission was first approved in 2007. Subsequent to the establishment of the NCDU, the country made attempts to revitalize the commission including a revision of its terms of reference and membership. The Director of the NCDU is the country's focal point for CNCDs, while the Chief Medical Officer is the chair of the CNCD Commission. The Commission's purpose is to act as an advisory which guides and assists key players in reducing the incidence of CNCDs. Its main role is to advocate for sectorial involvement in program implementation and resource mobilization initiatives. It recommends relevant research, promotes collaborations and partnerships, monitors regional and international trends, facilitates commissioning of audits /evaluation of CNCD programs, and recommends to the Minister of Health, the framework that encourages and promotes behaviour change to prevent CNCDs.

[12] This is since 2005 and was part of health sector reform, to decentralize and integrate services - Anguilla underwent this fundamental transition with the enactment of the Health Authority of Anguilla Act No. 1 of 2004.

The Commission's membership includes stakeholders from health, private sector and representatives from national NGOs. These including representatives from The Ministry of Health and Social Development, Ministry of Finance, Health Authority of Anguilla, Education Department (ED), Department of Agriculture, Department of Youth and Culture, Diabetes Association, Cancer Society, and Pan American Health Organization.

It is understood that certain strategic partners may also need to be included at different periods based on country needs. Certainly, it is anticipated that the Commission will use this action plan to guide and monitor its implementation.

2.2.2 CNCD Relevant Policies Strategies and Action Plans

Policies Addressing Unhealthy Diet

National Food and Nutrition Security Policy

At the time of writing, the National Food and Nutrition Security Policy is under review. It was drafted in alignment with the CARICOM Regional Food and Nutrition Security Policy (2010) and CARICOM Regional Food and Nutrition Security Plan of Action (October 2011). Additionally, the current draft was informed by a situational analysis and a review of the current policies and programmes in the areas of nutrition and health: food availability, safety and household access; and education. Based on this analysis, the priority areas identified for health were: Obesity and the related CNCDs, particularly among adults; Obesity in children; Iron-deficiency anaemia among children and pregnant women; Mild Protein- Energy Malnutrition; and Dental caries. In the area of food availability, safety and household access, several of the problems identified were related to the lack of a formal agro-processing, low local production and the resultant high associated importation costs; as well as challenges in regulating the content of imported food. This has implications for the regulation of trans-fat and sodium. Consumer education was also identified as an area needing much address. This notwithstanding, the current review is an opportunity to address these issues in a comprehensive manner.

National Health Policy and Strategic Plan

CNCDs are prioritized in the policy and strategic plan of the Ministry, included in Anguilla's 2015-2020 National Health Strategic Health Plan. This action plan has been developed, addressing four lines of action: Risk Factor Reduction, Health Promotion and Communications; Integrated Disease Management & Patient Self-Management; Surveillance, Monitoring & Evaluation; Programme Management, Policy & Advocacy. It addresses the major risk factors: harmful use of alcohol, unhealthy diet, physical inactivity and tobacco use. The settings for the interventions are health care facilities, schools, communities, and workplaces.

National School Health Policy

The School Health Report for 2014-2015 shows the following BMI calculations among students: For kindergarten students 5% are overweight and 21% are obese. Among the Grade 6 students, 14% are overweight and 23% are obese.

Currently in Anguilla, two schools have a school feeding programme which caters to the needs of the vulnerable or disadvantaged students. However, there is no policy covering school meals and coverage by feeding programmes is variable and focused on preventing malnutrition. Additionally, vendors sell food next to school premises and control over the nutritional content of their goods is virtually non-existent. On the other hand, the MOE receives technical support from the MSD's nutritionist with regard to the nutritional content and quality of school meals. The MOE is also in the process of developing a school gardens programme for the production of healthy foodstuffs i.e. fruits and vegetables for consumption by the student population – primary schools in the first instance.

Moreover, the National School Health Policy consultation was recently held to finalize the policy. This was spearheaded between the Ministry of Health and Social Development, the School Health Services and Department of Education. The policy's mission is to promote and protect the health and well-being of students and school staff through the mobilization of personnel, agencies and programmes both in the school setting and community. The importance of improving the quality of school meals is vital for improving children's health, especially in an

effort to decrease levels of obesity and future risks of developing related diseases, such as heart disease and diabetes. This is in addition to the evidence that improvements in diet may benefit children's academic performance.

Physical Activity Policy and Guidelines

Physical Education (PE) is mandatory in schools as part of the school curriculum. However, the current programme is for PE to be held once a week. No national physical activity guidelines are in existence.

