



Ngaki'anga Kapiti Ora'anga Meitaki
The Cook Islands
Strategic Action plan
to prevent and control
Non-communicable diseases 2021-2025

Te Marae Ora
Ministry of Health Cook Islands

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Introduction

Non-communicable diseases (NCDs) are the leading cause of premature illness, death and disability in the Cook Islands, the Pacific region, and globally. The burden of NCDs is accelerating with consequential non-sustainable escalating health system pressures and health care costs, further compounded by an ageing population. In the absence of bold and decisive prevention and control measures, NCDs pose an existential threat to the human, health, social and economic development of the Cook Islands. Health is a human right. The NCD burden must be addressed.

The 2030 agenda for the United Nations (UN) Sustainable Development Goals (SDG), Goal 3.4 aims to reduce by one third, premature mortality¹ from NCDs by 2030. The World Health Organization (WHO) global action plan NCD target seeks to reduce NCD-associated premature deaths by 25% by 2025. While the proportion of premature deaths from NCDs in the Cook Islands has steadily declined (2016 = 24%, 2017 = 22%, 2018 = 20%), in 2019, it was 26%.

In the burden of NCDs in the Cook Islands study² direct (health system) and indirect (lost productivity/intangible) costs of the four leading NCDs, were assessed to estimate the economic burden of NCDs (2017 data). Financial costs were estimated to be \$5M - \$8M with premature deaths estimated at \$75K - \$3M. Non-financial costs (Years Life Lost) were up to \$11.7M, at least half of this due to cardiovascular disease, diabetes was responsible for 27% and cancer 22%.

An effective NCD preventive and control strategy must address social, economic and cultural determinants and risk factors that drive the NCD epidemic. Some of these include health literacy, poverty and obesogenic environments, as well as tobacco smoking, obesity, harmful use of alcohol, poor food and nutrition intake and inadequate physical activity. Interventions must be multi-pronged, multi-sectoral, multi-systems, whole-of-government and whole-of-society.

This strategy and action plan draws from global, regional, and national commitments to prevent and control NCDs,³ as well as the two previous Cook Islands NCD plans (2009-2014, 2015-2019). This is an evolving process that takes a life course approach which seeks to empower people and communities to act decisively to live healthier lives whether at home, school, work, play, or church. It will require strong leadership and governance and more systematic and strategic partnerships across networked national, regional and global systems that are well supported by effective monitoring and accountability frameworks.

Background

The NCD and obesity epidemic in the Cook Islands is established but poorly quantified. Efforts to prevent, control and mitigate the impact of NCDs in current resource-constrained settings requires the prioritisation of innovative interventions to address the complex myriad of risk factors and drivers of the NCD epidemic.

¹ Premature deaths – defined as NCD-related deaths among those aged 30 to 69 years

² Draft Te Marae Ora Burden of NCDs 2019 report (WHO/World Bank)

³ [WHO Framework Convention on Tobacco Control](#) (2003), [Global Strategy on Diet, Physical Activity and Health](#) (2004) WHO, [Pacific Regional 2-1-22 Non-Communicable Disease Program \(2007-2011\) SPC](#), [Pacific Framework for the Prevention and Control of NCDs](#) (2007), [2008-2013 Action Plan](#) for the Global Strategy for the Prevention and Control of NCDs, [Western Pacific Regional Action Plan for NCDs \(2008–2013\)](#), [Global Strategy to Reduce the Harmful Use of Alcohol](#) (2010), [First Global Ministerial Conference on Healthy lifestyles and NCDs control Moscow](#) (2011), [Mental Health Action Plan 2013–2020](#) (WHO), [WHO Global Action Plan for the Prevention and Control of NCDs 2013-2020](#), [Pacific NCD Roadmap Report](#) (2014), [Western Pacific Regional Action Plan for the prevention and control of NCDs 2014-2020](#), [UN SDGs](#) (2015), [Global Strategy and Action Plan on Ageing and Health 2016–2020](#), [NCD Alliance Strategic Plan 2016-2020](#), [Cook Islands National Sustainable and Development Plan 2016-2020](#), [Cook Islands National Health Strategy 2017-2020](#), [Cook Islands National Health Roadmap 2017-2036](#), [Action Plan on Physical Activity 2018–2030](#) (WHO), [Montevideo Roadmap 2018-2030](#) on NCDs as a sustainable development priority, [SAFER alcohol control](#) initiative to prevent and reduce alcohol-related death and disability, 2018, [For the Future: Towards the Healthiest and Safest Region: A vision for the WHO work with Member States and partners in the Western Pacific 2020](#), [Regional Action Framework](#) on protecting children from the harmful impact of food marketing in the Western Pacific (WHO), [Regional Action Plan](#) for tobacco control in the Western Pacific 2020-2030 (WHO).

Te Marae Ora has identified NCDs as one of five priority areas – others being health security, workforce development, digital health and mental health. As a WHO Member State and Member Country of the Pacific Community and Pacific Ministers of Health Meeting, the Cook Islands is committed to taking action to meet the objectives of the Global Action Plan and Pacific region to prevent and control NCDs.

Purpose

The purpose of this document is to outline Te Marae Ora Ministry of Health Cook Islands ([Te Marae Ora], TMO) strategy and actions to prevent, control and mitigate the impact of NCDs. The most common diseases that contribute to the NCD burden are cardiovascular disease (and cerebrovascular accidents – strokes), diabetes, cancer, and chronic respiratory disease. Other NCDs include renal, endocrine, neurological, haematological, gastroenterological, hepatic, musculoskeletal and skin and oral diseases, genetic disorders, mental disorders, disabilities including blindness and deafness, and violence and injuries.⁴

Goal

To reduce the burden of morbidity, mortality and disability due to NCDs, in order to achieve the national health vision for “All people living in the Cook Islands to live healthier lives and achieving their aspirations”, and the Healthy Pacific Islands vision,⁵ within a sustainable and thriving social and economic environment.

