VISION
A nation free of avoidable burden of non-communicable diseases

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

Prevention of Non Communicable Disease NCDS: NAURU STRATEGY ACTION PLAN

2018 – 2020
STRATEGIC OBJECTIVE 1:
Establish mechanisms to raise the priority accorded to NCDs at national and districts levels and to integrate NCD prevention and control into policies across all government sectors

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

1. Establish an inter-sectorial NCD task force consisting of representatives from all sectors, district community leaders and development partners in health
2. Carry out a targeted districts sensitization exercise while disseminating the strategy to inform and empower districts leadership on the need to prioritize and integrate prevention and control.
3. Allocating NCD prevention and control initiatives in national and district budgets and prioritize their financing.
4. Integrating NCD prevention and control into policies across all government sectors.
5. Holding of advocacy and sensitization forums to raise the priority accorded to NCD at national and district levels
6. Strengthen of existing multi-sectoral partnership infrastructure and service delivery systems at National and districts levels to address NCD prevention and control.

STRATEGIC OBJECTIVE 2:
Formulate and strengthen legislations, policies and plans for the prevention and control of non-communicable diseases at both district and national governments.

To achieve this strategic objective 2, the following activities will be undertaken:

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

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

TOBACCO CONTROL
Smoking is very high at a prevalence rate of >46% amongst the population. Almost 54% of men aged 18-29 smoke. Mean age of smoking initiation was 16 years. Almost 60% of smokers were heavy users (≥15 cigarettes/day). Use of manufactured cigarettes daily was greater than hand-rolled ones. In addition, greater than half the population have been exposed to second-hand smoke in homes and greater than a quarter of the population in workplaces.

Goal: By 2020, Nauru aim to reduce 10% Tobacco use at National level
- A decrease in the number of people in Nauru who will die as a result of tobacco smoking.
- A decrease in the level of disease and hardship caused by smoking in Nauru
- A decrease in the economic and social costs of tobacco-related illness in Nauru.

Baseline:
- 6.5% Reduction in prevalence of current smokers (53.1% (2004) → 46.6% (2016)).
- Increase in mean age of initiation among current daily smokers (15.9 years (2004) → 16.4 (2016) years).
- Decrease in the number of manufactured cigarettes smoked per day (19.8 (2004) → 16.3(2016))
- Prevalence of Current smoking age group 18 – 29 : 42% in 2016

Target by 2020
- Target 1: 10% reduction in prevalence of Tobacco Use in Nauru population
- Target 2: 10% reduction of prevalence of smoking among aged 18 -29 in adults and youths
- Target 3: 100% of health facilities are to advise at risk population to stop smoking through the NCD toolkit and adi gom) MPOWER programme etc
- Target 4: 10% of national settings (communities, schools, workplaces) will be assigned smoke free public places & events.
Strategic objective 3a

The following activities will be undertaken:

1. Scaling up of the implementation and enforcement of the Tobacco Control Act 2009 at National and District levels.
2. Implement effective use of tax and price measures for control of demand for tobacco products.
3. Strengthen the implementation of the protocol to eliminate illicit trade in tobacco products.
4. Monitoring the implementation of the ban on Tobacco advertisement, promotion and sponsorship (TAPS) from tobacco industry
5. Strengthening the implement of the regulation of tobacco product content, emissions, disclosure labeling, and packaging
6. Raising public awareness on the dangers of tobacco use and exposure to second hand tobacco smoke.
7. Supporting the strengthening of the implementation of 100% smoke free environments in public places at National and District levels.
8. Integrating tobacco cessation interventions at all levels.
9. Promoting diversification to healthy and profitable alternatives of livelihoods for communities that are dependent on tobacco production at the national and District level.
10. Strengthening the implementation of tobacco control initiatives in the school curriculum and program.
11. Monitoring and mitigating tobacco industry interference in the implementation of public health policies

**NUTRITION/DIET**

**Fruits and Vegetables:** The greater majority (>95%) had <5 servings/day of fruits or vegetables with >61% consuming none at all. Slightly over 27% consumed 1-2 servings/day and only a very small percentage had ≥ 3 servings/day (6.7% 3-4 servings/day; 4.7% ≥5 servings/day). Fruits and vegetable were consumed on about 2 days in a week with average of about 1 serving/day. Results are very poor compared to rest of the Pacific island countries.

**Salt:** Greater than half the population (54%) always or often added salt to their food just before or when eating. At home, >65.4% added salt when cooking or preparing food. Younger age groups showed greater use of salt (18-29 year >60%; 30-44 year 50%; and 45-69 years 48% added salt before or when eating). Greater than 33% of the population always or often consumed processed food high in salt.