With regard to mass physical activity initiatives, CWD is observed annually and there are a number of ad hoc mass physical activity initiatives including the John.T.Memorial Bicycle Race and themed walks.

Work Wellness Programmes

A workplace wellness programme has been implemented as a part of a proactive measure to combat the effects of chronic diseases in the working population, designed to support healthy behaviours and improve health outcomes while at work. This program consists of activities such as health education and coaching, weight management programs, medical screenings, on-site fitness programs, and more.

This programme aims to break the link between CNCDs and possible premature deaths. Against this backdrop, the programme has been established within a number of private and public sector organizations to expand its reach to all working adults within Anguilla.

Each workplace has a designated focal point who is engaged with the staff at the Chronic Disease Unit to help to provide technical assistance in establishing tailored interventions for each work area. Monitoring and evaluating tools are yet to be developed to determine the efficiency of the programme.

Alcohol & Tobacco

Trade and Importations

The Government of Anguilla has increased taxation on alcohol and tobacco. GOA also increased taxation on high sugar content food and non-alcoholic beverages. Unfortunately, the taxes collected from these are used for general revenues, in other words, these funds are not specifically earmarked for national health purposes. Also, there are taxation incentives to promote physical activity, however, no price subsidies exist on healthy foods.

FCTC

Anguilla has not yet ratified the FCTC. In 2014 however the PAHO/WHO and the Convention Secretariat for WHO Framework on Tobacco Control (FCTC) started discussions looking at the possibility of extending the Convention to the United Kingdom Overseas Territories (UKOTS). Out of the discussion a project was developed with three main objectives:

- To provide technical assistance to the UKOTs in the Caribbean to develop understanding of the requirements and benefits of the FCTC.
- To establish a benchmark for UKOTs of their current level of achievement against the FCTC obligations.
- To help UKOTs to commence planning for the effective implementation of the FCTC.

At the time of writing, discussions continue on the Articles of the FCTC that may be most practicable in the Anguilla context.

2.2.3 Health Information Systems, Surveillance and Surveys for NCDs

Health Information Systems in the island can be considered rudimentary, and the MSD continues to participate in Health Information System strengthening initiatives in collaboration with the HAA. With regard to risk factor surveillance, the country has conducted one GSHS in 2008. However, no adult risk factor survey has been conducted. A lack of resources is the main reason

for this, although this continues to be prioritized, as reflected in the country's biennial work plan with PAHO.

3 THE NATIONAL ANGUILLA NCD ACTION PLAN

3.1 Purpose

The purpose of this national plan is to articulate a whole- of-government response and a whole-of- society focus to inclusivity in addressing the impact of the major CNCDs and their risk factors. It also sets out to provide direction and steer efforts for an integrated comprehensive approach to promote policy development and implementation, to aid the 25% reduction of CNCDs and their risk factors by 2025.

3.2 Vision

An Anguilla in which the resident population is free of the avoidable burden of CNCDs, able to reach the highest attainable standards of health and productivity at every age, and in which CNCDs are no longer a threat to well-being and socioeconomic development.

3.3 Mission

Foster a multisectoral approach to effectively prevent and manage chronic diseases; reducing their risk factors through research and surveillance; to influence policy formulation, programme creation, and behavioural modification for vulnerable groups, in order to obtain an optimum state of well-being.

3.4 Scope

The plan focuses on the four major CNCDs: cardiovascular disease, diabetes mellitus, chronic respiratory diseases, and cancer, as well as their four main risk factors: unhealthy diet, lack of physical activity, harmful use of alcohol, and tobacco use. The priority actions in this plan mimic the Global and Regional Action plans, and centre on:

- Policy, Advocacy and Multisectoral Partnerships
- Risk Factor Reduction, Health Promotion and Communications
- Health Systems Response, Integrated Disease Management& Patient Self-Management

- NCD Surveillance and Research

3.5 Principles

The following principles guided the construction of the plan:

- An Integrated Holistic View of Health
- Emphasis on Risk Factor Reduction and Health Promotion
- Complementarily with Anguilla National Health Plan
- Adequate Resource Mobilization, Allocation and Utilization
- Multidisciplinary, Multi-sectoral and Multi-stakeholder Networking
- Community and Family Empowerment and Participation Approaches
- Evidence-based Affordable Interventions and Preventive Sustainable Measures

3.6 Organization of Plan

The National Plan consists of four priority lines of action and eight corresponding strategic objectives:

1. **Policy, Advocacy and Multisectoral Partnerships:**

   Objective 1: Promote integration of CNCDs prevention in sectors outside of health, (agriculture, trade, education, labor, development, finance, planning, environment, infrastructural development and NGOs).