Principles

- Partnerships, participation, cross-sectoral action, and accountability
- Universal health coverage
- Equity-based approach to reverse health disparities
- Right to Health
- Evidence-based strategies and best practice
- Guard against conflicts of interest

Strategic action areas

1. Health promotion and prevention, health literacy and community empowerment
2. Whole-of-country community leadership and governance
3. Effective legislation and policy for safer and healthier environments
4. Access to quality and equitable health services

Global non-communicable disease policy

Globalisation has led to more open markets for transnational companies of tobacco, alcohol and food - sugar, salt and fats, adding further to the risk factors for NCDs. Non-communicable diseases pose a serious health, social and economic threat and the global community has responded with firm actions through the UN General Assembly Political Declarations to prevent and control NCDs (2011, 2014, 2018),⁶ and the WHO Global Action Plan for the Prevention and Control of NCDs (2013-2020), which identifies nine targets and 25 indicators.⁷

The Global Action Plan NCD targets to achieve by 2025 are:

1. Relative reduction in risk in premature mortality by 20%

⁴ Strategies to address mental disorders, cancer, oral health, and violence and injury are provided elsewhere

⁵ The Pacific Healthy Islands vision: Healthy Islands are places where: children are nurtured in body and mind; environments invite learning and leisure; people work and age with dignity; ecological balance is a source of pride; and the ocean which sustains us is protected.

⁶ [Political declaration](#) of the 3rd High-Level Meeting of the General Assembly on the Prevention and Control of NCDs (2018)

⁷ [WHO Global Action Plan](#) for the Prevention and Control of NCDs (2013-2020)

2. At least 10% relative reduction in the harmful use of alcohol
3. Relative reduction in the prevalence of insufficient physical activity by 10%
4. Relative reduction in the mean population intake of salt/sodium by 20%
5. Relative reduction in the prevalence of current tobacco use by 30%
6. Relative reduction in or contain the prevalence of hypertension by 25%
7. Halt the rise in diabetes and obesity
8. At least 50% eligible people get medicine/counselling to prevent heart attacks/strokes
9. Availability of affordable basic technology and essential medicines to treat NCDs by 80%.

The UN Sustainable Development Goal 3 aims to 'Ensure healthy lives and promote well-being for all at all ages' and identifies 13 targets.⁸ Goal 3.4 is specific to NCDs: 'By 2030, reduce by one third premature mortality from NCDs through prevention and treatment and promote mental health and well-being'. Most of the other UN Sustainable Development Goal 3 targets are linked to the prevention and control of NCDs and their attendant risk factors.

Pacific and Cook Islands non-communicable disease policy

Organised efforts to address the escalating NCD epidemic in the Pacific region took shape in 2007 with the establishment of the Pacific Framework for the Prevention and Control of NCDs. The NCD Programme (2007-2011) gave guidance to Pacific Island countries and territories to develop NCD strategies and plans. Pacific Forum Leaders declared the significant and growing burden of NCDs in the region to be 'a human, social and economic crisis,' calling for a more systematic and collective approach to address NCDs.

In 2014, the Joint Forum Economic and Pacific Ministers of Health endorsed the NCD Roadmap Report.⁹ The Forum committed to prioritising action in five areas: strengthening tobacco control through incremental increases in excise duties, considering an increase in taxation of alcohol products, considering policies that reduce consumption food and beverages that are directly linked to NCDs, enhancing primary and secondary prevention of NCDs, and strengthening the evidence base for programme effectiveness.

The Western Pacific Regional Action Plan for the prevention and control of NCDs 2014-2020¹⁰ which drew from the Western Pacific Regional Action Plan for NCDs (2008-2013), re-emphasised the need for a more systematic approach to NCD prevention and control. The plan provided a list of cost-effective interventions focussing on NCD risk factors, access to primary health-care services and strengthening surveillance systems.

To ensure adequate monitoring and reporting on the progress of NCD actions and their impact in the Pacific region, the Pacific Ministers of Health Meeting (2017) endorsed the Pacific Monitoring Alliance for NCD Action (MANA) dashboard. Reports are provided annually.

Determining cost effective interventions and monitoring progress

Noting attributable improvements must allow a long lag time for some of the NCD-related health impacts to be realised, maintaining momentum and the public's attention and interest is critical to ensure ongoing support for preventive policy and legislation actions. Priority should be given to the implementation of cost-effective interventions that are contextualised and relevant to the Cook Islands.

⁸ [SDG Goal 3 targets](#) (2015)

⁹ [Outcomes statement](#) of the Joint Forum Economic and Pacific Health Ministers Meeting, Honiara, Solomon Islands, 11 July 2014.

¹⁰ [Western Pacific Regional Action Plan](#) for the prevention and control of NCDs 2014-2020

Risk factors are either modifiable/behavioural or non-modifiable/individual risk factors. NCD-associated behavioural risk factors include tobacco smoking, harmful use of alcohol, physical inactivity and unhealthy diets which are closely linked to social determinants like inequitable access to healthcare, poverty, education, gender or dietary factors. Addressing the structural root causes and determinants of NCDs and ill-health are critical. The WHO evidence-based *Best buys* and other interventions list¹¹ outlines 88 cost-effective interventions and policy actions for each of the four key risk factors and four NCDs (Annex 1)

The child obesity epidemic

Results of a survey of school-aged children in the Cook Islands in May 2019 were alarming. The proportion of overweight and obese children has increased from 31% in 2017 to 46% in 2019. While the obesogenic environment requires attention, dietary interventions and healthy food policies in schools, increased physical activity opportunities and exclusive water only in schools is critical. The sale of food, sugar sweetened beverages, alcohol, and tobacco, within a 200 metre distance from schools possibly requires some regulating.

Unhealthy food marketing strategies particularly to children directly influences parent, caregiver, family, community, and child food choices which has contributed to the NCD epidemic. The Cook Islands Food Act (1992-93) and Food Regulations (2014) take a comprehensive statutory approach to regulate food marketing to children and helps protect children from the harmful impact of food marketing – sales, promotion, and sponsorship. The Food Regulations allow Te Marae Ora to impose restrictions on any form of marketing, such as advertising and promotion of designated products within a 200m distance of any setting where children gather, however this is poorly enforced. The Cook Islands government has also introduced sugar taxes.