**Sugar:** Consumption of sugar is prevalent in Nauru. On average, sugary drinks were consumed on almost 5 days of week at a mean of about 5 servings of sugary drinks on each occasion. Sugar was added to drinks almost 7 times in a day at a quantity of almost 4 teaspoons of sugar/drink.

**Goal:** Improve the nutritional status of the people Of Nauru

**Baseline:**

1% reduction in the proportion who did not meet the WHO recommendations for fruits and vegetables per day (96.4% (2004) → 95.3% (2016)).

35.2% of childbearing age group were anaemia - >13.0 g/dL

**Target by 2020**

- **Target 1:** at least 20% of children will be exclusively breastfed at 6 months in Nauru
- **Target 2:** 30% of population (communities, schools, workplaces and Churches) a) consumed any amount of servings of vegetables and/or fruits per day b) reduced sugary drinks c) reduced salt
- **Target 3:** 60% of risk population will be advised on nutrition through the NCD toolkit program at Wellness Centre/PH Diabetes Clinic/RON Hospital
- **Target 4:** 10% of households, schools and working places have vegetable gardens
Target 5: 10% of reduced anemia rate among child bearing age group

Strategic objective 3b
The following activities will be undertaken:

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

Alcohol
Greater than a quarter of Nauruans (27.7%) were current drinkers. Age groups more likely to drink were 18-29 (30.4%) and 30-44 years (32.4%). More men than women were drinkers. Almost a quarter (24.1%) binge drink in the past 30 days; men were much more likely to binge drink; and younger Nauruans aged 18-29 (26.3%) and 30-44 years (29.0%) were more likely to have binge drink compared to those aged 45-69 (13.4%).

Kava: Less than a fifth (18.1%) of Nauruans consumed kava in the past 12 months. In the last 30 days, Nauruans consumed kava on 7.7 days and spent about an hour on average drinking kava in a session. One third of Kava drinkers (33.4%) were likely to drink alcohol during or after drinking kava and 69.1% would smoke tobacco.
Goal: Improved prevalence of NCDs risk factors by reduce alcohol related harm in Nauru

Baseline:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current drink Alcohol</td>
<td>Nauruan</td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td>30.4%</td>
<td>2016</td>
</tr>
<tr>
<td>30-44</td>
<td>32.4%</td>
<td>2016</td>
</tr>
<tr>
<td>Binge drink</td>
<td>Nauruan</td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td>26.3%</td>
<td>2016</td>
</tr>
<tr>
<td>30-44</td>
<td>29.0%</td>
<td>2016</td>
</tr>
</tbody>
</table>

Target by 2020

- **Target 1**: 5% Reduce the prevalence of binge drinking in Nauru adult population
- **Target 2**: 5% Reduce proportion of current drinking in Nauru adult population
- **Target 3**: 10% reduce alcohol related harm episodes in Nauru
- **Target 4**: 10% of settings (communities, workplaces, churches) will incorporate alcohol related harm issues into their plans
- **Target 5**: 100% of health facilities at risk population will be advised on alcohol related harm through the NCD toolkit Program
- **Target 6**: 30% of clinics accessible to risk population for counseling of alcohol drinkers

Strategic objective 3c

The following activities will be undertaken:

1. Domesticating the global and regional strategies for the reduction of harmful use of alcohol.
2. Supporting the full implementation of Alcoholic Drinks Control Act 2010 and other relevant legislations.
3. Implementing effective fiscal and monetary measures to reduce the harmful use of alcohol at the National and District levels.
4. Developing legislation on prohibition of advertising, promotion and sponsorship of alcoholic beverages at the National and District levels.
5. Creating public awareness on the dangers of alcohol consumption and its related risks.
6. Strengthening the implementation of the component on prevention and control of alcohol use in the school health policy and programs.
7. Integrating alcohol abuse management and rehabilitation services at all levels including community, health care system, and workplace

PHYSICAL ACTIVITY
The mean body mass index (BMI) of Nauruans was 34.4 kg/m² – those aged 18-29 had a lower mean BMI (32.3) than those aged 30-44 years (35.8) and 45-69 (35.7). There was no statistically significant difference between men and women. According to the BMI risk categories, 0.1% were underweight, 9.6% were of normal weight, 19.8% were overweight, and 70.2% were obese. A significantly higher proportion of Nauruans aged 18-29 were classified as overweight (25.9%) than those aged 30-44 years (15.4%); and a higher proportion of those aged 30-44 years (77.9%) and 45-69 (77.1%) were classified as obese compared to those aged 18-29 (59.5%). There was no statistically significant difference between men and women.