   Objective 2: Strengthen existing policies and develop national health plans/ policies based on multisectoral approaches.

2. **Risk Factor Reduction, Health Promotion and Communications**

   Objective 3: To reduce the harmful use of alcohol.

Objective 4: Promote healthy eating for health and well-being through inter-sectoral action.

Objective 5: To develop and implement strategies that promote active living.

Objective 6: To develop and implement a comprehensive health communication strategy.

3. Health Systems Response, Integrated Disease Management& Patient Self-Management

Objective 7: To facilitate and support the strengthening of the capacity and competencies of the health system for the integrated management of CNCDs and their risk factors.

4. NCD Surveillance and Research

Objective 8: Improve the quality and breadth of CNCD and risk factor surveillance systems.

4 Monitoring Framework

For each line of action and objectives there are proposed activities and indicators. There are a total of 29 indicators. It adopts and adapts five (5) of the nine (9) WHO voluntary global targets, ten (10) of twenty-five (25) global WHO indicators, five (5) of the ten (10) additional PAHO regional indictors; the remaining nine (9) are country-specific. The 5 PAHO and 9 country-specific indicators are more process-oriented, as opposed to the outcome-oriented indicators of the WHO Global Monitoring Framework.

Table 2. National NCD Monitoring Framework

Line of Action	Specific Objectives	Activities	Indicator	Key Partners
Policy, Advocacy and Multisectoral Partnerships	Promote integration of CNCDs prevention in sectors outside of health, (agriculture, trade, education, labor, development, finance, planning, environment, fisheries, infrastructural development and NGOs). Strengthen existing policies and develop national health plans/ policies based on multisectoral approaches.	Review and revamp the term of reference of CNCD commission Appoint members to the CNCD Commission Review Multi-sectorial agencies existing policies & plans To integrate CNCDs into existing relevant plans by March 2016. Finalize & submit School Health Policy for ExCo approval by December 2015 Finalize and submit National 'Food' and Nutrition Policy for ExCo approval by December 2016 Develop Workplace Wellness Policy by December 2016	Functional CNCD Commission by end 2015 Endorsed CNCD Plan by March 2016 CNCD prevention component integrated into at least 3 non health sector agencies by 2018. Implementation of National Nutrition Policy, School Health Policy and, Workplace Wellness Policy by December 2018.	MSD, HAA, ED

Risk Factor Reduction, Health Promotion and Communications	Reduce the harmful use of alcohol. Promote healthy eating for health and well-being through inter-sectoral action. Develop and implement strategies that promote active living. Develop and implement a comprehensive health communication strategy	Support/continue health promotion activities on CNCD risk factors: harmful use of alcohol; tobacco use; obesity; physical inactivity, salt intake. Conduct workshops with local food vendors to encourage the preparation of healthy food. Advocate with the Department of Education to promote healthy food choices for the School Feeding Programme. Provision of educational opportunities to train additional personnel in physical education Refurbish current sporting activities facilities Launch of community sporting programmes Strengthen sporting	10% relative reduction in alcohol per capita consumption, measured in liters of pure alcohol by 2025 10% relative reduction in the age-standardized prevalence of heavy episodic drinking among adolescents and adults, as appropriate, within the national context b by end 2025 Age-standardized prevalence of persons (aged 18+ years) consuming less than five total servings (400 grams) of fruit & vegetables per day Age-standardized prevalence of raised total cholesterol among persons aged 18+ years (defined as total cholesterol Q5.0 mmol/l or 190 mg/dl); and mean total cholesterol concentration 25% relative reduction in the prevalence of raised blood pressure 10% relative reduction in the prevalence of insufficiently physically active adolescents, defined as less than 60 minutes of moderate to vigorous intensity activity daily by end 2025 10% reduction in sedentarism by end 2025	MSD, Nutrition and Health Promotion Department, Department of Sports CNCD Commission