In 2017, the Pacific Ministers of Health endorsed the establishment of the Ending Childhood Obesity in the Pacific (ECHO) network. ECHO is a governance mechanism with an accountability and reporting structure that identifies three priorities: physical activity, fiscal policy and the restriction of marketing of unhealthy foods and beverages to children. The inaugural meeting of the Pacific ECHO network was held in February 2019.

Tobacco control

Tobacco control in the Cook Islands is reasonably developed with relevant legislation and regulations, which are however poorly enforced. The prevalence of tobacco smokers in the Cook Islands is considerably high at 27% with a higher proportion among males (32%). While all Te Marae Ora official events are tobacco-free (and alcohol-free), plans to extend this policy to other government sponsored events in the Cook Islands are ongoing.

In 2013, Pacific Ministers of Health¹² set an ambitious target for a Tobacco-free Pacific by 2025. At the Ministers of Health meeting in 2019, the Cook Islands Minister of Health called for future meetings to be smoke-free.

The Cook Islands Tobacco Products Control Bill (2019) prohibits the importation for sale and/or the use of nicotine and non-nicotine delivery systems. Research (2019) exploring the utility of mobile phone text messaging to support smokers to quit was moderately successful. Nicotine Replacement Therapy is available in the Cook Islands.

¹¹ 'Best buys' and other recommended interventions for the prevention and control of NCDs: Updated (2017) Appendix 3 of the Global Action Plan for the Prevention and Control of NCDs 2013-2020

¹² These are ministers from various Pacific nations

Cancer control

Cancer control in the Pacific region is poorly resourced. Most Pacific countries lack the human and technological resources to address the burden of cancer. In 2019, at the 13th Pacific Health Ministers meeting, the Pacific islands component of the Lancet oncology series on Cancer control in small island developing states was launched. The ministers committed to advocating for appropriate collaborative approaches for cancer control including improving cancer surveillance, screening, diagnosis, treatment and palliative care capacity. The ministers also committed to implementing human papilloma virus (HPV) vaccination programmes as a priority. Hepatitis B vaccination programmes in the Pacific are established.

The HPV vaccine is provided to all young girls in the Cook Islands with plans to extend this to young boys. A Cook Islands Cancer Control Strategy is under development.

Reorienting the environment and health system

Critical to mitigating the impact of NCDs has been the need to understand the multifactorial aetiologies and therefore the need to respond with multi-sectoral strategies. National and regional legislative and fiscal policies have helped position and equip the Cook Islands to address NCDs and their attendant risks.

Legislative tools

In line with global and regional efforts to address NCDs, Pacific Ministers of Health approved a concept note in 2017 to develop a Pacific legislative framework for NCDs. The draft legislative framework considers the following key areas: tobacco control, liquor control, establishment of a health promotion foundation, code on marketing of breast milk substitutes, reduction in salt, sugar, and trans-fats, and the marketing of unhealthy foods and drinks.

The Cook Islands Public Health Act 2004 is under review. This has been required to modernise public health laws to better equip the Cook Islands to respond to current and emerging public health challenges including existential threats such as NCDs, infectious diseases (COVID-19), climate change, and antimicrobial resistance. The draft Public Health Act review policy introduces health promotion (in addition to existing health prevention and protection) and a human rights framework to provide robust norms and directives, describe legal responsibilities of government, and mechanisms to enhance accountability and priority setting for NCD prevention and control.

Leadership and governance

The adverse impact of NCDs on lives and livelihoods requires strong leadership and governance to identify preventive and treatment interventions to control and mitigate the impact of NCDs. The establishment of the Cook Islands National NCD taskforce and various subcommittees has been important to help steer national policy measures outlined in the NCD strategic and action plans. However, this has been inconsistent and lacked adequate representation from community leaders and non-health stakeholder groups.

Leaders must act in the interests of improving population health. The declaration of conflict of interest and the management of real, perceived or potential conflicts are critical to avoid ongoing undermining and interference from the tobacco, alcohol and food industry. The revised Terms of Reference for the National NCD taskforce is presented at Annex 2.

Although taxation measures on tobacco, alcohol, and sugar sweetened beverages have progressed, these fall short of global recommendations. Furthermore, there are policy and

legislation gaps in preventing tobacco industry interference and alcohol advertising, restricting the marketing of unhealthy foods and beverages to children, and limiting trans-fats in food supplies.

The need for a whole-of-country and multi-sectoral effort

The obesogenic Cook Islands environment and general acceptance of harmful use of tobacco and alcohol reflects a complex intertwining of various factors. Some key areas include:

- Cook Islands hospitality that promotes a culture of *more* in terms of providing excessive amounts of food at celebrations, as a mark of respect and love
- Effective and targeted marketing of nutrition-poor foods, sugar dense food and drinks, high salt, high fat and low fibre foods, tobacco and alcohol
- Poor health literacy¹³ and fatalistic acceptance of inevitable death rather than quality of life and longevity, leading to riskier behaviour and poor health choices and decisions
- Technology-enhanced media platforms (television, social media, phones) that entertain and capture audiences and conversations often resulting in sedentary lifestyles
- An outdated legislative framework that is poorly equipped to address modern public health threats and consequences of globalisation and fiscal/trade agreements
- Concurrent public health threats to preventive NCD actions such as climate change, transport, education, social and economic policy.

With the social, cultural and economic determinants of health, sitting largely outside the health sector, it is critical that interventions are multi-sectoral and include non-health stakeholders.

Health system restructure, reorientation and universal health coverage

Over the past two years, Te Marae Ora has invested substantial improvements across the health system to lift the quality of services in order to achieve universal health coverage. The organisation restructure of Te Marae Ora (Annex 3) beginning mid-2018 was designed to ensure a more efficient clinical decision-making process in both hospital and community settings and to reorient the health system and service delivery model to focus on primary health care and preventive community-based health services. Secondary and tertiary level services continue to be provided in hospital settings and complemented by visiting specialists to Rarotonga and the Pa Enea (outer islands), and/or referral of patients to the New Zealand health system.