The mean waist circumference of men was 105.2 cm and 103.0 cm for women. Younger men and women aged 18-29 had a significantly lower mean waist circumference than those aged 30-44 years and 45-69. In general, the mean hip circumference of men was 110.9 cm and 115.3 cm for women. Among women, those aged 45-69 (115.3 cm) had a higher mean hip circumference than those aged 18-29 (109.3 cm). The mean waist-hip ratio of men was 1.0 and 0.9 for women, whose difference was statistically significant. There was no statistically significant difference between the three age groups in relation to hip circumference and mean waist-hip ratio.

**Goal:** Improve Physical activities among adult and adolescent and reduce overweight and obese

**Baseline:**

<table>
<thead>
<tr>
<th>Overall an increase in mean BMI among 18- 29 (33.0 kg/m² (2014) → 34.4 kg/m²).</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI : Overweight (25.9%) and Obese (59.5%) among 18- 29 age group</td>
</tr>
<tr>
<td>BMI : Overweight (15.4) and Obese (77.9%) among 30-44 age group</td>
</tr>
<tr>
<td>Increase in prevalence of obesity (63.6% (2004)→ 70.5%).</td>
</tr>
<tr>
<td>Increase in prevalence of obesity among men (61.2% (2014) → 71.3%) and women (65.9% → 69.6%).</td>
</tr>
</tbody>
</table>

**Target by 2020**
Target 1: 50% increase in prevalence of Nauru children engaged in at least 30 minutes daily of health related physical activity in schools – age and sex stratified
Target 2: 20% increase in prevalence of Nauru adults engaged in at least 30 minutes of physical activity 3 days of the week - age and sex stratified
Target 3: 10% Increase in number of enrolled in weight watching program that available in all 14 districts with mentor
Target 4: 10% of settings (communities, schools, workplaces, and churches) will incorporate physical activities into their action plans
Target 5: By 2020, 100 % of health facilities at risk population will be advised on physical activity through the NCD toolkit Program

Strategic objective 3d

The following activities will be undertaken:

1. Implementing national legislations, policies and guidelines that promote physical activity
2. Creating public awareness on the health benefits of physical activity in prevention and control of NCDs
3. Strengthening implementation of the physical activity component of the school health policy, in the framework of national and district strategic plans, and regulations.
4. Implementing programs that promote physical activity in the community, private and public institutions, workplaces, health facilities etc, in the frame work of national and District strategic plans, and regulations.
NCD MEDICAL INTERVENTION

Strategic Objective 4:
To strengthen the Primary Care system for NCD prevention and control across all level of health sectors.

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

DIABETES MELLITUS /CVD/Cancer/ Chronic Respiratory Diseases (CRD)

Obesity: The mean waist circumference of men was 105.2 cm and 103.0 cm for women. Younger men and women aged 18-29 had a significantly lower mean waist circumference than those aged 30-44 years and 45-69. In general, the mean hip circumference of men was 110.9 cm and 115.3 cm for women. Among women, those aged 45-69 (115.3 cm) had a higher mean hip circumference than those aged 18-29 (109.3 cm). The mean waist-hip ratio of men was 1.0 and 0.9 for women, whose difference was statistically significant. There was no statistically significant difference between the three age groups in relation to hip circumference and mean waist-hip ratio.

Blood Pressure: A quarter of the population (25.3%) had raised blood pressure SBP ≥140 and/or DBP ≥ 90 mmHg or was currently on medication for the condition, with no statistically significant difference between men and women.

One tenth of the population (9.8%) had raised blood pressure SBP ≥160 and/or DBP ≥ 100 mmHg or were currently on medication for raised blood pressure, with no statistically significant difference between men and women.

Overall, the mean systolic blood pressure (SBP) was 122.2 mmHg and the mean diastolic blood pressure (DBP) was 80.2 mmHg. The mean SBP and DBP increased with age. Men had significantly higher mean SBP than women (126.7 mmHg for men and 118.1 mmHg for women); and there was no statistically significant difference in DBP between men and women.

Among those who had raised blood pressure of SBP≥140 and/or DBP≥90 or were currently on medication, majority (90.6%) were not on medication and had raised blood pressure of SBP≥140 and/or DBP≥90; 3.6% were on medication and had
raised blood pressure of SBP≥140 and/or DBP≥90; and 5.8% were on medication and had SBP<140 and DBP<90. There were no significant differences between men and women and between the three age groups.