		associations to ensure they have the necessary tools and expertize to function Formalize coaching structure Adapt and Introduce UNICEF child protection programme in sporting activities Devise and implement a comprehensive health communication strategy Maintain social mobilization activities such as Caribbean Wellness Week and Caribbean Nutrition Day	0% increase in the prevalence of overweight and obesity in adolescents by end 2025 0% increase in the age-standardized prevalence of overweight and obesity in persons aged 18+ years (defined as body mass index Q 25- 29.9 kg/m² for overweight and body mass index Q 30- 39.9 kg/m² for obesity) by end 2025	
Health Systems Response, Integrated Disease Management& Patient Self-management	Facilitate and support the strengthening of the capacity and competencies of the health system for the integrated management of CNCDs and their risk factors.	Improve/ strengthen referral mechanisms and secure healthcare professional compliance Exploration of &	Model of integrated management for CNCDs e.g. Chronic Care Model (CCM) (evidence-based guidelines, clinical information system, self-care, community support) implemented by end 2016 Minimum package of services covering essential drugs, laboratory services, basic equipment and maintenance checks developed	MSD, HAA, Private Sector(Inc. health professionals, FBOs, Gyms) SS, MOF(NHI), School Health

		participation in regional initiatives for cost-effective care including complications (e.g. Cancer Centre Antigua, DM Management Programme in Jamaica) Effect the introduction/inclusion of HPV vaccination in EPI Programme Develop/ Revise/Update comprehensive evidence-based cost-effective care protocols and guidelines (including screening) that cover multiple levels of staff and multiple levels of care (including palliative care) Develop or improve mechanisms that support patient self-management introducing guidelines that include and psychological support	by end 2020 MoU for various regional programmes Availability, as appropriate, of cost-effective & affordable, of vaccines against HPV according to national programmes & policies by end 2018 Vaccination coverage against hepatitis B virus monitored by number of third doses of Hep-B vaccine (HepB3) administered to infants by end 2015 Proportion of persons screened for the following cancers according to national guidelines (cervical, breast, colorectal, prostate) 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 glycaemic control) to prevent heart attacks and strokes PAHO Strategic Fund and Revolving Fund and/or other cost-saving mechanisms utilized to procure essential medicines and health technologies relevant to prevention, control and palliation for the four leading CNCD by end 2016	CNCD Commission

		behaviour and educational programmes which enable patients to take responsibility and manage their condition Utilize the PAHO Strategic Fund and Revolving Fund and/or other cost-saving mechanisms to procure essential medicines and health technologies relevant to prevention, control and palliation for the four leading CNCDs e.g., chemotherapy drugs, palliation medications, insulin, dialysis and hemodialysis, and hepatitis B and human papilloma virus (HPV) vaccines. Advocate for functional, transparent drug procurement commission locally Capitalize on	Functional official commission that selects, according to the best available evidence, and operating without conflicts of interest, CNCD prevention, treatment and palliative care medicines and technologies for inclusion in/exclusion from public sector and private services by end 2015 80% availability of affordable of quality, safe & efficacious essential CNCD medicines, including generics, & basic technologies in both public & private facilities b by end 2020	

		opportunities for continuing medical and professional education in relevant areas including CNCDs for delivery of quality evidence-based care Support initiatives for the strengthening of national laboratory services		
CNCD Surveillance and Research	Improve the quality and breadth of CNCD and risk factor surveillance systems	Monitor at national level the selected targets and indicators in the global monitoring framework and regional CNCD action Improve quality reporting and analysis of data on CNCD's utilizing international standards and guidelines e.g. CNCD minimum dataset; IARC guidance for cancer registries;	Periodic Reviews of CNCD Operational Plans annually Mid-term & Final Evaluations of CNCD Plan (2018 & 2025) 25% reduction in the unconditional probability of dying between the ages of 30 and 70 from CNCDs by end 2020 Cancer incidence by type/100,000 by 2020 Functional population-based disease registries for cancer and other CNCDs (HTN & DM) by 2025 At least two repeated nationally representative	MSD, HAA, Private Sector CARPHA, & PAHO (externals)

		Ensure the execution of risk factor surveys for the four risk factors	population survey of CNCD risk factors, in adults and youth by end of 2018 and another by end 2025	

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Annexes

Annex 1. WHO Monitoring Framework

Framework Element	Target	Indicator
MORTALITY & MORBIDITY		
Premature mortality from noncommunicable disease	1. A 25% relative reduction in the overall 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
Additional indicator		2. Cancer incidence, by type of cancer, per 100 000 population