Health promotion, prevention and social marketing

Health promotion focussing on preventing NCDs and mitigating the impact of NCDs extends beyond traditional health education activities and builds on community development and the empowerment of communities and related networks. Effective social marketing programmes that complements health promotion actions and involves information education communication approaches that use a range of media platforms and technological tools contextualised to the various target audiences are important to enhance health literacy among the population.

Package of essential non-communicable diseases

Primary health care plays a critical role in the prevention and control of NCDs. The Package of Essential Non-communicable (PEN) disease interventions¹⁴ provides guidance for primary care practitioners to support the early detection and diagnosis of NCDs, modification of NCD risk factors using non-pharmacological and pharmacological approaches, and the introduction of

¹³ Health literacy represents the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health. (WHO)

¹⁴ Implementation tools [Package of Essential Noncommunicable \(PEN\) disease interventions for primary health care in low-resource settings 2013](#) (WHO)

medicines to prevent and treat heart attacks, hypertension, strokes, diabetes, cancer, and asthma and chronic respiratory infective exacerbations.

People with and at risk of NCDs require equitable access to quality, holistic, patient centered, clinical and screening services, diagnostic services and essential medicines in primary care settings. Patient information management systems (aka MedTech) and established referral pathways to secondary and tertiary level services are also critical. Primary health care systems that are closely integrated with public health and community-based services are important to sustain universal health coverage and reach in particular to vulnerable populations such as those who are disabled, aged, or who require long-term care.

Data quality, analysis and reporting

Poor documentation and incorrect classification in MedTech has been a key contributor to the difficulty in quantifying the burden of NCDs. Other contributors include the lack of population and system-wide monitoring, regular data quality audits and analysis, and systematised reporting. Fit for purpose health information systems (HIS) and quality data are important to help measure and monitor health outcomes and the cost-effectiveness of interventions.

Over the past two years Te Marae Ora has invested significantly in HIS and Information Communications Technology improvements including human resources. This has involved the training of clinical staff (doctors and nurses) to better navigate MedTech, and to improve documentation and disease classification processes. In 2021, Te Marae Ora will be introducing a new patient information system.

Regular health systems reporting and COVID-19 situation reports throughout the week are examples of improved health reporting that identifies service and workforce pressure areas and other concerns that can help inform NCD and other health service delivery priorities.

Monitoring health priorities and health gains

In 2020, the Te Marae Ora Executive endorsed 129 national health indicators to help monitor health outcomes and population health gains across the Cook Islands health sector (Annex 4). While focussing on NCDs, the suite of indicators draws from the WHO Global Reference List of 100 Core Health Indicators (2018)¹⁵ which includes health-related SDGs. There are four areas of interest; health status, risk factors, service coverage, and health systems. Indicators are further classified according to the time period from which health interventions will likely impact on health outcomes; short term (< 12 months), medium term (1-5 years) and long term (> 10 years).

Other data sources include five-yearly NCD surveys example WHO Stepwise Approach to Surveillance to monitor population trends for example child growth (overweight /underweight), as well as annual and biennial public health nurse assessments of school aged children. The conduct of a cardiovascular risk assessment on all Cook Islands residents aged 18 years or more will assist in monitoring NCD preventive and control measures.

The national health indicators complement NCD-related global and regional indicators:

1. Non-communicable Diseases Global Monitoring Framework¹⁶ Comprises 25 indicators across four areas: mortality and morbidity, behavioural risk factors, biological risk factors,

¹⁵ [WHO Global Reference List of 100 Core Health Indicators \(2018\)](#)

¹⁶ [NCD Global Monitoring Framework \(2013\)](#)

and national systems responses. This set of indicators is applicable across regions and country settings and will monitor trends and assess progress made in the implementation of national strategies and plans on NCDs. Nine areas have been selected from the 25 indicators with targets to be achieved by 2025, the primary target being a 25% relative reduction in risk of premature mortality from the four main diseases that contribute to NCDs (Annex 5).

2. Pacific monitoring alliance for NCD action dashboard (MANA)¹⁷ Comprises 31 indicators that draw from the WHO Global Framework for NCDs with a set of action-orientated indicators across four areas: leadership and governance, preventing policies (tobacco, alcohol, food, and physical activity), health system response, and monitoring processes. The MANA dashboard uses a traffic light rating scheme to track progress on NCDs in the 21 Pacific Island countries and territories.

¹⁷ [Pacific Mana Dashboard](#)

Te Marae Ora Strategic Actions

The Te Marae Ora Strategy and Action Plan to prevent and control NCDs provides a range of activities with health outcomes and targets identified. There are four Strategic Action Areas with Aims and Outcomes:

Strategic Action areas

Strategic Action Area 1

Sustainable whole-of-country community leadership and governance

Objective 1: Enable national multisectoral action to accelerate whole-of-country NCD prevention and control

Outcome: Strong leadership and governance providing strategic direction and accountability

Strategic Action Area 2

Health promotion, prevention, health literacy and community empowerment

Objective 2: Promote and educate NCD patients, families and communities to prevent and control NCDs

Outcome: Educated, informed, empowered NCD patients, families and communities

Strategic Action Area 3

Effective legislation and policy for safer and healthier environments

Objective 3: Strengthen NCD preventive and control legislation and policy for effective action

Outcome: Strong legislation and policy for safer and healthier environments

Strategic Action Area 4

Access to quality and equitable health services

Objective 4: Ensure NCD patients and people at risk of NCDs have access to timely quality health services

Outcome: Quality health services for improved population health outcomes

Strategic Action Area 1: Sustainable whole-of-country community leadership and governance

Objective 1: Enable national multi-sectoral action to accelerate whole-of-country NCD prevention and control