**Cholesterol:** The mean total cholesterol was 3.8 mmol/L, with no statistically significant differences between men and women and between the three age groups. Overall, 19.6% had total cholesterol ≥ 5.0 mmol/L or were currently on medication for raised cholesterol and 7.9% had total cholesterol ≥ 6.2 mmol/L or ≥ 240 mg/dl or were currently on medication for raised cholesterol. A significantly higher proportion of Nauruans aged 45-69 had total cholesterol ≥ 5.0 mmol/L or was currently on medication for raised cholesterol (30.8%) than those aged 18-29 (12.0%).

Combined risk factors: In Nauru, 33.4% had 1-2 risk factors and 66.6% had 3-5 risk factors. A significantly higher proportion of Nauruans aged 18-29 (44.3%) had 1-2 risk factors compared to those aged 45-69 (18.4%); and a significantly higher proportion of those aged 45-69 (81.6%) had 3-5 risk factors compared to those aged 18-29 (55.7%). There was no significant difference between men and women.

**Counseling:** In terms of receiving lifestyle advice from a doctor or health worker: (a) 28.8% of the population of general population or those who visited with other risk factor or smokers? had been advised to quit using tobacco or not start; (b) 37.4% had been advised to reduce salt in the diet; (c) 47.1% had been advised to eat at least five servings of fruit and/or vegetables each day; (d) 42.7% had been advised to reduce fat in the diet; (e) 48.3% had been advised to do more physical activity; and (f) 47.4% had been advised to maintain a healthy body weight or to lose weight.

**Cancer:** Among women aged 18-69, it was found that 53.0% had ever been tested for cervical cancer. Among women who had ever undergone a screening test for cervical cancer, 49.5% did so within the last year, 34.1% within the last two years and 16.4% more than two years ago. A significantly higher proportion of women aged 45-69 was screened within the last year (73.5%) than those aged 18-29 (32.5%); whilst a significantly higher proportion of women aged 18-29 having been screened within the last two years (49.6%) than those aged 30-44 years (26.5%) and 45-69 (18.1%). It was also found that 35.3% of women indicated they had done self-breast examination to check for abnormalities, with a significantly higher proportion of those aged 45-69 having done so (45.4%) than those aged 18-29 (27.6%).

**Oral health:** Almost 70% of the population had been to a dentist for a check-up with no treatment required; almost 25% had an extraction or tooth filled; and about 6% had not visited a dentist in the preceding six months. About 60% of the population described their teeth as being in a painful state, >7% as being decayed, almost 12% as having loose teeth, and almost 23% as having good teeth. Painful teeth decreased with age (18-29 year almost 67%, 30-44 years almost 58%; and 45-69 year 45.0%).

Nauru NCD Strategy Plan 2018-2020 12
Goal: Promote health equities and ethical imperative of health
Nauruan Premature Mortality from NCDs 5% reduction

Baseline:

- Increase in proportion with raised blood pressure of the mean diastolic blood pressure (77.4 (2004) → 80.0 (2016))
- Decrease in mean of total cholesterol ≥ 5.0 mmol/L (4.5 (2004) → 3.8 (2016))
- Currently on medication for raised blood pressure SBP ≥ 140 and/or DBP ≥ 90 mmHg is 25.3%
- Currently on medication for raised cholesterol (≥ 5.0 mmol/L) aged 45-69 (30.8%)
- Currently on medication for raised cholesterol (≥ 5.0 mmol/L) aged 18-29 (12.0%).
- In 2016, 28.8% of the population had been advised to quit using tobacco or not start
- In 2016, Women aged 18-69 was screened for papsmear within a year (49.5%) 2016
- In 2016, Women aged 18-69 was screened for self-breast examination (35.3%)
- In 2016, Mental status for Nauruan: 23.4% mild mental disorder; 12.8% moderate mental disorder; 5.3% severe mental disorder
- In 2016, 24.6% of Nauruan population visited a dentist and had an extraction or tooth filled
- In 2016 Nauruan, 16.5% aged 18-29; (8.1%) aged 30-44 and aged 45-69 (4.4%), were involved in road traffic crash
Target:

- Target 1: 5% reduction in Premature Mortality from NCDs
- Target 2: 5% Reduce in the prevalence of NCDs (5% Diabetes, 5% Cancer, 5% CVDs and 5% CRDs) in Nauru by in 2020
- Target 3: 80% improved technologies and availability and affordable essential medicines to treat NCDs at all health facilities
- Target 4: At least 80% of population screened for all 4 major NCDs according to the protocols
- Target 5: At least 100 % Drug therapy and counseling coverage
- Target 6: At least 25% reduction in high blood pressure - age and sex stratified
- Target 7: At least 30% reduction in high cholesterol - age and sex stratified
- Target 8: At least 30% prevent of stroke and heart attack are identified and treated
- Target 9: 10% increase cancer screening for men and women
- Target 10: 10% of NCDs cases will have, and be compliant to their green and white ranking in their pen model
- Target 11: 100% of wellness centres at risk population will be able to ascertain their NCD status annually
- Target 12: 15% of NCD population on management will also have controlled blood sugars and Hypertension
- Target 13: 10% increase in oral health (no complains after dental visit) of Nauruan population
Strategic objective 4