Framework Element	Target	Indicator
BEHAVIOURAL RISK FACTORS		
Harmful use of alcohol[1]	2. At least 10% relative reduction in the harmful use of alcohol[2], as appropriate, within the national context	3. Total (recorded and unrecorded) alcohol per capita (aged 15+ years old) consumption within a calendar year in litres of pure alcohol, as appropriate, within the national context 4. Age-standardized prevalence of heavy episodic drinking among adolescents and adults, as appropriate, within the national context 5. Alcohol-related morbidity and mortality among adolescents and adults, as appropriate, within the national context
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)
Salt/sodium intake	4. A 30% relative reduction in mean population intake of salt/sodium[3]	8. Age-standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years
Tobacco use	5. 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 of current tobacco use among persons aged 18+ years
BIOLOGICAL RISK FACTORS		
Raised blood pressure	6. A 25% relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances	11. Age-standardized prevalence of raised blood pressure among persons aged 18+ years (defined as systolic blood pressure ≥140 mmHg and/or diastolic blood pressure ≥90 mmHg) and mean systolic blood pressure
Diabetes and obesity[4]	7. Halt the rise in diabetes & obesity	12. Age-standardized prevalence of raised blood glucose/ diabetes among persons aged 18+ years (defined as fasting plasma glucose concentration ≥ 7.0 mmol/l (126 mg/dl) or on medication for raised blood glucose) 13. 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) 14. Age-standardized prevalence of overweight and obesity in persons aged 18+ years (defined as body mass index ≥ 25 kg/ m² for overweight and body mass index ≥ 30 kg/m² for obesity)
Additional indicators		15. Age-standardized mean proportion of total energy intake from saturated fatty acids in persons aged 18+ years[5] 16. Age-standardized prevalence of persons (aged 18+ years) consuming less than five total servings (400 grams) of fruit and vegetables per day 17. Age-standardized prevalence of raised total cholesterol among persons aged 18+ years (defined as total cholesterol ≥5.0 mmol/l or 190 mg/dl); and mean total cholesterol concentration

[1] Countries will select indicator(s) of harmful use as appropriate to national context and in line with WHO's global strategy to reduce the harmful use of alcohol and that may include prevalence of heavy episodic drinking, total alcohol per capita consumption, and alcohol-related morbidity and mortality, among others.

[2] In WHO's global strategy to reduce the harmful use of alcohol the concept of the harmful use of alcohol encompasses the drinking that causes detrimental health and social consequences for the drinker, the people around the drinker and society at large, as well as the patterns of drinking that are associated with increased risk of adverse health outcomes.

[3] WHO's recommendation is less than 5 grams of salt or 2 grams of sodium per person per day.

[4] Countries will select indicator[s] appropriate to national context.

[5] Individual fatty acids within the broad classification of saturated fatty acids have unique biological properties and health effects that can have relevance in developing dietary recommendations.

Framework Element	Target	Indicator
NATIONAL SYSTEMS RESPONSE		
Drug therapy to prevent heart attacks and strokes	8. At least 50% of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes	18. 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 counselling (including glycaemic control) to prevent heart attacks and strokes
Essential noncommunicable disease medicines and basic technologies to treat major noncommunicable diseases	9. 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	19. 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		20. Access to palliative care assessed by morphine-equivalent consumption of strong opioid analgesics (excluding methadone) per death from cancer 21. 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 programmes 22. Availability, as appropriate, if cost-effective and affordable, of vaccines against human papillomavirus, according to national programmes and policies 23. 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 24. Vaccination coverage against hepatitis B virus monitored by number of third doses of Hep-B vaccine (HepB3) administered to infants 25. 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

Annex 2. WHO Best Buys

Risk factor / disease	Interventions
Tobacco use	• Tax increases • Smoke-free indoor workplaces and public places • Health information and warnings • Bans on tobacco advertising, promotion and sponsorship
Harmful alcohol use	• Tax increases • Restricted access to retailed alcohol • Bans on alcohol advertising
Unhealthy diet and physical inactivity	• Reduced salt intake in food • Replacement of trans fat with polyunsaturated fat • Public awareness through mass media on diet and physical activity
Cardiovascular disease (CVD) and diabetes	• Counselling and multi-drug therapy for people with a high risk of developing heart attacks and strokes (including those with established CVD) • Treatment of heart attacks with aspirin
Cancer	• Hepatitis B immunization to prevent liver cancer (already scaled up) • Screening and treatment of pre-cancerous lesions to prevent cervical cancer