Action	Indicator	Baseline	Targets	Output	Outcome	Responsible	Indicative cost (annual)
Convene bi-annual NCD taskforce meetings	NCD taskforce operational	One meeting held in 2020	Two meetings held annually	Taskforce engaged and support NCD interventions	Strong leadership and governance providing strategic direction	Manager Health Promotion	\$1,000
Establish community NCD committees	Three Vaka NCD Committees established for Rarotonga		Three NCD meetings held annually Terms of reference developed Secretariat appointed	NCD community committees operational with ToR supported by secretariat	Strengthened community action	Manager Health Promotion	\$5,000
NCD prioritised in national health strategic plan(NHSP) and broader health and development agenda	NCD indicators, targets identified and established in national development agenda		14 NCD indicators/targets established in national sustainable development plan and health strategy	NCD indicators and targets evident in the NSDP National Health strategy	Improved high level NCD reporting	Manager Policy and Planning and Manager Health Promotion	\$2,000
Te Marae Ora leading and coordinating NCD prevention and control programme	Implementation and monitoring of NCD strategy and action plan		Four NCD strategy and action plan progress reports	NCD strategy and action plan on-track to achieve targets	Effective management and monitoring of NCD strategy and action plan	Manager Health Promotion	\$83,000

Strategic action area 2: Health promotion, health literacy and community empowerment

Objective 2: Promote and educate NCD patients, families and communities to prevent and control NCDs

Action	Indicator	Baseline	Targets	Output	Outcome	Responsible	Indicative cost (annual)
Train frontline health workers on PEN guidelines	By the year 2025, 80% of health workforce will be trained on PEN guidelines		<ol style="list-style-type: none"> 1. 2021- 2022: 50% 2. 2022 – 2023: 60% 3. 2023-2024: 70% 4. 2024-2025: 80% 	Frontline health workforces use PEN guidelines properly	Educated and informed health workers	Manager Health Promotion	\$5,000
Develop NCD communications strategy, identifying target audience, key messages, media platforms	NCD communications strategy implemented		Implemented by June 2021	Raised awareness of communities on NCD	Improved health literacy of community on NCD	Manager Health Promotion and Communications Officer	\$30,000
Promote/advocate actions to reduce modifiable NCD risk factors among school students	By the year 2025 80% of school aged students are aware of tools to reduce modifiable NCD risk factors		<ol style="list-style-type: none"> 1. 2021- 2022: 50% 2. 2022 – 2023: 60% 3. 2023-2024: 70% 4. 2024-2025: 80% 	Increasing awareness in schools of NCD risk factors		Manager Health Promotion	\$10,000

Strategic Action Area 3: Effective legislation and policy for safer and healthier environments
Objective 3: Strengthen NCD preventive and control legislation and policy for effective action

Action	Indicator	Baseline	Targets	Output	Outcome	Responsible	Indicative cost (annual)
Modernise NCD-related legislative framework	Review Public Health Act (2004) to address health promotion and NCDs		Draft NCD and health promotion clauses added to the PHA reforms	NCD and Health Promotion legislation ratified in the Public Health Act	Strong legislation and policy for safer and healthier environments	Secretary of Health	\$10,000
Minimise tobacco, alcohol and food industry interference	Conflict of Interest Register for NCD committees		Establish four Conflict of Interest registers for NCD taskforce and Vaka committees	Conflict of Interest registers for NCD taskforce and Vaka committees operational	Effective management of Tobacco, alcohol and food industry interference in NCD committees	NCD Taskforce And Manager Health Promotion	\$1,000
Tobacco control measures: Relative reduction (RR) in tobacco use	1. Tobacco control Plan updated 2. Tobacco Products Control Amendment Bill 2021	2	Tobacco Control Plan 2021 – 2025 operational Tobacco Products Control Amendment Bill 2021 passed	Effective tobacco control actions implemented Effective legislative tobacco products control implemented.	Strong legislation and policy for safer and healthier environments	Manager Health Promotion and Manager Policy and Planning	\$20,000
Alcohol control measures: RR in alcohol use	Develop a alcohol control action policy		Reduced alcohol consumption by 10%	Evaluate alcohol control actions for effectiveness in reducing alcohol consumption	Strong policy for safer and healthier environments	Manager Health Promotion and Manager Policy and Planning	\$5,000
Promote healthy food and nutrition	Develop Cook Islands Dietary Guidelines Develop food and nutrition policy		One Cook Islands Dietary Guidelines 2021-2025 completed and disseminated to 50 health staff One Food and Nutrition Policy developed	Hold workshops for health staff to use guidelines to counsel patients		Manager Health Promotion and Manager Policy and Planning	\$5,000
Accredited baby-friendly hospital	Set up a Baby Friendly Hospital Steering Committee to commence process for Rarotonga Hospital to become a		Implement procedures to become an accredited Baby Friendly Hospital	Rarotonga Hospital accredited - Baby Friendly Hospital	Improved maternal and infant health	Paediatrician and OBGYN consultant	\$2,000

	accredited Baby Friendly Hospital						
Promote physical activity campaign in schools and community	Support existing physical activity programmes; and establish targeted physical activity programmes in schools, workplaces, vakas and the Pa Enea		Four physical activity programmes implemented in schools, workplaces, vakas and the Pa Enea	Evaluate physical activity programmes for effectiveness	Improved community engagement in physical activity	Manager Health Promotion	20,000
Fiscal/taxation policy: tobacco, alcohol, sweetened sugar beverages	Increase Excise tax on tobacco (70%), alcohol and SSB		Collaborate with Customs to write a submission to Cabinet to increase taxes tobacco, alcohol, sweetened sugar beverages	Reduced access to tobacco, alcohol and SSB	Safer and healthier environments	Manager Policy and Planning and Manager Health Promotion	\$1,000

Strategic Action Area 4. Access to quality and equitable health services

Objective 4: NCD patients and people at risk of NCDs have access to timely quality health services