The following activities will be undertaken:

1. Improve NCD services and technology to improve accessibility of population to NCD services in Nauru including standardize treatment, protocol and referrals for all levels
2. Ensuring availability and affordability of quality, safe and efficacious basic technologies for screening, diagnosis, treatment and monitoring of NCDs at the national and District level
3. Implement 70-100% Pen-model to become cost effective
4. Establish NDC as a National centre for NCD Research and Education with appropriate human resource and support
5. Ensuring availability of essential NCDs prevention and care medicines and supplies and link this to financing mechanisms to foster access, affordability and sustainability at the national and district levels
6. Establish Diabetes and CVDs/Renal/foot care/cancer/nutrition/Lab HUB as “one stop shops” for NCD management and care
7. Developing policy guidance for financing of health care delivery through primary health care approaches to include NCD prevention and control at national and District levels
8. Review health system structures (increase wellness centres) to better support NCD prevention and control taking into consideration access and equity. Facilitate integration of NCD prevention into other primary care platforms
9. Establish rehabilitation unit/home service for severe NCD cases including palliative care, mental patients for treatment, old age dying decently etc
10. Establish mechanisms for information sharing on leadership and governance in NCD prevention and control at county, national levels
11. Identify champions and ambassadors to provide leadership in NCD prevention and control.
12. Ensure the health information systems to guarantee reliable, timely, complete and quality data for evidence-based implementation and decision making in NCD prevention and control
13. Provide a central repository for NCD data to facilitate its utility for policy formulation and review

STRATEGIC OBJECTIVE 5:

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

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

**Injury /Accidents/ Disability:** Overall, 10.8% had been involved in a road traffic crash in the past 12 months. A significantly higher proportion of men than women had been involved in road traffic crash in the past 12 months – 15.4% among men and 6.5% among women. Nauruan aged 18-29 were more likely to have been involved in a road traffic crash in the past 12 months (16.5%, than those aged 30-44 years (8.1%), and 45-69 (4.4%).

**Mental health /Stress Management:** Regarding the state of mental well-being (using K10 scores), almost 60% were classified as well, >23% have a mild mental disorder, about 13% have a moderate mental disorder and about 5% as have a severe mental disorder

**Target 1:** Reduce 10% of road traffic crash in Nauru.

**Target 2:** Reduce % of violence against women in Nauru (no baseline).

**Target 13:** improved mental status for Nauruan at each stages mild, moderate and severe mental disorder

**Strategic objective 5**

**The following activities will be undertaken:**

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

STRATEGIC OBJECTIVE 6:
To establish and strengthen effective Monitoring and Evaluation systems of non-communicable disease and their determinants.

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

Strategic objective 6
The following activities will be undertaken:

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

STRATEGIC OBJECTIVE 7:
To promote and conduct research and surveillance for the prevention and control of non-communicable diseases
There is need to support research and surveillance on non-communicable diseases and timely disseminate the findings to the decision makers and the general population. Research that includes epidemiology, behavioral, health system, biomedical and clinical are critical in producing base line data, measuring progress and supporting informed policy and strategy development.

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

**Strategic objective 7**

**The following activities will be undertaken:**

1. Carry out a national situational analysis for NCDs burden and risk factors.
2. Identify priority research areas on Non-communicable Diseases and their risk factors
3. Strengthen capacity for NCD surveillance and research (human resource, infrastructure, equipment and supplies)
4. Conducting baseline and periodic surveys on NCDs and their risk factors
5. Allocating resources for routine and periodic surveillance of NCDs at county and national government.
6. Facilitating knowledge translation on conducted research to guide decision making by national and county governments
7. Integrating research into national and county health programmes for evidence-based policy and practice for the prevention and control of NCDs
8. Integrating NCD and their risk factors into the existing national household surveys.
9. Establishing national and sub national networks and reference centers for NCD surveillance and research and link with regional and global structures on NCD surveillance research networks
10. Establishing dissemination mechanisms of surveillance and research findings on NCDs

**Reference:**

5. WHO PEN model tool kit