Annex 3. PAHO Plan of Action Monitoring Framework

Strategic lines of action	Specific objectives	Indicators
1: Multi-sectoral policies and partnerships for NCD prevention and control	**1.1:** Promote integration of NCD prevention in sectors outside of health, at the government level, and conduct in partnership with a wide range of non-state actors, as appropriate, such as agriculture, trade, education, labor, development, finance, urban planning, environment, and transportation.	**1.1.1** Number of countries with mutisectoral NCD prevention policies, frameworks and actions in **at least three sectors outside the health sector** at the government level and conducted in partnership with a wide range of non-state actors, as appropriate, (e.g. agriculture, trade, education, labor, development, finance, urban planning, environment and transportation).
	1.2: Strengthen or develop national health plans based on multisectoral approaches, with specific actions, targets, and indicators geared to at least the four priority NCDs and the four main risk factors.	**1.2.1** Number of countries implementing a national multisectoral plan and/or actions for NCD prevention and control.
	1.3: Expand social protection policies in health to provide universal coverage and more equitable access to promotive, preventative, curative, rehabilitative and palliative basic health services and essential safe, affordable, effective, quality medicines and technologies for NCDs.	**1.3.1** Number of countries with national social protection health schemes that address universal and equitable access to NCD interventions.

Strategic lines of action	Specific objectives	Indicators
2: NCD risk factors and protective factors	**2.1:** Reduce tobacco use and exposure to secondhand smoke.	**2.1.1*** Number of countries that reduce prevalence of current tobacco use from the level established at national baseline to the level established for interim reporting for the WHO Global Monitoring Framework, and contributing to global target of 30% relative reduction in current tobacco smoking by 2025 measured by aged standardized prevalence of current tobacco use in the population 15 years and over)
	2.2: Reduce the harmful use of alcohol.	**2.2.1*** Number of countries that by 2019 achieve a reduction of harmful use of alcohol from the level established at national baseline to the level established for interim reporting for the WHO Global Monitoring Framework, thus contributing to the global target of 10% relative reduction by 2025.
	2.3: Promote healthy eating for health and well-being.	**2.3.1*** Number of countries with policies to reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, trans-fatty acid, free sugars and salt.
		2.3.2* Number of countries with adopted national policies to limit saturated fats and virtually eliminate partially hydrogenated vegetable oils in the food supply, as appropriate within national context and national programs.

Strategic lines of action	Specific objectives	Indicators
2: NCD risk factors and protective factors		**2.3.3*** Number of countries that by 2019 reduce salt/sodium consumption from the level established at the national baseline to the level established for interim reporting to the WHO Global Monitoring Framework, and contribute to the 2025 global target of 30% relative reduction in population based intake of salt/sodium, measured by age-standardized mean population intake of salt (sodium chloride) in grams per day in persons aged 18+ years.
	2.4: Promote active living for health and well-being and to prevent obesity.	**2.4.1*** Number of countries that by 2019 reduce prevalence of insufficient adult physical activity, to the level established from the national baseline to the level established for interim reporting for the WHO Global Monitoring Framework and contribute to the 2025 global target of at least 10% relative reduction, in prevalence of insufficiently physically active persons aged 18+ (defined as less than 150 minutes of moderate-intensity activity per week or equivalent).
		2.4.2.* Number of countries that by 2019 reduce prevalence of insufficient physical activity among adolescents from the level established at the national baseline to the level established for interim reporting for the WHO Global Monitoring Framework and contribute to the 2025 global target of at least 10% relative reduction in prevalence of insufficiently physically active adolescents (defined as less than 60 minutes of moderate-to-vigorous-intensity activity daily in school aged children and adolescents).

Strategic lines of action	Specific objectives	Indicators
3: Health system response to NCDs and risk factors	**3.1:** Improve the quality of health services for NCD management.	**3.1.1** Number of countries implementing a model of integrated management for NCDs (e.g. Chronic Care Model with evidence-based guidelines, clinical information system, self-care, community support, multidisciplinary team-based care).
	3.2: Increase access to and rational use of essential medicines and technologies for screening, diagnosis, treatment, control, rehabilitation, and palliative care of NCDs.	**3.2.1*** Number of countries that by 2019 achieve the level of availability of affordable basic technologies and essential medicines including generics required to treat the four main NCDs in both public and private facilities, established by the country for interim reporting to the WHO Global Monitoring Framework and contribute to the 2025 global target of 80% availability.
		3.2.2 Number of countries that by 2019 improve access to palliative care assessed by increase in morphine equivalent consumption of opioid analgesics (excluding methadone) per death of cancer based on 2010.
		3.2.3 Number of countries utilizing the PAHO Strategic Fund and Revolving Fund and/or other cost-saving mechanisms to procure essential medicines and health technologies relevant to prevention, control and palliation for the four leading NCDs e.g., chemotherapy drugs, palliation medications, insulin, dialysis and hemodialysis, and hepatitis B and human papilloma virus (HPV) vaccines and medications for the treatment of hypertension and diabetes.