Action	Indicator	Baseline	Targets	Output	Outcome	Responsible	Indicative cost (annual)
NCD patients and people at risk of NCDs access timely quality health services: screening, diagnostic, counselling, treatment, rehabilitative and palliative care.	Increasing availability and access to primary care services		By 2025, 80% of population access universal health coverage	Increased numbers of patients using primary services -	Quality health services for improved population health outcomes	Director Primary Care	\$5,000
	Develop a home-based palliative care model		Home-based palliative care model of care operational	Access to quality home based palliative care		Director Public Health	\$10,000
Maintain currency of NCD register	Relative reduction (RR) in risk in premature mortality 25% RR in risk in premature mortality		Establish a mortality and premature mortality sub register	Reduced premature NCD mortality	25% RR in risk in premature mortality	Director Hospital Health Services, Director Primary Health Care, Supervisor Health Information Systems and Chief Pharmacist	\$20,000
	Relative reduction in prevalence of hypertension and cholesterol		Establish a Hypertension and Cholesterol sub register	Increased adherence to hypertension and cholesterol regimes	25% RR in HTN and high cholesterol		
	Relative reduction in diabetes	1	Review Diabetes register	Increased adherence to diabetes regimes	No rise in diabetes		
	Eligible people get medicine/counselling to prevent heart attacks/strokes		Review NCD register - proportion receiving medicine/counselling	Access to NCD medicine or counselling	50% people get medicine/counselling		
	Availability of affordable basic technology and essential medicines to treat NCDs		Review screening and diagnostic services and essential medicines	Access to screening, diagnostic services, essential medicines	80% availability of technology, medicines		

Robust monitoring and evaluation framework for NCD trends, determinants, prevention and control	NCD monitoring and evaluation framework: 1. Global NCD goals 2. MANA dashboard 3. TMO health indicators		Establish surveillance and monitoring and evaluation framework	Enhanced and robust NCD surveillance systems	Evidence-based NCD interventions	Manager Research Policy and Planning and TMO Research Committee	\$15,000
	Support NCD-related research to inform prevention/control		Two NCD research projects	Two research projects annually			

Annex 1. Summary of cost-effective ‘best buys’ 88

NCD ‘best buys’ are evidence-based cost-effective public health interventions to prevent and control NCDs (four major NCDs and their risk factors). This is a summary of the WHO cost-effective interventions which provide a menu of evidence-based options to guide policy decisions¹⁸.

Reduce tobacco use	<ul style="list-style-type: none"> • Increase excise taxes and prices on tobacco products • Implement plain packaging and/or large graphic health warnings on tobacco packages • Ban tobacco advertising, promotion and sponsorship • Ban smoking in all indoor workplaces, public places, and on public transport • Warn about the harms of smoking/tobacco use and second hand smoke through mass media campaigns • Provide tobacco cessation programmes
Reduce harmful use of alcohol	<ul style="list-style-type: none"> • Increase excise taxes on alcohol beverages • Ban or restrict alcohol advertising • Restrict the physical availability of retailed alcohol • Enact and enforce drink-driving laws and blood alcohol concentration limits • Provide psychosocial intervention for persons with hazardous and harmful alcohol use
Promote healthy diet	<ul style="list-style-type: none"> • Reduce salt intake by: <ul style="list-style-type: none"> ○ Product reformulation and setting targets for the amount of salt in foods and meals ○ Provide lower sodium options in public institutions ○ Promoting behaviour change through mass media campaigns ○ Implementing front-of-pack labelling • Ban trans-fats in the food chain • Raise taxes on sugar-sweetened beverages to reduce sugar consumption
Promote physical activity	<ul style="list-style-type: none"> • Promote physical activity with mass media campaigns and other community based education, motivational and environmental programmes • Provide physical activity counselling and referral as part of routine primary health care
Diabetes	<ul style="list-style-type: none"> • Offer glycaemic control for people with diabetes • Provide preventive foot care for people with diabetes • Screen diabetes patients for retinopathy and provide laser photocoagulation to prevent blindness
Cardiovascular Disease	<ul style="list-style-type: none"> • Provide drug therapy and counselling for eligible persons at high risk to prevent heart attacks and strokes • Treat new cases of acute myocardial infarction with either acetylsalicylic acid and clopidogrel, or thrombolysis, or primary percutaneous coronary interventions • Treat acute ischaemic stroke with intravenous thrombolytic therapy • Prevent rheumatic fever and rheumatic heart disease by increasing treatment of streptococcal pharyngitis at primary care level and developing a register of patients who receive regular prophylactic penicillin
Cancer	<ul style="list-style-type: none"> • Prevent cervical cancer by: <ul style="list-style-type: none"> ○ Vaccinating girls aged 9-13 years against human papillomavirus ○ Screening women aged 30-49 years, with the Pap smear, or human papillomavirus test, or visual inspection with acetic acid • Provide breast cancer screening for women aged 50-69 years, with mammography linked to timely diagnosis and treatment • Provide surgery, chemotherapy and radiotherapy treatment for cancer • Provide home-based and hospital-based palliative care services
Chronic Respiratory Disease	<ul style="list-style-type: none"> • Provide symptom relief for patients with asthma, and for patients with chronic obstructive pulmonary disease, with inhaled salbutamol • Provide treatment for patients with asthma, using low dose inhaled beclometasone and short acting beta agonist

¹⁸ PAHO. Department of NCDs and Mental Health. NCD Best Buys summary poster.

Annex 2. NCD Taskforce Terms of Reference

Purpose

To monitor and progress the *Ngaki'anga Kapiti Ora'anga Meitaki: Cook Islands National Strategy and Action Plan for Non-communicable Diseases 2021 – 2025*. The task force will provide a written progress report to the Secretary of Health on matters of urgency as they arise to the implementation of the strategy and activities.

The task force shall:

- Present the Minister of Health an annual progress report on implementation of strategic activities
- Set up structures (sub-committees) necessary to achieve the objectives of the plan
- Make recommendations on activities outside the scope of the plan for consideration

The task force will advise on, and participate as appropriate, in meetings, workshops and promotion of strategic activities. The task force will provide input into the development of any organisational strategic documents and guidelines relative to the work of non-communicable diseases in the Cook Islands.

Task force

1. At least five people representing the health-related interests of Cook Islands peoples
2. At least four people with a strong and demonstrated performance record in health
3. Ex-officio members: Two representatives of Te Marae Ora.

The task force will appoint the Chair. Total membership is 11. Quorum is five. Meetings: ;Four per annum. Members: Crown Law; Ministries of Agriculture; Finance and Economic Management (Revenue Management, Statistics); Foreign Affairs and Immigration, Education; Internal Affairs; Office of the Public Service Commissioner; Island Councils; and Police.

The task force reports to the Minister of Health or delegated authority. At any stage, relevant to the work of the working group, a person may be work in a committee for a temporary period.

Secretariat: Health Promotion and Prevention team. The secretariat will be responsible for all administrative tasks of the task force (scheduling of meetings, agenda, minutes, correspondence).

Terms of office

Members will be appointed on a three plus three-year basis.

Appointment of task force members

The Secretary of Health will endorse membership recommendations made by the Director of Public Health, in consultation with the Public Health Specialist and the Manager Health Promotion will appoint members based on the criteria stipulated for vacant positions. The Chair will be responsible for ensuring gender balance in membership.

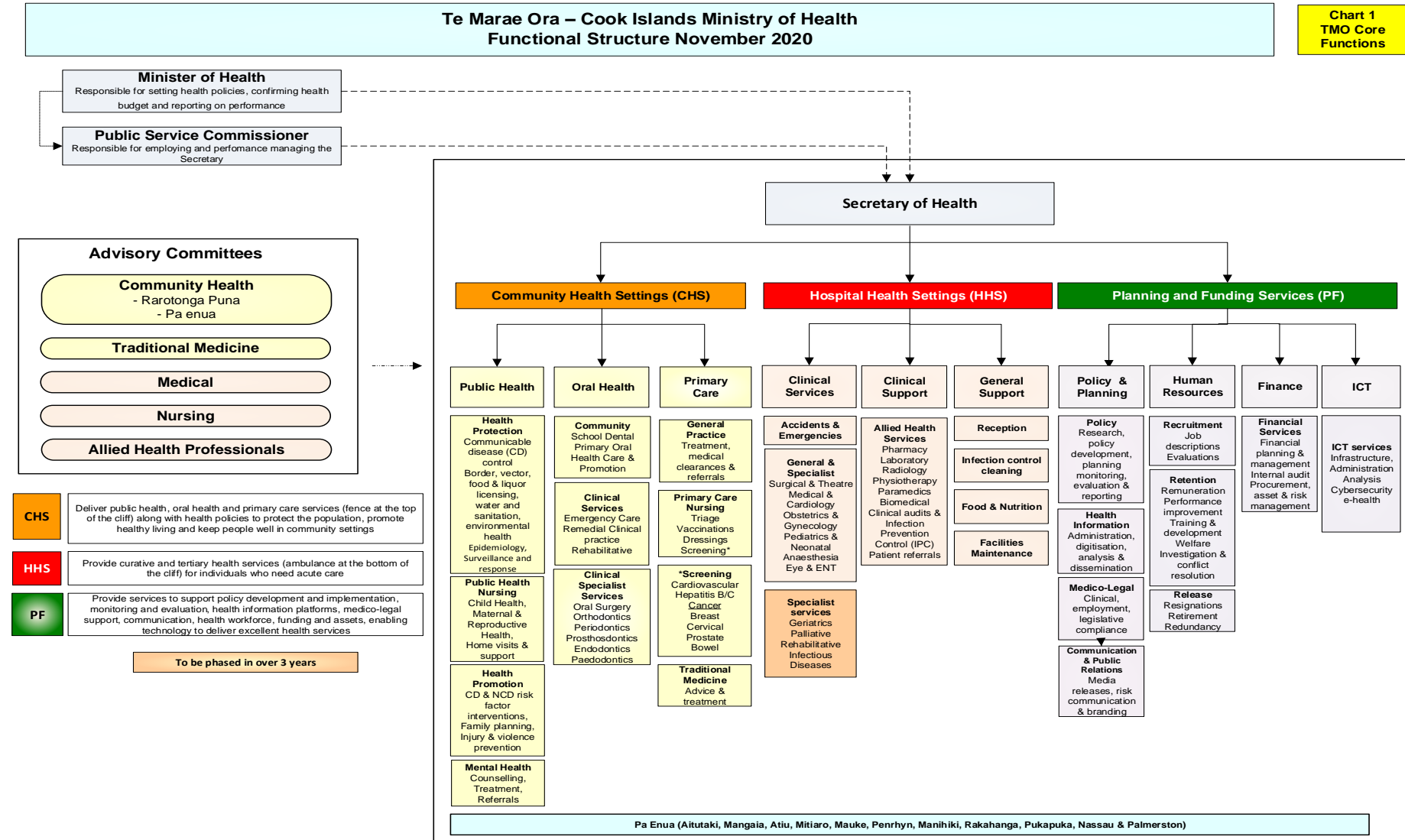
Members of the working group will ensure that they attend scheduled meetings. Any member who is absent for three consecutive meetings (inclusive of apologies tendered) will be deemed to have vacated their membership.

Apinga a'roa

Non public sector employees will be given an apinga a'roa in recognition of their services to the task force. Public sector employees will be acknowledged for their services in the task force through their annual performance appraisal.

Annex 3. TMO Functional Structure

**Chart 1
TMO Core
Functions**



Annex 4: Te Marae Ora Health Indicators

The 129 national high-level health indicators summary table is below.