Strategic lines of action	Specific objectives	Indicators
3: Health system response to NCDs and risk factors		3.3.3* Number of countries that by 2019 achieve the level set for adolescent overweight and obesity, from the national baseline, to the level set for interim reporting to the WHO Global Monitoring Framework and contribute to the 2025 global target of a halt in prevalence of overweight and obesity, (defined according to the WHO growth reference for school-aged children and adolescents: overweight as one standard deviation BMI for age and sex; and obese as two standard deviations BMI for age and sex).
		3.3.4* Number of countries that by 2019 achieve the level set from national baseline to the level set for interim reporting to the WHO Global Monitoring Framework and contribute to 2025 global target of at least 50% of eligible people to receive drug therapy and counseling (including glycaemic control) to prevent heart attacks and strokes; eligible people defined as aged 40 years and over with a 10-year cardiovascular risk greater than or equal to 30% including those with existing CVD.
		3.3.5* Number of countries that by 2019 reduce the level of prevalence of raised blood pressure from national baseline to the level set for interim reporting to WHO Global Monitoring Framework and contribute to the 2025 global goal of at least 25% relative reduction in prevalence of raised blood pressure or contain the prevalence of raised blood pressure expressed by age-standardized prevalence of raised blood pressure among adults aged 18+ years (defined as systolic blood pressure ≥140 mmHg and/or diastolic blood pressure ≥90 mmHg).

Strategic lines of action	Specific objectives	Indicators
3: Health system response to NCDs and risk factors		**3.2.4** Number of countries with an official commission that selects, according to the best available evidence, and operating without conflicts of interest, NCD prevention and/or treatment and/or palliative care medicines and technologies for inclusion in/exclusion from public sector services.
		3.2.5 Number of countries with a plan in place, as appropriate, to increase access to affordable treatment options for patients affected by CKD, particularly end stage renal disease.
	3.3: Implement effective, evidence-based and cost-effective interventions for treatment and control of CVDs, hypertension, diabetes, cancers and chronic respiratory diseases.	**3.3.1*** Number of countries that by 2019 achieve the level set for raised blood glucose/diabetes from the national baseline to the level set for interim reporting to WHO Global Monitoring Framework, and contribute to the 2025 global target of a halt in prevalence of raised blood glucose/diabetes assessed by age-standardized prevalence of raised blood glucose/diabetes among adults aged 18+ years (defined as fasting plasma glucose value ≥7.0 mmol/L (126 mg/dl) or on medication for raised blood glucose).
		3.3.2* Number of countries that by 2019 achieve the level set for adult obesity, from the national baseline to the level set, for interim reporting to WHO Global Monitoring Framework and contribute to the 2025 global target of a halt in prevalence of adult obesity assessed through age-standardized prevalence of overweight and obesity in persons aged 18+ years (defined as BMI ≥25 kg/m2 for overweight or ≥30 kg/m2 for obesity).

Strategic lines of action	Specific objectives	Indicators
3: Health system response to NCDs and risk factors		**3.3.6.*** Number of countries with a cervical cancer screening coverage of 70% by 2019 [among women aged 30-49 years, at least once, or more often, and for lower or higher age groups according to national policies.
		3.3.7 Number of countries with at least 50% coverage of breast cancer screening in women aged 50–69 years (and other age groups according to national programs or policies) in a three-year period with all positive cases found during screening provided effective and timely treatment.
		3.3.8.* Number of countries that provide as appropriate cost-effective and affordable vaccines against human papilloma virus (HPV) according to national programs and policies.(2012)
4: NCD surveillance and research	**4.1:** Improve the quality and breadth of NCD and risk factor surveillance systems to include information on socioeconomic and occupational status.	**4.1.1** A 15% reduction in premature mortality from the four leading NCDs by 2019 and 25% by 2025.
		4.1.2 Number of countries with high-quality mortality data (based on international criteria for completeness and coverage and percentage of ill-defined or unknown causes of death) for the four main NCDs and other NCDs of national priority e.g. CKD.
		4.1.3* Number of countries with quality cancer incidence data, by type of cancer per 100,000 population.

Strategic lines of action	Specific objectives	Indicators
4: NCD surveillance and research		**4.1.4*** Number of countries with at least two nationally representative population surveys by 2019 of NCD risk factors and protective factors in adults and adolescents, in the last 10 years, that include: - tobacco use - alcohol use - anthropometry - albumin - blood pressure - fasting glucose and cholesterol - fruit and vegetables intake - creatinine - physical inactivity - sodium intake - disease prevalence - sugar intake - medication use
	4.2: Improve utilization of NCD and risk factor surveillance systems and strengthen operational research with a view to improving the evidence base for planning, monitoring, and evaluation of NCD-related policies and programs.	**4.2.1** Number of countries that produce and disseminate regular reports with analysis on NCDs and risk factors, including demographic, socioeconomic and environmental determinants and their social distribution to contribute to global NCD monitoring process.
		4.2.2 Number of countries that have research agendas that include operational research studies on NCDs and risk factors aiming to strengthen evidence-based policies, program development and implementation.

Annex 4. CARICOM NCD Monitoring Framework

POS NCD #	NCD Progress Indicator	ANG	ANT	BAH	BAR	BEL	BER	BVI	CAY	DOM	GRE	GUY	HAI	JAM	MON	SKN	STL	SVG	SUR	TRT	TCI
COMMITMENT																					
1,14	NCD Plan	X	X	±	√	±	√	±	X	√	√	√	x	√		√	√	±	±	√	
4	NCD budget	X	X	X	√	X	X	X	X	±	X	±	x	X		X	√	X	X	√	
2	NCD Summit convened	X	X	X	√	X	√	√	X	√	±	√	x	√		X	√	X		√	
2	Multi-sectoral NCD Commission appointed and functional	X	X	X	√	±	√	√	X	x	√	√	x	±		X	√	X	±	√	
12	NCD Communications plan	X	X	±	±	X	√	X	X	±	±	√	x	±		X	±	X	X	√	
TOBACCO																					
3	FCTC ratified	*	√	√	√	√	*	*	√	√	√	√	X	√	*	±	√	√	√	√	*
3	Tobacco taxes >50% sale price	X	X	X	√	X			±	X		√	x	√		±	X	X	√	X	
3	Smoke Free indoor public places	X	√	X	√	±	√	√	√		√	√	x	±		X	√	X	±	√	
3	Advertising, promotion & sponsorship bans	X	X	X	±	X	√	√	√		X	±	x	√		X	X	X	±	√	
NUTRITION																					
7	Multi-sector Food & Nutrition plan implemented	√	√	√	±	±	X	√	X	√	√	√	x	√	√	±	X	√	X	±	√
7	Trans fat free food supply					X			X					±				X	X	X	
7	Policy & standards promoting healthy eating in schools implemented		√		√	±	√	X	±			±		√		±		X	X	±	
8	Trade agreements utilized to meet national food					X			X			±		X				X	X	√	

	security & health goals																					
9	Mandatory labeling of packaged foods for nutrition content		X			X	±		±			±		X				X	±	X		
PHYSICAL ACTIVITY																						
6	Mandatory PA in all grades in schools				√	√	±		√			±		x				X	X	√		
10	Mandatory provision for PA in new housing developments				√	√			X			X		x				X	X			
10	Ongoing, mass Physical Activity or New public PA spaces	X	X	√	√	√	√	X	±		√	√		√		√	√	√	√	√		
EDUCATION / PROMOTION																						
15	CWD multi-sectoral, multi-focal celebrations	√	√	√	√	√	√	√	√	√	√	√	x	√	√	√	√	√	√	√	√	
10	≥50% of public and private institutions with physical activity and healthy eating programmes		X			X		X	X			±					±	X	X	X		
12	≥30 days media broadcasts on NCD control/yr (risk factors and treatment)		√		√	X	√	X	±			√		√		√	±	X	X	X		
SURVEILLANCE																						
11, 13, 14	Surveillance: - STEPS or equivalent survey	X	X	√	√	√	±	√	X	√	±	±	x	√		√	±	X	±	±		
	- Minimum Data Set reporting	X	X	X	X	X	√	√	X	√	X	X	x	X	X	X	X	√	√	X	X	
	- Global Youth Tobacco Survey	X	√	√	√	√	X	√	±	√	√	√	√	√		±	√	√	√	√		
	- Global School Health Survey	√	√	√	±	±		√	±		√	√	x	√		±	√	√	√	√		

TREATMENT

5	Chronic Care Model / NCD treatment protocols in ≥ 50% PHC facilities	X	√	√	±	±	±	X	±	X	±	±	x	√		X	√	X	X	√	
5	QOC CVD or diabetes demonstration project	±		√	√	±	±	±	√	X	√	√	±	√		±	√	X	√	√	
		ANG	ANT	BAH	BAR	BEL	BER	BVI	CAY	DOM	GRE	GUY	HAI	JAM	MON	SKN	STL	SVG	SUR	TRT	TCI