Short term <12 months
Medium term >1-5 years
Long term >10 years

HEALTH STATUS	RISK FACTORS	SERVICE COVERAGE	HEALTH SYSTEMS
Mortality by age and sex	Nutrition	Reproductive maternal, new-born, child and adolescent	Quality and safety of care
Life expectancy at birth	Exclusive breastfeeding rate 0-5 months of age	Demand for family planning satisfied with modern methods	Perioperative mortality rate
Crude death rate	Incidence of low birth weight among new-borns	Contraceptive prevalence rate	Institutional maternal mortality ratio
Adolescent mortality rate	Children <5 years who are overweight	Antenatal care coverage	Maternal death reviews
Adult mortality rate 15-60 years of age	Anaemia prevalence in children	Births attended by skilled health personnel	ART retention rate
Under-five mortality rate	Anaemia prevalence in women of reproductive age	Postpartum care coverage – women	TB treatment success
Infant mortality rate	Children <5 years who are stunted	Postpartum care coverage – new-born	Clinical protocols and guidelines for all specialty areas
Neonatal mortality rate	Children <5 years who are wasted	Immunisation	Availability of essential medicines and commodities
Stillbirth rate	Environmental risk factors	Immunisation coverage rate by vaccine for each vaccine in the national schedule <5 years	Rate of adverse events among specialty areas
Mortality by case	Population using safely managed drinking water services	Availability of vaccines against human papillomavirus, according to national programmes and policies	Complication rate among long term care patient population
Suicide rate	Population using safely managed sanitation services	HIV	Number and proportion of domestic patient referrals
Death rate due to road traffic injuries	Population with handwashing facility with soap and water	People living with HIV who know their status	Number and proportion of international patient referrals
Mortality rate due to homicide	Number and proportion of reported foodborne illnesses	Prevalence of mother-to-child transmission	ASH rates for 0-4 year olds
Maternal mortality ratio	Number and proportion of reported waterborne illnesses	ART coverage	% of compliance with PEN guidelines
TB mortality rate	Population with primary reliance on clean fuels and technologies	HIV viral load suppression	Utilisation and access
AIDS-related mortality rate	Non communicable diseases	HIV/TB	Access to primary health care

HEALTH STATUS	RISK FACTORS	SERVICE COVERAGE	HEALTH SYSTEMS
Premature NCD mortality	Insufficient physical activity in adults	Coverage of treatment for latent TB infection (LTB)	Access to palliative care
Unconditional probability of dying between ages 30-70 from CVD, cancer, diabetes or chronic respiratory disease	Insufficient physical activity in adolescents	HIV test results for TB patients	Proportion of patients who have seen a primary provider/GP within 7 days of discharge
Mortality from unsafe water, unsafe sanitation and lack of hygiene	Total alcohol per capita (age 15+ years) consumption	HIV-positive new and relapse TB patients on ART during TB treatment	Number and proportion of outpatient consultations
Mortality from unintentional poisoning	Age-standardised prevalence of heavy episodic drinking among adolescents and adults as appropriate, within the national context	Tuberculosis	Number and proportion of consultations for oral health services
Fertility	Alcohol-related morbidity and mortality among adolescents and adults, as appropriate, within the national context	Drug susceptibility testing coverage for TB patients	Number and proportion of people aged two and over who had a dental visit within the last 12 months
Crude birth rate	Tobacco use among persons aged 15+ years	TB treatment coverage	Inpatient admissions
Adolescent birth rate	Raised blood pressure among adults	Treatment coverage for drug-resistant TB	30-day readmission rate after hospital discharge
Total fertility rate	Raised blood glucose/diabetes in adults	Vector borne diseases	Surgical volume
Morbidity	Raised blood glucose/diabetes in adolescents	Intermittent preventive therapy for vector borne diseases during pregnancy	Health facility density and distribution
New cases of vaccine-preventable diseases	Age-standardised mean proportion of total energy intake from saturated fatty acids in persons aged 18+ years	Use of insecticide treated nets	Hospital bed density
New cases of IHR-notifiable diseases and other notifiable diseases	Age-standardised prevalence of raised total cholesterol among persons aged 18+ years (defined as total cholesterol >5mmol/L) and mean total cholesterol concentration	Treatment of confirmed dengue cases	Health workforce
NCD morbidity rate	Age-standardised prevalence of persons consuming less than 5 total servings (400grams) of fruits and vegetables per day	Indoor residual spraying coverage for dengue	Health worker density and distribution
HIV incidence rate	Salt intake	Screening and preventive care	Health information
Hepatitis B incidence	Overweight and obesity in adults	Breast cancer screening	Birth registration
Sexually transmitted infections (STIs) incidence rate	Injuries/harmful traditional practices	Cervical cancer screening	Death registration
Congenital syphilis rate	Intimate partner violence number and prevalence	Proportion of women between the ages of 30-49 years screened for cervical cancer at least once, or more often, and	Health security

HEALTH STATUS	RISK FACTORS	SERVICE COVERAGE	HEALTH SYSTEMS
		for lower or higher age groups according to national programmes or policies	
TB incidence rate	Non-partner sexual violence number and prevalence	Mental health	International Health Regulations (IHR) core capacity index
TB notification rate	Sexual violence against children (number and prevalence)	Number and proportion of mental health disorders	Health financing
Cancer incidence, by type of cancer	Frequency rates of occupation injuries	Coverage of services for severe mental health disorders	Health Care Expenditure (HCE) as a percentage of GDP
HIV prevalence rate	% of injury related fatalities across all patient groups	NCD	HCE per capita
Hepatitis B surface antigen prevalence rate		% of diabetes patients receiving eye care visits/treatment from a specialist within one year	HCE as a percentage of Govt. Expenditure
NCD prevalence rate		Admission rates for conditions that are sensitive to outpatient (ambulatory) care delivery	
		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	
		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	
		Substance abuse	
		Treatment coverage for alcohol and drug dependence	
		Health Specialist Visits	
		Number and proportion of population accessing health services by area of specialty	

Annex 5. Nine Global NCD Goals

	Baseline	Target 2021	2022	2023	2024	2025	2026
1. 25% relative reduction in risk in premature mortality	26%						
2. At least 10% relative reduction in the harmful use of alcohol	48% Males 51% Females						
3. 10% relative reduction in the prevalence of insufficient physical activity	32% prevalence						
4. 30% relative reduction in the mean population intake of salt/sodium	36% mean population intake of salt/sodium						
5. 30% relative reduction in the prevalence of current tobacco use	31% Males 27% Females						
6. 25% relative reduction in or contain the prevalence of hypertension	35% Males 23% Females						
7. Halt the rise in diabetes and obesity	10% prevalence						
	80% prevalence						
8. At least 50% eligible people get medicine/counselling to prevent heart attacks/strokes	-						
9. 80% availability of affordable basic technology and essential medicines to treat NCDs	100%						